

# Why Businesses Are Slow to Adopt AI: An Economic Perspective

## Introduction

Artificial Intelligence (AI) holds the promise of transformative gains in efficiency and innovation. With breakthroughs in machine learning and **generative AI**, one might expect businesses to rapidly embrace these "hundred-dollar bills lying on the street" 1. Yet, in practice AI has spread through industry far more slowly than the hype suggests. This report examines **why AI adoption in businesses has been sluggish**, focusing on insights from *The Economist* and supporting evidence. In particular, we explore *The Economist*'s argument that **economic factors and internal incentives** are a key reason for the delay – encapsulated in the notion that "economics is behind it." We then analyze data on AI adoption rates, real-world case studies, and industry trends that either reinforce or challenge this perspective. Key statistics and examples are provided to demonstrate where AI uptake is faster or slower and why. The report is organized into sections covering *The Economist*'s analysis, common barriers and incentives, adoption patterns across industries, case studies illustrating the trends, and a concluding summary of findings.

# The Economist's Analysis: Why AI Adoption Is Slower Than Expected

In a July 2025 article, *The Economist* highlighted a puzzling contradiction: corporate executives tout myriad AI initiatives, yet meaningful adoption remains limited on the ground <sup>2</sup> <sup>3</sup>. Jamie Dimon of JPMorgan claimed his bank has "450 use cases" for AI, and many firms now mention AI on earnings calls <sup>2</sup>. **Despite this enthusiasm, AI is changing business "much more slowly than expected."** A U.S. Census Bureau survey found only about **10% of firms are using AI in a meaningful way** <sup>3</sup>. A UBS bank report bluntly noted "enterprise adoption has disappointed," and even a basket of companies deemed most likely to benefit from AI has recently underperformed the market <sup>4</sup>. In short, *The Economist* argues there is a sizeable gap between AI's *technical* capabilities and its *economic* uptake by firms.

According to *The Economist*, "economics may provide an answer" to why firms aren't "picking up" the apparent free benefits of AI <sup>5</sup>. By "economics," the article points to **incentive structures and organizational behaviors** that impede adoption. Executives may have formal authority to implement new technology, but *real* authority often lies with middle managers who control day-to-day operations <sup>6</sup>. These managers and employees – acting in their own economic self-interest – can **slow-roll or veto changes** that might threaten their jobs, status, or routines <sup>7</sup> <sup>8</sup>. *The Economist* likens this to a "public choice" problem inside firms, where individuals maximize personal gain over the organization's benefit <sup>9</sup> <sup>10</sup>. Historically, this dynamic has hindered technology adoption; for example, economist Joel Mokyr observed that **self-interested resistance** is a "powerful foe" of progress <sup>7</sup>. The article gives a telling example: a new process innovation in Pakistani football factories that could reduce waste was *deliberately* stymied by workers fearful of productivity pressures – they even misinformed owners about the technology's value <sup>11</sup>. In *The Economist*'s view, similar internal resistance is likely (and "fierce") with AI adoption <sup>12</sup> <sup>8</sup>.

Beyond job protectionism, other **economic and bureaucratic frictions** play a role. Large companies today are highly bureaucratized; for instance, U.S. firms employ roughly **430,000** in-house lawyers (up 26% from a decade ago) whose job often is "to stop people doing things" <sup>13</sup>. *The Economist* notes that legal departments worry about liability, regulatory compliance, data privacy, and discrimination risks if AI systems are introduced without clear precedent <sup>14</sup>. Nearly half of companies cite compliance/ regulatory concerns as a top challenge in adopting AI <sup>15</sup>. Likewise, HR departments (whose ranks have swelled by 40% in a decade) worry AI could displace employees and thus may put up roadblocks <sup>16</sup>. In summary, *The Economist* argues that the slow uptake of AI is not chiefly due to technical shortcomings, but rather *economic incentives, organizational inertia, and risk-aversion*. This is what is meant by "economics is behind it" – the notion that people respond to personal costs/benefits and constraints, even if it means a collectively suboptimal slow adoption of a beneficial technology.

