POLICY BRIEF | JULY 2026

Stanford | Institute for Economic Policy Research (SIEPR)

What is really happening to jobs? Separating AI hype from reality

By Neale Mahoney, Erika McEntarfer, and Karsen Wahal

Key takeaways

AI's effect on overall employment is likely small, though a tough job market for new graduates may be partly due to AI.

AI's impact on worker productivity is mixed but generally positive.

Firm adoption has accelerated but unevenly across the economy.

Early evidence is hardly the last word on the future of work in an AI world.

Advances in AI models have sparked fears that rapid disruption of labor markets is imminent, if not already underway. A steady drumbeat of media articles has forecast a grim future for white-collar work due to AI.[1] Fears of an "AI jobs apocalypse" are often amplified by AI leaders themselves. For example, Dario Amodei, CEO of Anthropic, has predicted that AI could wipe out half of white-collar jobs and push unemployment to 20 percent. A labor market upheaval of this magnitude would cause enormous suffering for many households and pose a significant challenge for policymakers.

While the public has been debating AI's potential impact on firms and their workers, research and data have been catching up. Our goal in this brief is to synthesize the fast-growing body of research on AI's impact for policymakers and others eager to understand how AI is affecting the labor market right now. For ease of exposition, we organize this empirical evidence into a set of stylized facts, as follows:

1 Meg Short, "**Banks Lay the Groundwork for Mass Workforce Cuts as AI Takes Hold**," *Bloomberg*, June 7, 2026. Lindsay Ellis, Owen Tucker-Smith, and Allison Pohle, "**Tens of Thousands of White-Collar Jobs Disappearing as AI Starts to Bite**," *Wall Street Journal*, October 28, 2025. Kevin Roose, "**For Some Recent Graduates, the AI Job Apocalypse May Already Be Here**," *The New York Times*, May 30, 2025. Derek Thompson, "**Something Alarming is Happening to the Job Market**," *The Atlantic*, April 30, 2025.

1. AI's impact on aggregate employment is likely small right now.
2. A tough market for recent graduates may be partly due to AI.
3. AI's impact on worker productivity is mixed but generally positive.
4. Firm adoption has accelerated but unevenly across the economy.
5. Early evidence is hardly the last word on AI's impacts.

We will now explore each of these points in greater depth.

AI's impact on labor market conditions is likely small right now.

No one can predict the future, but there is little evidence that AI is causing significant job losses *right now*. Unemployment among workers in occupations most exposed to AI-driven disruption is rising, but not faster than among those least exposed.[2] As shown in Figure 1, the unemployment rate for the top quintile of AI-exposed workers has risen by 0.77 percentage points since 2022, while the unemployment rate for the least-exposed workers rose slightly more, by 0.85 percentage points over the same period. These aggregate trends suggest a broadly softening labor market, rather than one characterized by AI-driven job losses.

There is also little evidence of AI depressing employment or job postings in the most highly exposed occupations. Employment trends in occupations with high exposure to AI are fairly stable.[3] While employment growth in coding-heavy occupations has slowed somewhat, it remains positive.[4] There is no evidence that AI adoption has negatively impacted firms' job postings.[5] Indeed, online job postings for software developers — a very highly exposed occupation — have been growing faster than for other occupations over the last year.[6] Among firms that adopted enterprise AI, employment grew by 10 percent in the two years following adoption, an effect driven by firms with the highest per capita AI spending.[7]

What about the companies announcing layoffs, increasingly citing AI as a driving factor?[8] Both industry leaders and labor economists express some healthy skepticism about these claims.[9] While some narrow layoffs may be connected to AI-related automation, others appear driven by a desire to free up cash flow for AI investments or to reduce headcount after pandemic-era over-hiring. Human resource executives say the impacts of AI are more evident in role consolidation and hiring avoidance in roles where AI can automate many tasks.[10]

2 Eckhardt, Sarah, and Nathan Goldschlag. **AI and Jobs: The final word (until the next one)**. Economic Innovation Group, August 2025. Massenkoff, Maxim, and Peter McCrory. **Labor Market Impacts of AI: A new measure and early evidence.** Anthropic Research, March 2026.

3 Gimbel, Martha, Molly Kinder, Joshua Kendall, and Maddie Lee. **Evaluating the Impact of AI on the Labor Market: Current State of Affairs**. Yale Budget Lab, October 2025. Chandar, Bharat. **Tracking Employment Changes in AI-Exposed Jobs**. SSRN, June 2025.

4 Crane, Leland, and Paul Soto. "**AI and Coder Employment: Compiling the Evidence**." FEDS Working Paper. No. 2026-018. Board of Governors of the Federal Reserve System, March 2026.

5 Liu, Jessica, and Douglas Webber. "**AI Adoption and Firms' Job-Posting Behavior**," FEDS Notes, Board of Governors of the Federal Reserve System, March 27, 2026.

