

# The State of Generative AI Adoption in 2025

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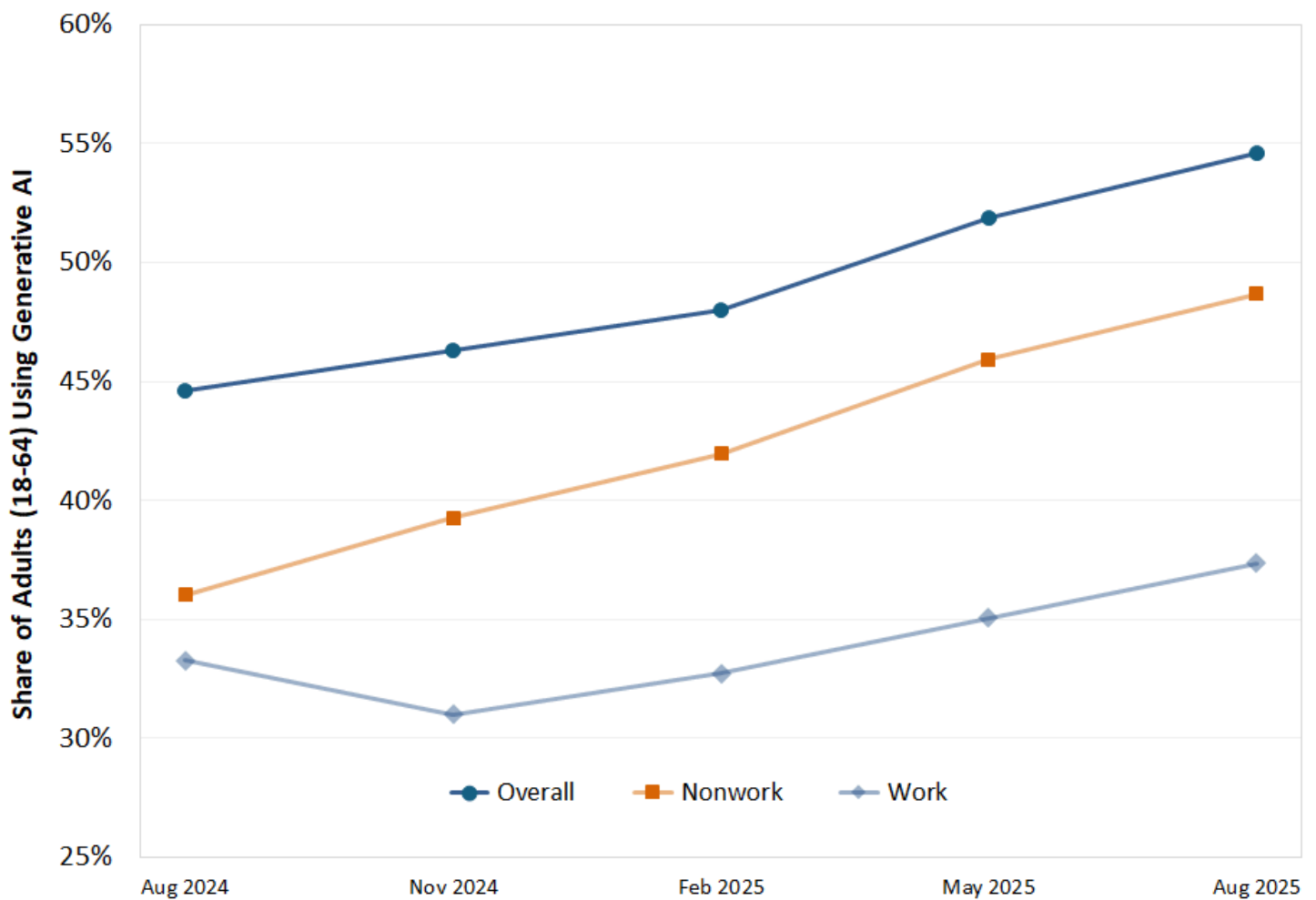
In September 2024, we presented results from the first nationally representative U.S. [survey of generative AI adoption](#) at work and nonwork settings, conducted in August 2024. Since then, we have conducted our survey—the [Real-Time Population Survey](#)—on a quarterly basis. In this blog post, we share an update on the state of generative AI adoption by U.S. workers and look for evidence of this technology’s impact in the broader economy.

To make our findings accessible, we are also releasing a [public tracker](#) with adoption rates across different settings (overall, work, nonwork) as well as some breakdowns by industry and occupation. The tracker also includes data on time savings by industry and occupation, which will be updated on a quarterly basis.

## Generative AI Adoption Continues to Climb

The first figure plots overall adoption rates, both for work and for nonwork, from August 2024 to August 2025. Our survey found that in August 2024, 44.6% of adults ages 18 to 64 used generative AI overall.<sup>1</sup> In the last 12 months, adoption of this new technology increased by 10 percentage points to 54.6%.

### **Generative AI Adoption: Overall, Work, and Nonwork**



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SOURCES: Real-Time Population Survey and authors' calculations.

