



# Unlocking Economic Opportunity:

A First Look at ChatGPT-Powered Productivity

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OpenAI



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## Foreword

Throughout history, certain technologies have fundamentally changed what people can achieve. More than just simple tools, they provide a new kind of infrastructure that drives progress: the wheel, the engine, electricity, the transistor. AI is such a technology.

At its core, AI is helping people scale their ability to think, learn, create, and build. It's scaling human ingenuity itself. As these systems improve, the economic benefits are expected to be significant.

Productivity is the essential ingredient to raise living standards and improve quality of life for everyone. Economists differ in their projections for how AI will impact productivity, but even at the lower end, AI will expand the economic pie. The most pressing questions are, how will that expansion unfold and who gets what slice?

The choices we make today will shape whether this transformation leads to greater opportunity for all, or greater concentration of wealth and power for the few. At OpenAI, we want everyone to be on the “up elevator” of AI.

We're already seeing glimpses: scientists accelerating discovery, small business owners expanding their capacity, teachers preparing lessons faster. Imagine what's possible when these tools are in everyone's hands.

This extraordinary potential doesn't mean progress will move in a straight line. Every major technological shift brings disruption; some jobs disappear, others evolve, new jobs emerge. The pace and scale of change with AI will likely be bigger and faster than what's come before. We need to be honest about this fact and prepare now.

Our task isn't to stop disruption but to guide it. History shows that new technology can expand opportunity and make life better for everyone – but only if we democratize access, support workers through changing times, and build economic systems that reward broad contribution and participation.

This aspiration requires a wider conversation with more voices – not just industry leaders and policymakers, but also workers, teachers, students and communities. We all need to ask hard questions and be open to new ideas. OpenAI’s new Economic Research team and Washington, DC Workshop will play an active role in this discussion, releasing research papers, non-technical summaries, and notes like this one.

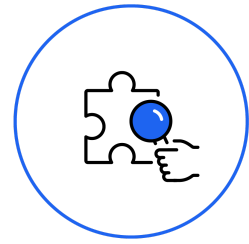
We believe AI can unlock incredible possibilities: more meaningful work, faster progress, and broadly shared prosperity. That future is within reach, but only if we choose to build it together.

**Ronnie Chatterji**

Chief Economist

OpenAI





## Introduction

Much of the world faces what Stanford economist Michael Spence termed a “[productivity imperative](#).” During the 2010s, US labor productivity growth increased by about [1.5 percent](#) per year on average, 1 percentage point lower than the pace of the last economic boom in the late 1990s. Generative AI, put in the hands of as many people as possible, has the potential to significantly increase productivity for people and businesses of all sizes.

The exact scale of AI’s eventual impact on productivity is uncertain, and economists have wide-ranging estimates. What we do know is that the impact will depend upon how quickly AI spreads, how rapidly the models advance, how people and organizations choose to use it, and the policies that shape its deployment. Here, we offer some initial insights into AI’s potential benefits based on data on how people are using ChatGPT.

ChatGPT is the fastest-adopted consumer technology in history, reaching 1 million users in five days, 100 million users in two months, and over 500 million users today. Since launch, we have seen a dramatic increase in use of ChatGPT for work. Today, 28% of employed US adults report using ChatGPT at work, compared to just [8%](#) in 2023.

Users send more than 2.5 billion messages to the platform per day globally, and more than 330 million daily in the US.<sup>1</sup> This breadth of use offers a unique window onto AI’s impacts on the economy. Today, we’re seeing the most use in support of learning and improved written communication: 20% and 18% of all US-based messages, respectively.



**>2.5B**  
messages per day  
globally



**>330M**  
messages per day  
in the US



**20%**  
US-based messages  
about learning

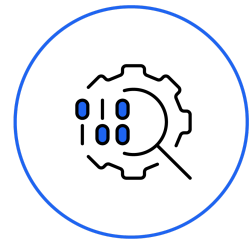


**18%**  
US-based messages  
about written  
communication

<sup>1</sup> Except where otherwise noted or linked, data cited in this analysis are OpenAI’s own internal data.

But Americans are turning to ChatGPT in nearly every aspect of life, and between its widely varied use cases, broad and still growing adoption, and free availability, ChatGPT on its own will be a significant driver of greater personal productivity and a key indicator of AI's impacts on the economy. Below, we explore the drivers of the unprecedented adoption rate of ChatGPT and offer insights that draw on millions of anonymized and aggregated real-world ChatGPT conversations in the US along with economic studies, external surveys, and forecasts to assess the potential for AI to contribute to US economic growth.





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## Pace of AI Adoption Suggests Significant Economic Impact

Past general-purpose technologies like electricity and the steam engine took decades to be broadly adopted and produce widespread economic gains. In reaching 100 million monthly active users just two months after launch, ChatGPT was adopted [significantly faster](#) than the Internet or personal computers. The adoption rate of ChatGPT within two years of launch was twice that of the Internet. Last year, just two years after ChatGPT's launch, [2 in 5](#) US adults reported having used an AI product.