6 Gallacher, Guillermo. "**AI and Job Postings: From Job Destruction to Creation?**" Indeed Hiring Lab, July 2026.

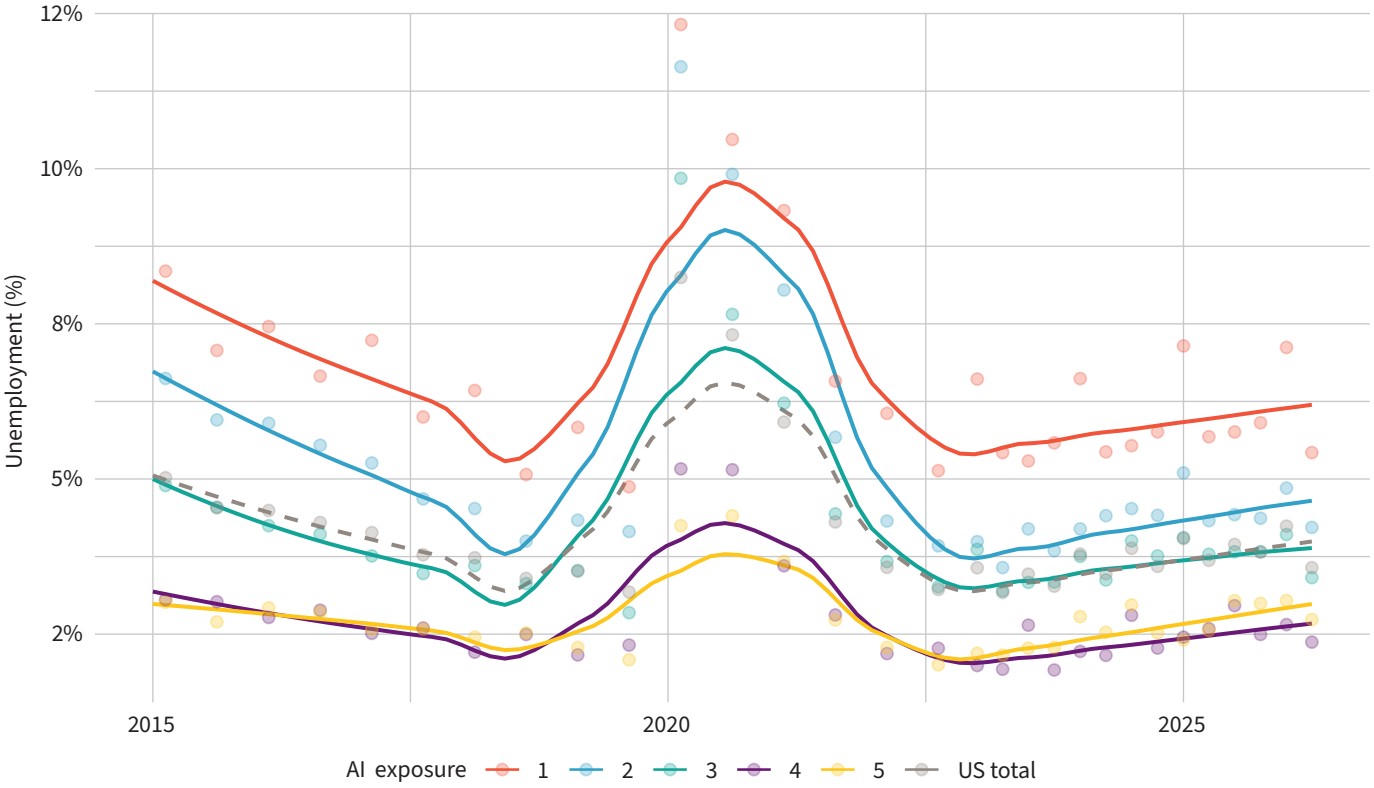
7 Kharazian, Ara, Lisa Simon, and Ryan Stevens. **A New Look at AI's Impact on Jobs: Firm-Level AI Spending and Workforce Adjustment**. Ramp Economics Lab, June 2026.

8 Rebecca Bellan and Connie Loizos, "**Every Major Tech Layoff in 2026 That Has Name-Checked AI**." *TechCrunch*, July 6, 2026.

9 Lucy Hodgman, "**Sam Altman thinks tech companies are 'AI-washing' their layoffs**," *San Francisco Chronicle*, February 21, 2026. Jake Angelo, "**Marc Andreessen says AI layoffs are a farce: Companies are 75% overstaffed, and AI is the 'silver bullet excuse' to clean house**," *Fortune*, March 31, 2026. Satyam Mishra, "**AI Overtakes All Other Reasons for Job Cuts as Layoffs Surge in 2026**." *Outlook Business*, June 7, 2026.