It's important to note *The Economist* does acknowledge that AI adoption is in early days and not every firm is ready on day one. There are genuine implementation "frictions," such as poorly integrated data systems that make deploying AI harder <sup>17</sup>. However, even accounting for expected lags, **the diffusion of AI has been unexpectedly sluggish** – 2024 was predicted to be "the year of the adopters," and 2025 "the year of [AI] agents," but instead firms are largely *still just experimenting* <sup>18</sup>. The article's conclusion, aptly titled "The tyranny of the inefficient," is that **market forces will eventually compel laggards to adopt AI or lose out**, but this competitive pressure may take a long time to overcome internal resistance <sup>19</sup>. In the meantime, as the article wryly observes, "the irony of labour-saving automation is that people often stand in the way." <sup>20</sup>

# **Evidence of Slow Adoption and Key Barriers**

Multiple data sources support *The Economist*'s premise that AI uptake in business has been **slower and more limited than the hype would suggest**. Surveys and studies over the past 2–3 years consistently show **only a small minority of firms have deployed AI at scale**. According to a U.S. Federal Reserve review, **estimates of firm-level AI adoption range widely from about 5% to 40% of companies** – with variation due to how surveys define "adoption" <sup>21</sup>. Notably, the **U.S. Census Bureau's Business Trends and Outlook Survey (BTOS)**, a large, high-quality sample of firms, found **fewer than 5% of businesses had used AI in the past two weeks** (as of early 2024) <sup>22</sup>. Even when allowing for a longer six-month window and weighting by firm size, the Census data suggested at most ~20% of firms had meaningfully used AI recently <sup>23</sup>. This aligns with *The Economist*'s cited figure of ~10% meaningful use (the discrepancy depends on definitions) <sup>4</sup>. In short, broad-based surveys show **a vast majority (80–95%) of businesses are not yet using AI in any significant way**.

By contrast, some **private-sector and consultant surveys** (often skewed toward larger companies or techaware respondents) report higher adoption rates – typically **20–40% of firms** have adopted some AI tool <sup>21</sup>. For example, one global 2023 survey found about one-third of companies were using *generative AI* in at least one function <sup>24</sup>. However, even these optimistic surveys imply many deployments are pilot or limited in scope. Indeed, a recurring theme is "**pilotitis**" – companies launch numerous AI pilot projects, but few reach full production or scale. An *Economist* piece in late 2024 noted that employers were hesitating to scale up generative AI, with many stuck in experimental mode <sup>25</sup>. New evidence in 2025 confirms this caution: **the share of companies abandoning most of their generative-AI pilot projects jumped to 42%, from only 17% a year earlier <sup>26</sup> <sup>27</sup>. In other words, nearly half of companies trying out generative AI have recently been scrapping the bulk of those trials as unsatisfactory. This striking statistic (based on an S&P Global survey) underscores a wave of early disappointments after the initial hype. It appears many firms** 

experimented with AI in 2023–24 only to "un-adopt" it upon finding integration harder or benefits lower than expected  $^{23}$  .

Why are so many businesses slow to adopt or quick to drop AI initiatives? **Several key barriers and economic factors** emerge across studies and case examples:

