List of References	
Source	**Exemplary Quote**
MIT Sloan / NANDA – The GenAI Divide (2025)	• "Just 5% of integrated AI pilots are extracting millions in value, while the vast majority remain stuck with no measurable P&L impact" • "**Investment bias**: Budgets favor visible, top-line functions over high-ROI back office" • "Limited disruption: Only 2 of 8 major sectors show meaningful **structural change**"
Stanford AI Index Report 2026	• **"The data does not point in a single direction. It reveals a field that is scaling faster than the systems around it can adapt"**
McKinsey State of AI 2025	• "Nearly two-thirds of respondents say their organizations have not yet begun scaling AI across the enterprise" • "Respondents report the greatest revenue benefits from AI in marketing and sales, strategy and corporate finance, and product or service development." • "High performers are more likely than others are to say their organizations **have defined processes** to determine how and when model outputs need human validation."
BCG AI Radar 2026	• "Trailblazer **CEOs** are systematic in their approach to AI" • "**Data privacy and cybersecurity** remain the primary concern"
BCG – Agents (2025)	• "Invest in a robust **data** foundation" • "Follow the 10/20/70 rule. **Algorithms account for 10% of the work in AI transformation, the tech backbone 20%. The remaining 70% comes from people and processes."**
Microsoft AI Diffusion	• *(focusing on the macro-economic level, not the enterprise-level)*
MIT AI Agent Index 2025	• "Definitions of AI agents are nebulous and differ across fields"
Microsoft – AI in the Enterprise (2026)	• "… adoption, while broad, is uneven. Usage patterns vary substantially across industries, occupations, and work activities, and there is **substantial room for adoption to grow** across the activities done in the labor market"
World Economic Forum – Future of Jobs Report 2025	• "Regarding barriers to AI adoption, …, half of executives worldwide highlight **a lack of skills to support adoption as the top barrier**. • This is closely followed by a **lack of vision among managers** and leaders (43%)"
Google Cloud – AI Business Trends Report 2025	• "About 30% of B2C marketing decision-makers globally see data quality management as a major challenge in implementing successful marketing strategies." • "… organizations are increasingly seeking professionals skilled in AI and cybersecurity, with 66% of organizations anticipating a need for expanded AI expertise"
Gartner: CIO Technology Adoption Priorities for 2026 (19 May 2026 - ID G00853586)	• "Despite strong momentum, 75% of CIOs report that the implementation costs of AI are currently outweighing its benefits. 1 This is, in part, because investments are being advanced **independently across domains, each optimizing for its own priorities**, deployment plans, and productivity goals" • "To drive enterprise value at scale, CIOs must move beyond enabling technology adoption to actively coordinating **how domain investments align across platforms, data, and workflows**" • "**Platform decisions are being made within domain silos**, undermining enterprise-wide AI success"
Accenture Technology Vision 2025	• "….only 36% of executives say their organizations have scaled gen AI solutions, and just 13% report achieving significant enterprise-level impact."
IBM AI Adoption Challenges 2026	• „The companies making the most progress are taking a disciplined approach. • They are strengthening **governance, improving data quality, modernizing infrastructure and building cross-functional alignment** between business and technology teams"

Main Challenges for Scaling GenAI

named in Literature - and areas where Enterprise Architecture addresses them

Gap	Bad state	Good state	EAM support	Exemplary Sources
Outside-in innovation	Innovations available in the market are not transferred to the enterprise	The enterprise has an uptake of innovative technologies optimal for its business	◕	Stanford AI Index, Microsoft Copilot Research
Inflated expectations	Unrealistic, too high expectations on GenAI and Agentic AI	Well understood capabilities and use cases of GenAI and Agentic AI	◑	Gartner Hype Cycle, MIT GenAI Divide, MIT AI Agent Index, Stanford AI Index
Management support	GenAI benefits are unclear on management level (whilst understood on working level)	Management understands the benefits of GenAI	◑	McKinsey State of AI, BCG AI Radar, Future of Jobs
Investment mismatch	70% of budgets favor visible top-line functions over ROI	Balanced portfolio of achievable and moon-shot use case	◑	MIT GenAI Divide, BCG AI Radar, Stanford AI Index
Value (ROI) gap	Massive spend with no measurable impact on the balance sheet	Direct linkage between AI usage and reduced costs/new revenue	◑	McKinsey State of AI, BCG AI Radar, MIT GenAI Divide, Gartner CIO
Strategic impact	"Only 2 of 8 major sectors show meaningful structural change"	Business model- specific possibilities of GenAI leveraged	◑	BCG AI Radar, Accenture Technology Vision, McKinsey State of AI, MIT GenAI Divide
Pilot-to-Prod	Many prototypes do not go live, because of underestimated effort and risks	Good initial assessment of use cases and efficient pipeline from MVP-to-Prod	◕	MIT GenAI Divide, McKinsey State of AI, IBM AI Adoption
Prod-to-Scale	"Big firms lead in pilot volume but lag in scale-up"	Have better success rates, based on better initial assessment	◕	MIT GenAI Divide, McKinsey State of AI, BCG Agents Report, Accenture Technology Vision
Sustainable improvement	Enterprise AI is "static" and fails to evolve with business changes („Learning Gap")	Systems retain feedback, adapt to context, and improve over time, i.e.: Application ownership.	◕	MIT GenAI Divide
Infrastructure gap	The GenAI model works, but the underlying infrastructure is missing	E.g., data, access management and integration architecture are available	●	Google Cloud AI Business Trends, IBM AI Adoption
Central-decentral alignment	No economies of scale, no internal knowledge transfer, silos, redundant solutions	Central platforms aligned with local needs, enterprise-wide target pictures	●	Gartner CIO, BCG Agents Report, IBM AI Adoption, McKinsey State of AI
Governance gap	Tech guidance is not fit to control the high number of GenAI use cases	Governance processes are adapted to cope with GenAI characteristics	◕	MIT GenAI Divide, McKinsey State of AI, IBM AI Adoption
Tech Skill gap	Not enough GenAI specialists available	GenAI trainings and hires adequate to internal needs	◑	WEF Future of Jobs, Accenture Technology Vision, Google Cloud AI Business Trends
Change readiness	The organization is not ready to fundamentally change its processes	Organization leverages available technologies to optimize its business	◑	WEF Future of Jobs, Microsoft AI Diffusion Report

Scaling GenAI is not about the latest LLM upgrade,
it is about a comprehensive Enterprise Architecture,
and comprehensive transformation.

Check out eamfundamentals.com to find out more on EAM in the context of Data & AI

Links to the sources in the comments