10 Roy Maurer. "**The AI Layoffs Narrative: Real Transformation, or Scapegoat?**" *SHRM*, May 18, 2026.

FIGURE 1: Unemployment rate by AI-exposure quintile, 2015-2026 (quarterly)



Source: IPUMS-CPS data. Updates and extends Eckhardt and Goldschlag (2025) using replication code.
Note: AI exposure from Felten, Raj, and Seamans (2021).[11] Quintile 1 = least exposed, 5 = most exposed; dashed line is the U.S. total.

This doesn't mean AI isn't having any negative impact on some workers; rather, the effects so far are more nuanced than an imminent "AI jobs apocalypse" would suggest. AI could be creating pockets of disruption that aren't easily visible in aggregate economic data. In particular, there is some evidence that AI may be negatively affecting demand for young white-collar workers, as we discuss next.

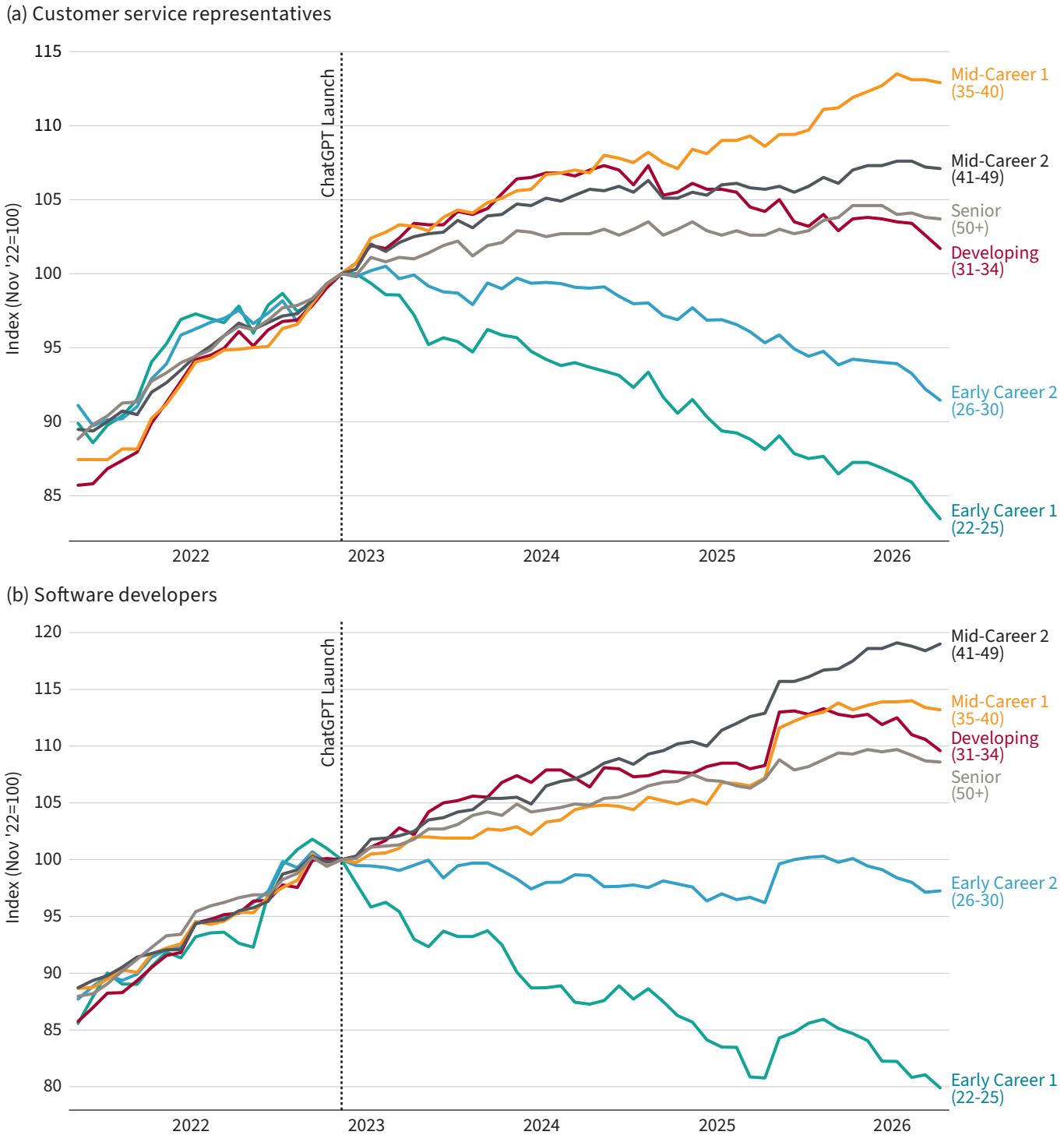
A tough labor market for young workers may be partly due to AI

Recent graduates are facing the most challenging job market in years, with unemployment rates for new grads reaching 5.6 percent in early 2026, up 1.6 percentage points from three years earlier.[12] This rise has fueled concerns that AI is replacing many of the jobs recent graduates once sought. Junior roles often involve routine research, analysis, and writing tasks that can now largely be done with AI. Consistent with this intuition is empirical evidence that AI may be dampening demand for new hires.