To put this in perspective, we can compare the pace of generative AI adoption to the pace of computer and internet adoption, relative to the release of the first mass-market product for each technology. August 2025 is roughly three years after the release of ChatGPT, the first mass-market generative AI product. The current generative AI adoption rate of 54.6% exceeds the 19.7% adoption rate of the personal computer (PC) in 1984, three years after the first mass-market computer (the IBM PC in 1981), and the internet's 30.1% adoption rate in 1998, three years after the internet was opened to commercial traffic.<sup>2</sup>

The first figure also breaks down overall adoption by work versus nonwork uses. In the last 12 months, work adoption increased from 33.3% to 37.4%. Nonwork adoption increased even more rapidly, from 36.0% to 48.7%. Along both dimensions, three years after the introduction of the first mass-market product, generative AI adoption is higher than the adoption of PCs, which was 25.1% for work and 5.5% for nonwork.

## Beyond the Adoption Rate: Intensity of Use at Work

Beyond measuring how many workers use generative AI, our survey also allows us to measure how much time workers spend using this technology for their jobs. We can only do this in more detail

starting in November 2024. For the entire U.S. workforce ages 18 to 64, the share of work hours spent using generative AI increased from 4.1% in November 2024 to 5.7% in August 2025.

## Is There Evidence that Generative AI Is Impacting Productivity?

A pressing question is whether generative AI is already affecting aggregate economic data. One margin along which generative AI might impact the economy is by increasing labor productivity; for example, by allowing workers to get more done in less time.

Our survey asks generative AI users how many additional hours they would need to work to get the same amount done if they had not had access to generative AI. We pooled the data from our February, May and August 2025 surveys, and then calculated the aggregate time savings. Factoring in all workers, including nonusers, workers report generative AI time savings equivalent to 1.6% of all work hours.

When we feed these estimates into a standard aggregate production model, this suggests that generative AI may have increased labor productivity by up to 1.3% since the introduction of ChatGPT. This is consistent with recent estimates of aggregate labor productivity in the U.S. nonfarm business sector. For example, productivity increased at an average rate of 1.43% per year from 2015-2019, before the COVID-19 pandemic. By contrast, from the fourth quarter of 2022 through the second quarter of 2025, aggregate labor productivity increased by 2.16% on an annualized basis. Relative to its prepandemic trend, this corresponds to excess cumulative productivity growth of 1.89 percentage points since ChatGPT was publicly released.<sup>3</sup>

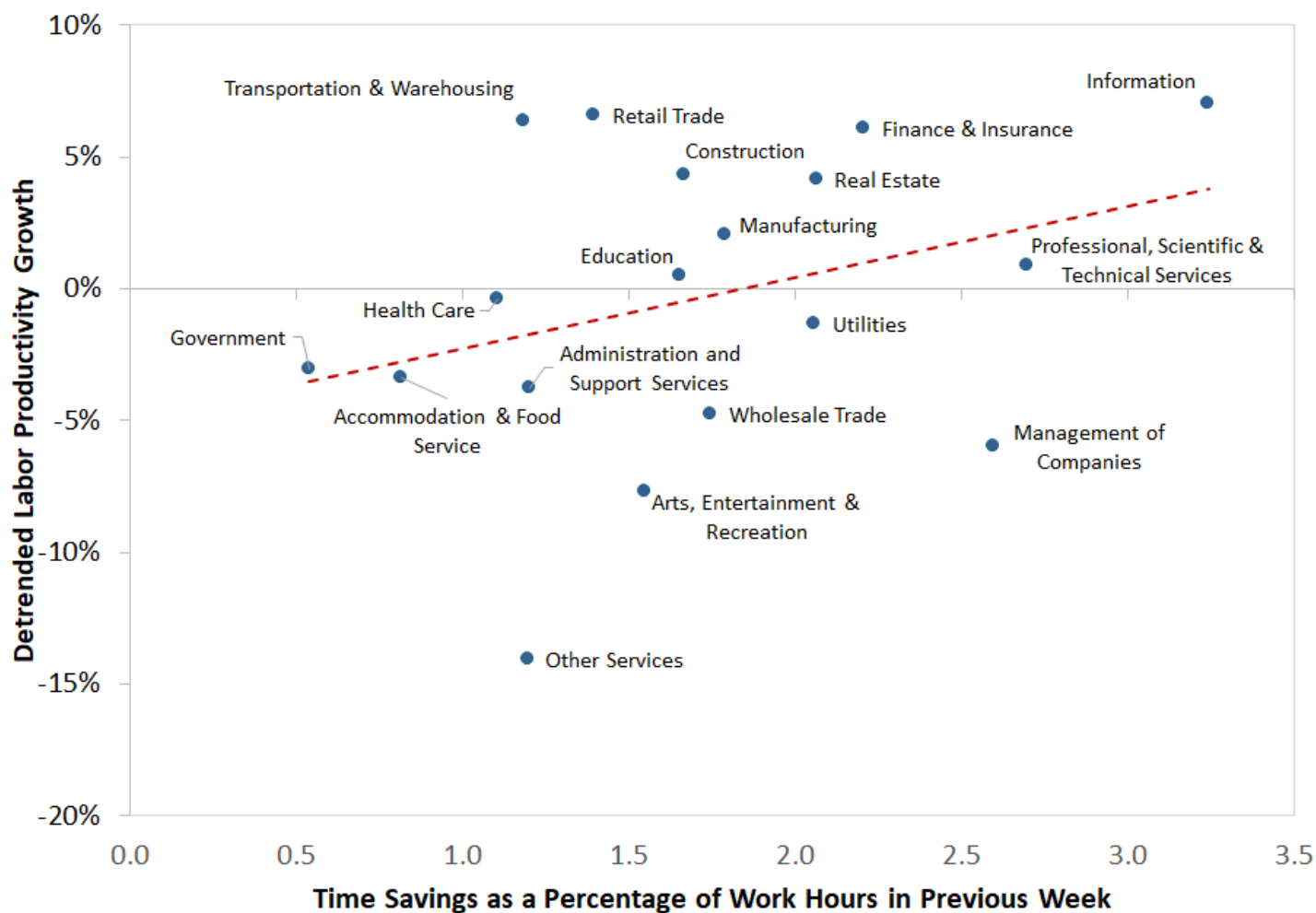
These estimates require several important caveats. On the one hand, increased productivity by workers in some tasks will not increase measured productivity by as much if workers apply their saved time to less-productive activities, such as lower-value tasks, or on job leisure (e.g., doing personal online shopping while at work). On the other hand, our estimates will not capture firm-side adjustments to capital or work reorganizations, which, if they occurred, could lead to additional productivity gains.