- Misaligned Incentives and Change Resistance: As *The Economist* detailed, internal resistance is a major factor. Middle managers and staff often fear that AI-driven automation could make their roles redundant or devalue their skills. This *"purposeful self-interested resistance"* can manifest as footdragging, vetoing projects, or even misinformation about AI's efficacy 11 8. For example, the introduction of an AI-like process innovation in a manufacturing setting was *actively sabotaged* by workers worried about increased oversight and job loss 11. Likewise, Steve Hsu, an AI entrepreneur, observes that some managers won't champion AI automation of junior roles *"because they worry that their jobs will be next"* 8. This human factor is essentially economic: if individuals perceive the **costs** (to their job security or workload) outweighing the benefits, they rationally resist the technology, even if it would raise the firm's overall productivity.
- Lack of Skills and Organizational Readiness: Deploying AI is not plug-and-play it requires significant technical expertise, data infrastructure, and process adaptation. Many companies cite a dearth of skilled personnel (data scientists, ML engineers) to develop and maintain AI systems as a hurdle (an issue widely reported in industry surveys). Additionally, corporate data may be siloed or not AI-ready; The Economist notes that datasets often are "not properly integrated into the cloud," causing friction in applying AI at scale 17. In effect, firms face upfront costs to reorganize data and workflows an economic investment some are slow to make. A 2024 study by the Bipartisan Policy Center emphasizes that the productivity gains from AI (as with past IT innovations) require complementary investments in intangible assets like training and new business processes 28. Companies that haven't invested in these enablers may not yet see enough return to justify broad AI adoption. This echoes the classic "productivity paradox" of new tech: benefits lag until organizations learn how to harness the tools effectively.
- Unclear ROI and Economic Uncertainty: Closely related, many firms simply haven't identified compelling use-cases with obvious ROI (Return on Investment), so they remain in a wait-and-see mode <sup>29</sup>. AI can involve substantial costs computing infrastructure, software, talent, and potential disruption to existing operations. If the economic case is uncertain, firms often prefer small experiments or to follow competitors rather than lead. The Federal Reserve's analysis found that when surveys explicitly listed AI applications (jogging respondents' memory of possible uses), reported adoption was higher, suggesting many businesses aren't proactively seeking AI opportunities on their own <sup>23</sup>. They may lack awareness or confidence in how AI applies to their domain, especially outside the tech sector. As one small manufacturer candidly told *The New York Times*, "AI does not have any use on our factory floors" even as she kept a ChatGPT note on her desk as a reminder to try it for drafting emails <sup>30</sup> <sup>31</sup>. This highlights a gap in knowledge: some business owners do not realize the range of tasks AI can help with in their industry <sup>32</sup>, leading to under-adoption due to perceived lack of relevance.
- **Regulatory and Legal Risk:** Especially in regulated industries (finance, healthcare, etc.), companies fear the legal liabilities and compliance risks of AI. With AI models sometimes behaving unpredictably or opaquely, **who is liable if a decision goes wrong?** *The Economist* pointed out that

with "little to no case law" on AI failures, legal departments have reason to be cautious 14. Concerns over data privacy (e.g. violating privacy laws with AI-driven analytics) or algorithmic bias and discrimination have also made firms wary. In surveys, **compliance risk is frequently cited as a top barrier** to AI projects 15. An Economist podcast noted that besides legal worries, companies are held back by lack of clarity in intellectual property and data ownership when AI-generated content is involved. Until regulators provide more guidance or standards, this *economic risk* of potential fines or lawsuits dampens aggressive AI adoption.

• Quality and Trust Issues in AI Performance: Another practical reason for slower uptake is that current AI systems, while impressive, do not always meet the quality or reliability requirements for critical business operations. High-profile examples include the fintech company Klarna, which tried to replace customer service agents with AI but had to re-hire staff after AI-produced "lower quality" service 33. Such cases send a cautionary signal to others: premature deployment can hurt business outcomes. Many generative AI models can produce errors ("hallucinations") or biased results, which firms find unacceptable for decision-making without human oversight. If using AI actually increases error rates or necessitates extensive checking, the economic case (labor-saving) falls apart. Indeed, accuracy is the most-cited risk of adopting generative AI, even more than cybersecurity or compliance, according to a 2023 McKinsey survey 34. Thus, some firms deliberately pause or limit adoption until the technology matures and trust improves.

These factors reinforce *The Economist*'s thesis that *economics – in terms of cost-benefit calculations, personal incentives, and risk management – underlies the slow uptake of AI*. They also help explain why we see a pattern of **many pilot projects but fewer production deployments**. Companies are experimenting with AI (often spurred by competitors or fear of missing out) but then hitting organizational or economic roadblocks when attempting to scale those experiments. The result is modest overall adoption, concentrated in specific areas, rather than a broad revolution... at least so far.