11 Felten, Edward, Manav Raj, and Robert Seamans. 2021. "**Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses**." *Strategic Management Journal* 42(12): 2195-2217.

12 Federal Reserve Bank of New York, **The Labor Market for Recent College Graduates**, 2026 Q1 data.

FIGURE 2: Employment by age in two AI-exposed occupations, 2021–2026



Source: Stanford Digital Economy Lab and ADP Research.
Note: Employment index by age group, from a five-year balanced sample of firms using ADP payroll services; 100 = each group's employment at the November 2022 launch of ChatGPT (Brynjolfsson, Chandar, and Chen 2025).

In a widely discussed paper, Brynjolfsson, Chandar, and Chen report a notable decline in employment among early-career workers in AI-exposed occupations, notably software developers and customer service representatives, since ChatGPT's launch in 2022. As shown in Figure 2, by contrast, employment among older workers in those same occupations remained relatively stable or continued to grow. The authors liken these young workers to "canaries in the coal mine," the first to experience labor market disruption from AI.[13] Other researchers have since identified similar negative effects on the hiring of young AI-exposed workers in the U.S. and the U.K., beginning in 2022.[14]

The timing of this impact is somewhat surprising. AI model capabilities were very limited in 2022. Other factors may be at play, including rising interest rates, pandemic over-hiring, and remote work. For example, in response to rising inflation, the Federal Reserve aggressively hiked interest rates beginning in March 2022 — several months before ChatGPT's public release the following November. Two new papers find that hiring in AI-exposed occupations began to decline after the Fed's monetary policy shift but before ChatGPT's debut.[15] Also, the rapid shift to remote work during the pandemic, which can slow on-the-job learning, erodes the value of hiring younger workers. New evidence suggests hiring in remote-friendly occupations began to skew toward more experienced workers after the pandemic.[16]

In response to concerns about these and other possible confounding effects, Brynjolfsson and coauthors added new controls. In these results, employment declines among entry-level workers are not notable until 2024.[17] It thus seems plausible that factors other than AI are driving declines in hiring young workers around 2022. However, by 2024, both AI adoption and model capabilities had advanced significantly, making the direct impacts of AI more plausible.

Hiring of entry-level workers in AI-exposed occupations clearly declined markedly around 2022. What is harder to determine is whether this decline constitutes clear evidence of AI's impact on demand for young workers, now or in the future. Given other macroeconomic shocks to labor demand around this time, isolating AI's impact is empirically challenging. This remains an open and active area of research.

The impact of AI on worker productivity is mixed but generally positive.

In experimental settings, generative AI tools — such as chatbots and coding tools — have often been found to disproportionately improve the performance of less experienced and poorer performing workers. In one such study, researchers analyzed the impact of a generative AI assistant on customer support agents in a large call center.[18] The assistant increased overall productivity by 15 percent, with gains highly concentrated among novice and less-skilled workers, who saw a 30 percent improvement in the number of issues resolved per hour. There was no

13 Brynjolfsson, Erik, Bharat Chandar, and Ruyu Chen. "**Canaries in the Coal Mine? Six Facts about the Recent Employment Effects of Artificial Intelligence**." Stanford Digital Economy Lab, November 2025.

14 Hosseini Maasoum, Seyed Mahdi, and Guy Lichtinger. **Generative AI as Seniority-Biased Technological Change: Evidence from U.S. Resume and Job Posting Data**. SSRN, November 2025. Teeselink, Bouke. **Generative AI and Labor Market Outcomes: Evidence from the United Kingdom**. SSRN, December 2025. Tucker, Lee. "**You're Not Hired: Artificial Intelligence and Early Career Hiring in the Quarterly Workforce Indicators**," CES Working Paper CES-26-27, April 2026.

15 Iscenko, Zanna, and Fabien Curto Millet. **Looking for the Ladder: Is AI Impacting Entry-Level Jobs?** Economic Innovation Group, January 2026. Frank, Morgan, Alireza Sabet, Lisa Simon, Sarah Bana, and Renzhe Yu. "**AI-Exposed Jobs Deteriorated Before ChatGPT**." arXiv, January 2026.

16 Lambert, Peter and Yannick Schindler. "**The Broken Ladder: AI, Remote Work, and Early-Career Hiring**." SSRN, May 2026.

17 Brynjolfsson, Erik, Bharat Chandar, and Ruyu Chen. "**Canaries, Interest Rates, and Timing: More on the Recent Drivers of Employment Changes for Young Workers**." Stanford Digital Economy Lab, February 2026.

18 Brynjolfsson, Erik, Danielle Li, and Lindsey Raymond. 2025. "**Generative AI at Work**." *Quarterly Journal of Economics*. 140(2): 889-942.

performance improvement among highly skilled customer service agents, whose response quality fell slightly.