## Early Evidence from Industry-Level Data

An additional test for potential productivity gains from AI is to ask whether industries which adopt AI at higher rates also experienced more rapid productivity growth.

To account for differences in preexisting trends, we subtracted a prepandemic trend from each industry's productivity growth. We then correlated this detrended productivity growth with industry-level time savings—the main input in our productivity calculations.<sup>4</sup> The correlation is 0.32, indicating that high-adoption industries tended to have growth faster than their prepandemic trend.

## Labor Productivity Growth and Industry-Level Usage of Generative AI



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SOURCES: Bureau of Economic Analysis, Bureau of Labor Statistics, Real-Time Population Survey and authors' calculations.

NOTES: The dashed red line is a regression line and the slope coefficient is 2.7; the correlation between both variables is 0.32. The figure's data are available for [download](#).

As shown by the dashed red line in the second figure, on average, industries with 1 percentage point higher time savings experienced 2.7 percentage points higher productivity growth relative to their prepandemic trend. We stress that this correlation cannot be interpreted as causal, and that labor productivity is determined by many factors. However, the current results are suggestive that generative AI may already be noticeably affecting industry-level productivity.<sup>5</sup>

## Looking Ahead

Our findings help shed light on a rapidly evolving technology. Generative AI use has grown substantially over the past year, both for work and nonwork. Reported time savings at work by users suggest that generative AI may have already meaningfully increased aggregate labor productivity. Consistent with this, industries with higher reported time savings also tended to experience faster measured productivity growth since the release of ChatGPT than prepandemic trends would suggest. However, we caution that this relationship could be due to confounding factors.

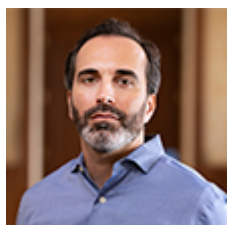
As we continue to track generative AI adoption in future surveys, we will gain a clearer picture of how this general-purpose technology is reshaping work, productivity and the broader economy.

## Notes

1. While conducting our August 2025 survey, we tested our sequencing of questions related to generative AI awareness and use. As a result, we found that the initial results underestimated usage. In response, we applied a reweighting adjustment to our 2024 surveys and February and May 2025 surveys. (See Appendix A.2.1 in our [updated working paper](#) for details.) Our initial result for generative AI usage was 39.4% in August 2024; by revising the sequencing, our updated result for August 2024 is 44.6%.
2. Internet adoption between 1997 and 1998 grew by 8.6 percentage points. Between 1984 and 1989, the next period the data on PC usage by U.S. households are available, adoption grew, on average, by 1.2 percentage points per year.
3. Specifically, we first regress logarithmic labor productivity between 2015 and 2019 on a time trend, predicted labor productivity (in levels) for the postpandemic period, and then subtracted the growth rate of these predicted values from the actual growth rate.
4. In our productivity calculation, we weight time savings by wages but refrain from doing this in the second figure for simplicity. We exclude two sectors from our analysis: agriculture, because the corresponding BLS employment numbers are not available, and mining, because of the strong impact of large swings in commodity prices.
5. For another analysis using our original 2024 data, see Oksana Leukhina and Mickenzie Bass' 2025 *On the Economy* blog post, "[Industry-Level Growth, AI Use and the U.S. Postpandemic Recovery](#)."

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## ABOUT THE AUTHORS



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Alexander Bick is an economist and senior economic policy advisor at the Federal Reserve Bank of St. Louis. He joined the St. Louis Fed in 2022. [Read more about the author and his research.](#)



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