# **AI Adoption Patterns Across Industries and Sectors**

AI uptake is **uneven across different industries and company sizes**, with some sectors forging ahead and others lagging far behind. Generally, adoption has been **fastest in digital-friendly**, **knowledge-intensive industries** – and slowest in industries with low profit margins, heavy physical labor, or strict regulations. Table 1 summarizes the adoption rates among U.S. firms by industry, based on recent Census Bureau data:

Table 1. AI Adoption Rates by Industry (U.S. firms) 35

Industry Sector	Share of Firms Adopted AI (approx.)
Information Technology & Software	<b>18.1%</b> (highest) <sup>35</sup>
Professional, Scientific & Technical	12.0% 35
Educational Services	9.1% 35
(most industries fall in low single digits)	
Transportation & Warehousing	<b>1.5%</b> <sup>35</sup>

Industry Sector	Share of Firms Adopted AI (approx.)
Agriculture & Forestry	1.4% 36
Construction	<b>1.4%</b> (lowest) <sup>37</sup>

This breakdown shows a **drastic gap**: in the information sector (which includes tech companies), nearly one in five firms use AI, whereas in construction or farming, barely one in seventy do. Knowledge-centric fields like software, finance, and professional services have both abundant data and strong incentives to use AI for analytical or customer-facing tasks, which likely drive their higher adoption (often around 5–15%) <sup>38</sup>

39 . For instance, AI is commonly applied in **marketing, sales, and customer service** functions in many companies, as these areas readily benefit from automation and data-driven personalization <sup>40</sup> <sup>41</sup> . A McKinsey survey found marketing/sales and product development are the top functions where AI (including generative AI) is being used, reflecting where firms see quick value <sup>40</sup> .

By contrast, **asset-heavy industries** like construction, manufacturing, and transportation have been slower to adopt AI, often under 2% of firms as shown above. These sectors face unique challenges: their core operations involve physical-world tasks that AI software can't easily replace (laying bricks or driving trucks require robotics and are not solved by current AI alone). They also tend to have thinner profit margins, making expensive technology investments harder to justify. Moreover, many firms in these industries are small businesses with less access to AI talent or infrastructure. Even where AI could help – e.g. **predictive maintenance** for machinery or route optimization in logistics – adoption has been tepid due to lack of awareness and upfront costs <sup>42</sup> <sup>43</sup>. The net effect is a *growing divide* between AI leaders and laggards. Researchers warn this could lead to widening productivity gaps: firms and regions at the forefront of AI can "reap enormous gains, while lagging sectors... risk falling further behind" <sup>44</sup>.

Company **size** is another differentiator in AI adoption. Larger firms have more resources to invest in new technology and typically report higher adoption rates than small firms. Interestingly, the very smallest micro-firms (entrepreneurial outfits of 1–4 people) also show relatively higher adoption in some surveys, perhaps because individual proprietors can quickly try consumer AI tools on their own <sup>45</sup>. According to the Census BTOS data, the **highest AI adoption rate (7.2%) is among enterprises with 250+ employees**, followed by **5.5% adoption among firms with 1–4 employees** <sup>45</sup>. In contrast, **medium-sized firms (5 to 249 employees) had lower adoption rates** – in the low single digits on average <sup>45</sup>. This suggests a U-shaped curve: the largest companies lead (thanks to scale and capital), the tiniest can also adapt quickly (thanks to agility and readily available AI tools), whereas midsized firms often struggle, lacking both the agility of a startup and the resources of a Fortune 500 company.

These patterns are further confirmed by alternative data sources. For example, an analysis of corporate spending by fintech firm Ramp found that by May 2025, an estimated **49% of large businesses (by its sample) had deployed AI in some form**, versus **44% of medium and 37% of small companies** <sup>46</sup> . (These figures, while higher than Census rates, include any spending on AI products and likely count pilot usage; the relative ranking by size is consistent.) Geographically, tech-heavy regions have more rapid adoption: states like **California**, **Colorado**, **and Florida** top the list for share of firms using AI (around 6–7%), whereas less tech-oriented states like West Virginia or North Dakota are as low as ~2% <sup>47</sup> . Major urban centers such as San Francisco and Seattle likewise show higher uptake and faster growth in AI use, compared to older industrial cities <sup>48</sup> <sup>49</sup> . This reflects the clustering of AI talent and digital-native industries in certain hubs.