Other studies also show that AI tools generally speed up task completion, though the effects vary by task, context, and skill level. Figure 3 summarizes research findings on the impact of AI tools on speed across a variety of tasks. In software development, the use of GitHub Copilot — an AI tool that suggests code and functions — allowed tasks to be completed 56 percent faster, with gains concentrated among less-experienced programmers.[19] More modest impacts on software development were found in a separate paper, with effects ranging from 10 percent to 30 percent, depending on the firm where it was deployed.[20] In writing tasks, access to ChatGPT was found to reduce writing time for workers of all abilities and improve writing quality among low-ability writers.[21] Among young lawyers, the use of an AI tool was found to increase the speed of legal work, such as drafting contracts.[22] In medical settings, an assessment of AI scribes found some evidence that they increase the speed of medical note-taking, although the effects are small and occasional inaccuracies require physician oversight.[23]

In many workplace settings, employees must determine when and how to deploy AI assistance, which complicates matters considerably. Dell'Acqua and coauthors document that AI's capabilities are "jagged," meaning performance can be strongly positive or negative depending on the specific task to which it is deployed.[24] Determining whether AI output is useful or needs further refinement can require skilled judgment. For example, when researchers deployed an AI assistant to help Kenyan entrepreneurs, less-skilled entrepreneurs posted lower revenues and profits from using an AI tool than those who grew their businesses without it.[25] Examining why, the researchers found that less-skilled entrepreneurs were more likely to act on generic advice from the AI tool that was detrimental to their specific situations, while better performers extracted suggestions more tailored to their business needs.

While AI can make some employees more individually productive, it can also narrow the range of creative ideas. The use of AI in creative writing tasks was found to increase the quality of stories produced by less-skilled writers, but AI-generated stories were much more similar to one another than human-generated ones.[26] Hao and coauthors found that, while scientists who adopt AI tools publish more papers, AI adoption reduces the total number of topics studied and scientists' engagement with one another.[27]

19 Peng, Sida, Eirini Kalliamvakou, Peter Cihon, and Mert Demirer. "**The Impact of AI on Developer Productivity: Evidence from GitHub Copilot**." arXiv, Feb 2023.

20 Cui, Zheyuan, Mert Demirer, Sonia Jaffe, Leon Musolff, Sida Peng, & Tobias Salz. "**The Effect of Generative AI on High-Skilled Work: Evidence from Three Field Experiments**." SSRN, August 2025.

21 Noy, Shakked, and Whitney Zhang. 2023. "**Experimental Evidence on the Productivity Effects of Generative Artificial Intelligence**." Science. 381:187-192.

22 Choi, Jonathan, Amy Monahan, and Daniel Schwarcz. 2024. "**Lawyering in the Age of Artificial Intelligence**." *Minnesota Law Review*. pp 147-218.

23 Lukac, Paul, William Turner, Sitaram Vangala, Aaron Chin, Joshua Khalili, Ya-Chen Shih, Catherine Sarkisian, Eric Cheng, John Mafi. "**Ambient AI Scribes in Clinical Practice: A Randomized Trial**." NEJM AI 2025, 2(12).

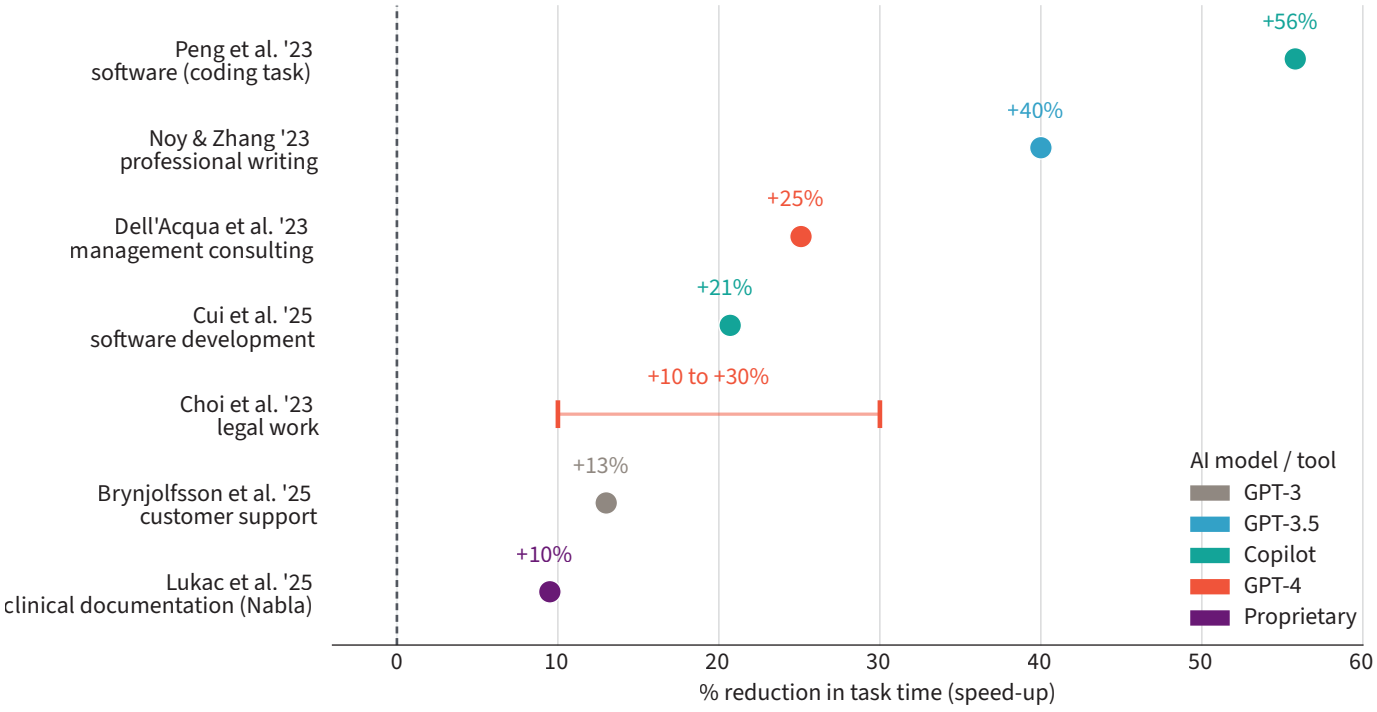
24 Dell'Acqua, Fabrizio, Edward McFowland III, Ethan Mollick, Hila Lifshitz-Assaf, Katherine Kellogg, Saran Rajendran, Lisa Krayer, Francois Candelon, and Karim Lakhani. "**Navigating the Jagged Technological Frontier: Field Experimental Evidence of the Effects of AI on Knowledge Worker Productivity and Quality**." Harvard Business School Working Paper, No. 24-013. September 2023.

25 Otis, Nicholas, Rowan Clarke, Solene Delecourt, David Holtz, and Rembrand Koning. "**The Uneven Impact of Generative AI on Entrepreneurial Performance: Evidence from a Field Experiment in Kenya**." Harvard Business School Working Paper, No. 24-042. October 2025.

26 Doshi, Anil, and Oliver Hauser. "**Generative AI Enhances Individual Creativity but Reduces the Collective Diversity of Novel Content**." *Science Advances*. July 12, 2024. Moon, Kibum, Kostadin Kushlev, Andrew Bank, Ben Lira Luttges, Indre Viskontas, James Kaufman, Dan Johnson, Angela Duckworth, and Adam Green. "**The Creative Link Between Words and Ideas is Weakening in the AI Era**." Available at ResearchGate. February 2026.

27 Hao, Qianyue, Fengli Xu, Yong Li, and James Evans. 2026. "**Artificial Intelligence Tools Expand Scientists' Impact but Contract Science's Focus**." *Nature*. 649: 1237-1243.

FIGURE 3: Experimental estimates of generative AI's effect on task speed



Source: Authors' compilation of randomized and field experiments.
Note: Each point is the estimated effect of giving workers access to generative AI on the time taken to complete representative tasks, colored by the AI model generation used. Choi et al. (2023) is shown as a range (the span across tasks). Cui et al. (2025) and Brynjolfsson et al. (2025) are converted from output-per-hour measures, and Brynjolfsson et al. is a staggered-rollout, quasi-experiment rather than a randomized trial. Estimates are task-level and short-horizon, and tasks differ across studies, so magnitudes are not strictly comparable.