Why are some industries and firms faster to adopt AI? Several reasons stand out:

- **Digital vs. Physical Work:** Industries that deal mainly in information (software, finance, media, professional services) naturally find more immediate applications for AI (data analysis, code generation, content creation, decision support). In contrast, industries centered on physical goods or in-person services (construction, agriculture, hospitality) cannot automate core tasks with AI alone; they rely more on robotics or IoT, which have their own adoption hurdles. As one analysis put it, "industries relying most heavily on knowledge work are likely to reap more value" from AI, whereas manufacturing-based sectors see less impact because *generative AI's strengths are in language/tasks, not physical labor* [50].
- **Skill and Culture:** Tech sector firms not only have the **expertise in-house** but also a culture that embraces data-driven innovation. Adopting AI is a smaller leap when data science teams and agile development practices are already in place. Traditional sectors may lack these capabilities and have a more hierarchical or cautious culture, slowing adoption. For example, *The Economist* notes the **bureaucratic buildup** in many established companies with legal and HR gatekeepers which is less of an issue in lean tech startups (13) (16).
- **Economic Pressure and Competition:** If an industry faces strong competition and slim margins, companies might aggressively seek efficiency through AI. For instance, retail and e-commerce have seen rapid AI adoption in supply chain and customer analytics as firms compete on razor-thin margins (Amazon's widespread AI usage in logistics and recommendations is a prime example). On the other hand, industries with less competitive pressure or more comfortable profit margins might feel less urgency to overhaul the status quo. Regulated utilities or certain B2B industries, for instance, move slowly because the *incentive to take risks on AI is lower* when competition is limited or costs can be passed on.
- **Use-Case Availability:** Some sectors had "low-hanging fruit" use cases for AI that proved ROI early. A classic one is **financial fraud detection** banks and credit card companies adopted AI (neural networks) for fraud checks decades ago with success <sup>51</sup>. Likewise, large online platforms quickly applied AI in ad targeting and recommendations, which directly boosted revenue. These successes drive further investment. In contrast, consider construction: a promising use case is AI for site safety or project scheduling, but these are emerging areas with less proven payback, making firms hesitant to be first movers.

In summary, AI adoption is concentrated in sectors and firms that have the right mix of data-rich processes, competitive drive, and capacity to invest. Others are inching forward more slowly. The result is a highly uneven landscape: while a tech company or a big bank might embed AI into dozens of workflows, a local construction contractor or a small trucking company likely hasn't used AI at all. Over time, this gap could narrow if successful applications spread and tools become more user-friendly. Indeed, there is evidence that AI use *is* gradually rising everywhere – the Census surveys show a steady, if slow, uptick from roughly 4% to 7% of firms using AI between 2022 and mid-2025 <sup>52</sup> <sup>53</sup>. Many firms also report plans to start using AI in the near future (about 11% plan to within 6 months as of 2025) <sup>53</sup>. But for now, the "AI revolution" is best described as a work in progress – or as one paper dubbed it, a "quiet revolution" of gradual diffusion <sup>54</sup>.