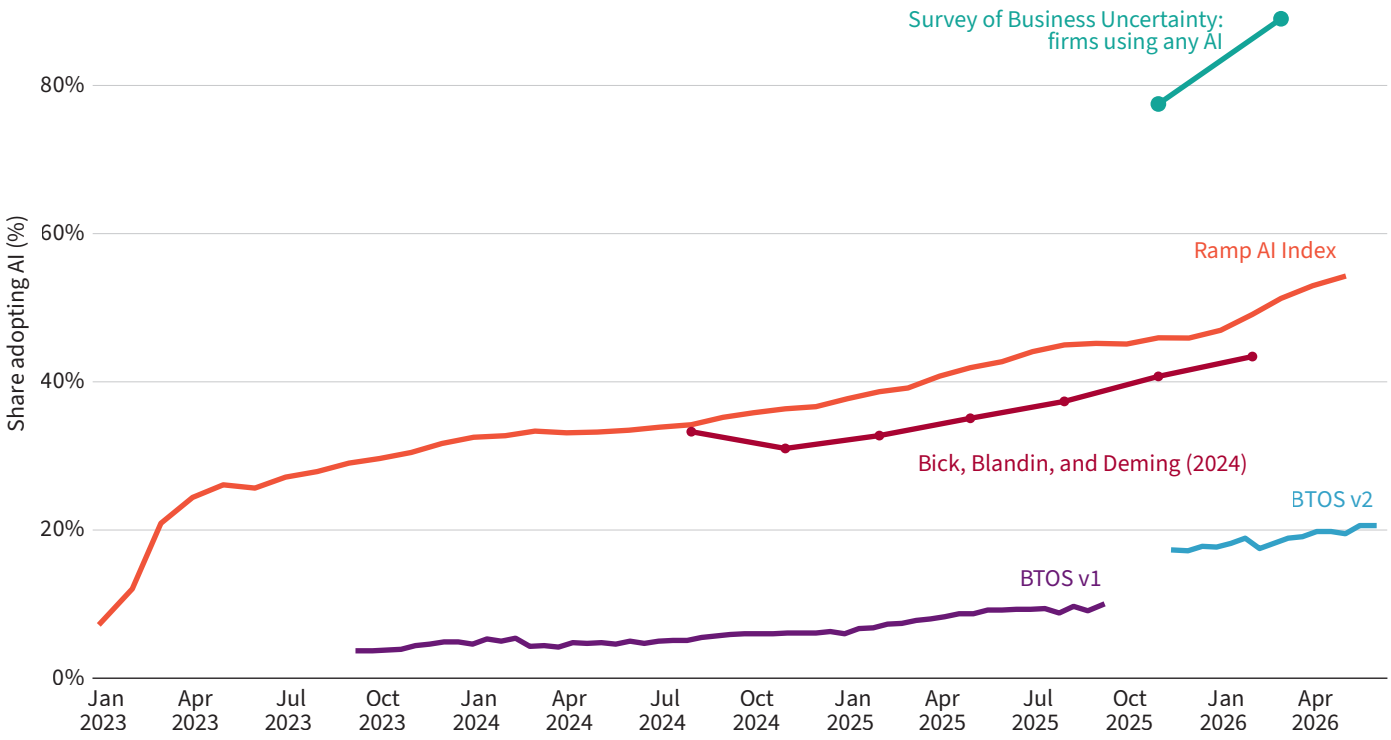
AI clearly has the potential to improve worker performance across many settings. However, several frictions could prevent the gains observed in experimental studies from showing up in aggregate productivity measures yet. The share of tasks that AI can profitably speed up may be small relative to the total number of economic tasks.[28] Bottlenecks in processes where AI cannot currently assist could limit productivity gains for a time.[29] Also, when firms adopt new technologies, measured productivity can initially fall because firms need to divert resources to reorganize functions and make complementary investments.[30] While AI is likely to boost productivity eventually, given the current pace of firm adoption, it may not be visible in aggregate statistics yet.

28 Acemoglu, Daron. "**The Simple Macroeconomics of AI**." NBER Working Paper 32487. 2024.

29 Jones, Charles. "**AI and Our Economic Future**." NBER Working Paper 34779. 2026.

30 Brynjolfsson, Erik, Daniel Rock, and Chad Syverson. (2021). "**The Productivity J-Curve: How Intangibles Complement General Purpose Technologies**." *American Economic Journal: Macroeconomics*. 13(1): 333-372.

FIGURE 4: AI adoption at work, 2023-2026



Source: U.S. Census Bureau, Business Trends and Outlook Survey (BTOS); Stanford Digital Economy Lab/Real-Time Population Survey (Bick, Blandin & Deming, 2024); Federal Reserve Bank of Atlanta, Survey of Business Uncertainty; Ramp AI index. The Census revised the BTOS instrument in November 2025 to ask firms about all AI use at the firm; previously, the survey asked whether AI was used 'to produce goods and services'.
Note: Series are not directly comparable. BTOS = unweighted share of firms using AI (biweekly; the break marks the November 2025 change in question wording). Bick, Blandin, and Deming = the share of *individuals* using generative AI at work. Survey of Business Uncertainty = employment-weighted share of firms using any AI. Ramp = the share of businesses on its platform (not a representative sample) purchasing AI services.

Firm adoption has accelerated but unevenly across the economy.

If AI is truly a transformative technology, whether its sweeping effects occur over three years or 20 years fundamentally changes the policy problem. A swift transformation could displace many workers at once, while a slower one gives policymakers and workers more time to adapt. One of the most important indicators of the timing and distribution of AI's potential economy-wide effects is the pace of firm adoption.