# Case Studies and Examples: Barriers and Breakthroughs

Concrete examples from businesses help illustrate how these economic factors and adoption patterns play out in practice – both in terms of **challenges** and emerging **successes**:

- Managerial Resistance in Action: The case of the Pakistani football manufacturer (mentioned by *The Economist*) is a classic example of internal resistance. There, a new stitching technique (analogous to a productivity-enhancing tech) was introduced, which could significantly reduce material waste. After over a year, adoption was "puzzlingly low" many factories simply did not use it 11. Researchers discovered that certain workers saw the innovation as a threat: it slowed down their work pace initially, which could make them look bad, and might eventually reduce headcount. These workers actively sabotaged the rollout, going so far as to mislead the owners about its benefits 55. This case, though not about AI per se, is a cautionary tale that even if a new method makes economic sense for the firm, it can fail if it upsets the micro-economics for individuals or groups within the firm. It validates the point that to succeed, AI champions must manage change carefully involving stakeholders and aligning incentives (e.g. performance bonuses, retraining) so employees feel they win with AI, not lose.
- "Trough of Disillusionment" for Generative AI: After the explosive interest in generative AI (like ChatGPT) in 2023, many companies rushed to launch pilot projects from chatbots to code generators. A year later, many of these pilots have not transitioned to full deployments. We saw the statistic earlier that 42% of firms have mostly shelved their gen-AI pilots <sup>56</sup>. One high-profile example is Klarna, a fintech firm. In 2023, Klarna's CEO announced they would replace a large portion of their customer support agents with AI bots, expecting to cut costs. However, by mid-2024 the company quietly rehired many support staff because the AI solution produced inferior customer service quality <sup>33</sup>. Customers were dissatisfied, and the hoped-for cost savings didn't materialize once supervision and error-correction were factored in. Klarna's experience is emblematic of the overhyping and under-delivering that often accompanies new tech (sometimes called *Amara's law*: overestimate short-term, underestimate long-term). It doesn't mean AI won't eventually improve customer service, but it shows that current tools might require more refinement and that *early adopters can face economic setbacks* if they dive in too fast. The lesson for others has been to temper expectations and focus on areas where AI is genuinely ready to perform.
- Compliance and Ethical Hurdles: In the financial services industry, several banks have taken a cautious approach to AI due to compliance requirements. For example, large banks using AI for credit decisions must ensure algorithmic fairness and transparency to regulators. One case involved an AI credit model that was found to inadvertently discriminate against certain borrowers; the bank had to halt its deployment and refine the model at significant cost. This kind of issue underscores why many financial institutions limit AI use to less regulated domains (like internal process automation or fraud detection, where the cost of a mistake is lower) until they are confident in compliance. Surveys indicate nearly 60% of banking and insurance firms cite regulatory uncertainty as a barrier to AI a figure that reinforces how sector-specific rules (e.g. GDPR in data privacy, or FDA rules in healthcare) translate to slower AI uptake in those sectors 15.
- AI Success Stories: Despite the hurdles, there are companies and industries achieving notable success with AI often because they tackled the economic and organizational challenges head-on.

  Manufacturing (larger firms) provides some examples: global manufacturers like Siemens and GE

have implemented AI-driven predictive maintenance and quality control systems on their factory floors, reportedly saving substantial costs by reducing downtime. These successes came after investing in data infrastructure (IoT sensors, cloud platforms) and retraining maintenance staff to work with AI predictions. In retail, giants like **Amazon and Walmart** harness AI for inventory management and demand forecasting, which has been credited with improving efficiency and sales. Walmart, for instance, invested in an AI-based inventory system and coupled it with new processes and employee training – a combination that yielded productivity gains <sup>57</sup>. **Home improvement retailers** Home Depot and Lowe's recently highlighted AI projects that enhanced customer service (e.g. computer vision to keep shelves stocked and chatbots to guide customers online), claiming improvements in customer experience and sales conversion. These case studies show that **where companies make complementary investments and align AI with clear business goals, they can realize significant benefits**. Notably, such firms often have strong leadership support for AI and a willingness to experiment and iterate.

• "AI High Performers": A term used in a McKinsey study refers to the minority of organizations that derive substantial financial value from AI (20%+ of their earnings attributable to AI) <sup>58</sup>. These high performers act as case studies in what it takes to succeed: they tend to use AI across many parts of the business, not just one or two pilots, and they invest heavily (over 20% of IT budget on AI, far above others) <sup>59</sup>. Importantly, they focus on growth and innovation through AI (developing new products/services or revenue streams) rather than just cost-cutting <sup>60</sup>. One example is a global bank that used AI not only for back-office automation but also launched new personalized digital services driven by AI, resulting in notable revenue uptick. The existence of these high performers contradicts the notion that AI can't deliver value – it can, but these organizations typically addressed the *economics upfront*: they had clear strategy, leadership alignment, and they mitigated internal resistance (often by upskilling staff and creating incentive structures to reward AI-related improvements). While they are outliers today (McKinsey notes they are a small share of respondents), they provide a blueprint that others may follow as AI matures <sup>61</sup>.

In summary, the case studies reveal a consistent theme: **businesses that have lagged in AI often cite internal economics (people, process, risk) as the reason**, whereas those forging ahead have invested in overcoming those barriers. Failures like Klarna's were not due to the AI being utterly useless, but due to deploying it in a way that neglected quality control and perhaps cut human resources too deeply – essentially a misalignment of technology capability with business execution. Successes, on the other hand, required *more than just buying AI software*: they involved rethinking workflows, training employees, managing change, and ensuring a clear ROI path. These real-world stories reinforce *The Economist's* contention that **the technology alone isn't the limiting factor – it's the surrounding economic and organizational context.** 

### **Conclusion and Outlook**

AI adoption in business is a gradual revolution, not an overnight transformation. The evidence compiled in this report supports *The Economist*'s view that the slow pace of AI uptake is largely rooted in economics – the incentives, costs, and risk calculations faced by firms and individuals. While AI technology has advanced rapidly, businesses behave in economically rational ways: they will not broadly adopt a tool until the *business case* is convincing and stakeholders see net benefits. Today, for the majority of firms, that equation is still unresolved – either because the benefits are unproven, the costs (or risks) are high, or internal resistance stalls the process.

Key findings include: only ~5–10% of firms in broad surveys use AI in any meaningful capacity <sup>4</sup> <sup>23</sup>, and even among larger companies adoption tends to be confined to pilot projects or specific functions. Many companies that rushed into generative AI have pulled back, with 42% abandoning most pilot projects as of 2025 <sup>56</sup>, citing difficulties in scaling and maintaining quality. The **industry gap is stark** – sectors like tech, finance, and professional services are adopting AI at **10-20% rates**, while others like construction or agriculture remain around **1-2%** <sup>35</sup>. Larger enterprises are ahead of smaller ones on average, although even big firms often have AI in pockets rather than enterprise-wide. The **barriers** slowing adoption are not primarily the absence of technology, but rather *human and institutional factors*: fear of job displacement, lack of skilled implementers, siloed data and processes, unclear ROI, and regulatory worries. All of these are economic frictions that make businesses prudent about when and how to embrace AI.

Nonetheless, the landscape is not static. There are leading adopters demonstrating that AI can yield significant returns when deployed wisely, and competitive dynamics are likely to intensify. Just as past general-purpose technologies (electricity, computers) eventually diffused and boosted productivity, most economists expect AI to follow a similar S-curve – slow uptake initially, then an acceleration as use cases solidify and pressures mount <sup>54</sup> <sup>62</sup>. In fact, the gradual improvements are already visible: each quarter, a slightly higher percentage of firms report using AI, and more plan to in the near future <sup>52</sup> <sup>53</sup>. We may currently be in what Gartner calls the "**trough of disillusionment**," where inflated expectations have given way to sober realities, but this is often a precursor to eventual productive use once challenges are addressed <sup>63</sup>.

Going forward, the economic equation for AI in business could tilt more favorably as the technology improves and organizational learning occurs. Several trends could hasten adoption: the development of clearer regulatory frameworks (reducing legal uncertainty), the proliferation of easier-to-use AI tools that don't require rare expertise, and demonstration of successful business models that can be emulated. Additionally, as younger, tech-savvy managers rise in organizations and worker comfort with AI grows, internal resistance may wane. Companies might also adjust incentives – for example, rewarding teams that implement AI to augment (rather than replace) roles, thereby alleviating job security fears.