Surveys of firms show a wide range of adoption rates, but all show rapid growth in the use of AI. Figure 4 shows several widely cited measures of firm adoption. The most conservative estimate of firm adoption is the Census Bureau's Business Trends and Outlook Survey (BTOS), a nationally representative survey of businesses, which currently estimates that about 20 percent of firms use AI. Other measures of AI use in the workplace generally show higher rates of firm adoption; at the high end, a survey of executives in U.S. firms found that over 80 percent of employees use AI at work.[31] Ramp, a fintech expense management company, estimates that over 50

31 Yotzov, Ivan, Jose Maria Barrero, Nicholas Bloom, Philip Bunn, Steven Davis, Kevin Foster, Aaron Jalca, Brent Meyer, Paul Mizen, Michael Navarrete, Pawel Smietanka, Greg Thwaites, and Ben Zhe Wang. "**Firm Data on AI**." Federal Reserve Bank of Atlanta Working Paper. March 2026.

percent of its clients are spending money on AI tools and AI vendors. A nationally representative survey of households finds that over 40 percent of employed respondents use AI at work.

Variance in adoption rates across measures is largely due to differences in methodology and sample composition. Larger firms are more likely to adopt AI, so employment-weighted adoption rates are higher than simple firm counts would suggest. Ramp clearly states in the methodology for its AI index that firms using its platform are not a representative sample of businesses and are skewed toward technology firms, which have higher rates of AI adoption. In a review of the surveys on AI adoption, a recent Federal Reserve research report noted good reasons to favor the relatively low Census estimates, which use a national sampling frame, and showed how differences in adoption rates across surveys narrow considerably when each is weighted by employment.[32]

The distribution of firms that are adopting AI tells us where AI's effects will likely happen first. Currently, the survey evidence suggests AI adoption is concentrated among technology firms and information-intensive sectors like finance. The most common AI deployments are in sales and marketing, IT, strategy, finance, and accounting. Even among adopters, AI use remains narrow rather than broad, limited either to one or two business functions or to low-frequency use across a broader set of tasks, with comprehensive AI integration the exception rather than the rule.[33] A recent McKinsey survey found that most businesses remain in the experimentation and piloting phase of AI, with only a few large companies leading the way in scaling beyond pilots. [34]

AI adoption also appears to have had little effect on employment. In the Census data, only 5 percent of firms report any employment impact, with equal numbers reporting gains and losses. Eighty percent of executives surveyed by the Federal Reserve Bank of Atlanta said AI investments have yet to alter their headcount or improve productivity. A large-scale Danish study linking data on AI adoption by workers to firms found that AI adoption results in the restructuring of worker tasks and time, but that these changes are not yet affecting worker employment, hours or earnings.[35] A recent study found that among firms adopting AI, employment grew by 10 percent in the two years following adoption.[36]

Taken together, the data suggest firm AI adoption is moving quickly but unevenly throughout the economy, with many firms still in the experimentation stage and only the more advanced adopters deploying AI more broadly.

32 Crane, Leland, Michael Green, and Paul Soto. "**Measuring AI Uptake in the Workplace**." FEDS Notes. Board of Governors of the Federal Reserve System. February 2025.

33 Bonney, Kathryn, Cory Breaux, Emin Dinlersoz, Lucia Foster, John Haltiwanger, and Aditya Pande. "**The Microstructure of AI Diffusion: Evidence from Firms, Business Functions, and Worker Tasks**." NBER Working Paper 35141. 2026.

34 McKinsey. "**The state of AI in 2025: Agents, innovation, and transformation.**" November 5, 2025.

35 Humlum, Anders and Emile Vestergaard. "**Still Waters, Rapid Currents: Early Labor Market Transformation under Generative AI**." NBER Working Paper 33777. 2025.

36 Kharazian, Ara, Lisa Simon, and Ryan Stevens. **A New Look at AI's Impact on Jobs: Firm-Level AI Spending and Workforce Adjustment**. Ramp Economics Lab, June 2026.

Conclusion: Existing evidence is hardly the last word.

Technological advances typically take years, even decades, to transform businesses and labor markets. In 1987, economist Robert Solow famously quipped, "You can see the computer age everywhere but the productivity statistics." This lag between innovation and growth occurs because firms' adoption of new technologies is often uneven and slow. Firms, for instance, invested heavily in PC technology in the 1980s. But leveraging the advantages of the PC required additional investments — in enterprise software, worker retraining, and organizational restructuring. These adoption frictions were a major reason measurable economic returns from the computer revolution did not appear until the late 1990s.

It is always difficult to predict what will come next. In Silicon Valley, opinion is sharply divided between those who see AI as a "normal technology" — transformative but gradual, akin to past technologies — and those who predict world-altering effects as early as 2027. The strongest case for AI as a normal technology is history. Previous technological revolutions have eliminated or reduced labor demand in some occupations while simultaneously creating new jobs and industries. As a result, aggregate employment increased, even as the nature of work and the economy changed.

In contrast, those who believe that AI is fundamentally different point to the uniquely fast pace of AI adoption, AI's disproportionate impact on cognitive work, and the cross-cutting nature of AI, threatening not just one occupation but much white-collar work. Regardless of which camp is correct, technological revolutions can be deeply disruptive to individuals, making it crucial to better understand — as quickly as possible — AI's evolving impact on the labor market and prepare potential policy responses.

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