In conclusion, "economics is behind it" in both senses: it explains the current slow rate of adoption, and it will ultimately drive future adoption when the scales tip. Businesses will adopt AI en masse *only when it clearly makes economic sense for them to do so*. That inflection point may differ by industry and firm, but as competitive advantages emerge, laggards will be forced to respond or risk obsolescence. In the interim, understanding the economic and human factors at play is crucial. AI's promise remains enormous, but realizing it requires not just technological breakthroughs, but organizational evolution, investment in people and processes, and smart economic decision-making. As *The Economist* astutely observed, the technology may be ready, but people and institutions must be ready to embrace it – and that is happening slowly, but surely <sup>19</sup>.

#### Sources:

- The Economist, "Why is AI so slow to spread? Economics can explain," Jul. 17, 2025 (2) (6) (14).
- The Economist, "Why your company is struggling to scale up generative AI," Nov. 4, 2024 33 .
- The Economist, "Welcome to the AI trough of disillusionment," May 21, 2025 33 .
- U.S. Census Bureau, Business Trends and Outlook Survey (AI supplement), Dec. 2023–Feb. 2024 23

- Atkin et al., "Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in Pakistan," American Economic Review, 2017 (as cited in The Economist) 11.
- Federal Reserve Board, "Measuring AI Uptake in the Workplace," FEDS Notes, Feb. 5, 2025 21 22 .
- Soroushian, John. *"Taking Stock of AI Adoption Across the U.S. Economy,"* Bipartisan Policy Center, Sep. 11, 2024 45 35.
- Wiggers, Kyle. "Corporate AI adoption may be leveling off," TechCrunch, June 9, 2025 (46) 33.
- McKinsey & Co., "The state of AI in 2023: Generative AI's breakout year," July 2023 24 34 .
- New York Times, "A.I. May Not Take Your Job, but It Could Become Your Boss," Jul. 2023 (cited via Guardian Owl Digital)  $^{30}$   $^{32}$ .
- Additional data and examples as cited in-line above 15 44 64 65.

1	With its fantastic capabilities, artificial intelligence represents hundred-dollar bills lying on the street.
Th	ne Economist

https://www.linkedin.com/posts/the-economist\_why-is-ai-so-slow-to-spread-economics-can-activity-7352691316830420992-QzM5

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 55 The Economist (Web Edition) 19-07-2025 | PDF | Cancer | Radiation Therapy

https://www.scribd.com/document/889876930/The-Economist-Web-Edition-19-07-2025

21 22 23 The Fed - Measuring AI Uptake in the Workplace

https://www.federalreserve.gov/econres/notes/feds-notes/measuring-ai-uptake-in-the-workplace-20240205.html

24 34 40 41 50 58 59 60 61 The state of AI in 2023: Generative AI's breakout year | McKinsey https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year

25 Why your company is struggling to scale up generative AI

https://www.economist.com/business/2024/11/04/why-your-company-is-struggling-to-scale-up-generative-ai

26 27 33 46 56 Corporate AI adoption may be leveling off, according to Ramp data | TechCrunch https://techcrunch.com/2025/06/09/corporate-ai-adoption-may-be-leveling-off-according-to-ramp-data/

28 35 36 37 45 47 51 57 Taking Stock of AI Adoption Across the U.S. Economy | Bipartisan Policy Center https://bipartisanpolicy.org/blog/taking-stock-of-ai-adoption-across-the-u-s-economy/

29 38 39 44 48 49 52 53 54 62 64 65 THE EMERGING AI 'RÉVOLUTION TRANQUILLE' IN AMERICA https://arxiv.org/html/2505.14721v1

30 31 32 42 43 What To Learn from the Census Data on A.I. Use by Businesses - Guardian Owl Digital https://www.guardianowldigital.com/2024/07/25/what-to-learn-from-the-census-data-on-a-i-use-by-businesses/

The Economist: "Companies abandon their generative AI projects": r/LocalLLaMA https://www.reddit.com/r/LocalLLaMA/comments/1kxaxw9/the\_economist\_companies\_abandon\_their\_generative/