AI has three attributes that speed up adoption:

- 1. *Ease of access.*** AI is an easy workflow fit: people understand how to interact with a blank box, prompting is intuitive, and, once people are up and running, it's easy to adapt AI tools to an unlimited range of tasks, both personal and professional.
- 2. *Low barrier to entry and high scalability.*** OpenAI and some other companies offer free tiers, making experimentation affordable and giving users a chance to scale once they identify valuable ways to use AI.
- 3. *Lots of use cases (and many more to be discovered).*** People are already using ChatGPT for everything from games and cooking to data analysis and creative ideation. Users can see benefits fairly quickly after initial use, so they are encouraged to continue experimenting with AI to find additional ways to identify new uses and increase their productivity.

In light of this rapid adoption, nearly all forecasts suggest that AI will increase productivity. While estimates by economists vary considerably, under most scenarios, AI's impact on economic growth would be meaningful.



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## How Americans Are Using ChatGPT

Millions of Americans already are using ChatGPT in their daily lives and work. An analysis of the purpose of these messages finds that the top use cases are:

**1. Learning & Upskilling (20%):** Students, workers, and small business owners use ChatGPT as a personalized tutor to grasp new concepts on-demand, shrinking the timespan between curiosity and mastery.

**2. Writing & Communication (18 %):** Professionals draft emails, marketing copy, and compliance documents in minutes rather than hours, reallocating scarce cognitive bandwidth to higher-value tasks.

**3. Programming, Data Science & Math (7 %):** Both expert engineers and “vibe coders” lean on GPT models to generate boilerplate code, refactor legacy code, and debug algorithms.

Smaller but economically relevant segments include Design & Creative Ideation (5 %), Business Analytics (4 %), and Translation (2 %).

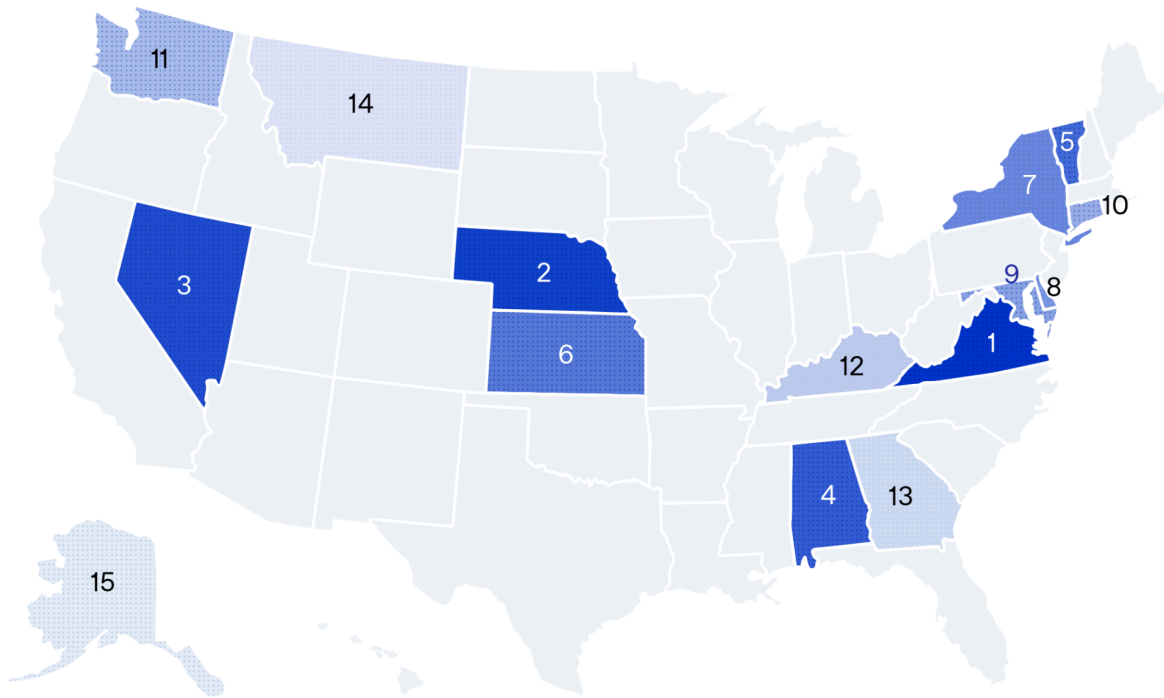
Currently, American users of ChatGPT also skew younger, suggesting that there may be long-term economic benefits as they continue to use AI tools in the workplace going forward. One quarter (24%) of US users are between the ages of 18 and 24, and one third (32%) are between ages 25 and 34. This means that many students and workers in the early stages of their careers are becoming AI natives who will bring this expertise to their careers for years to come.



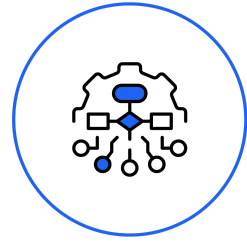
The geographic range of the US states that are the fastest adopters of ChatGPT suggests that adoption is accelerating across much of the country.

### 15 States Adopting ChatGPT the Fastest

*US States with Fastest Quarter-over-Quarter User Growth (July 2025)*

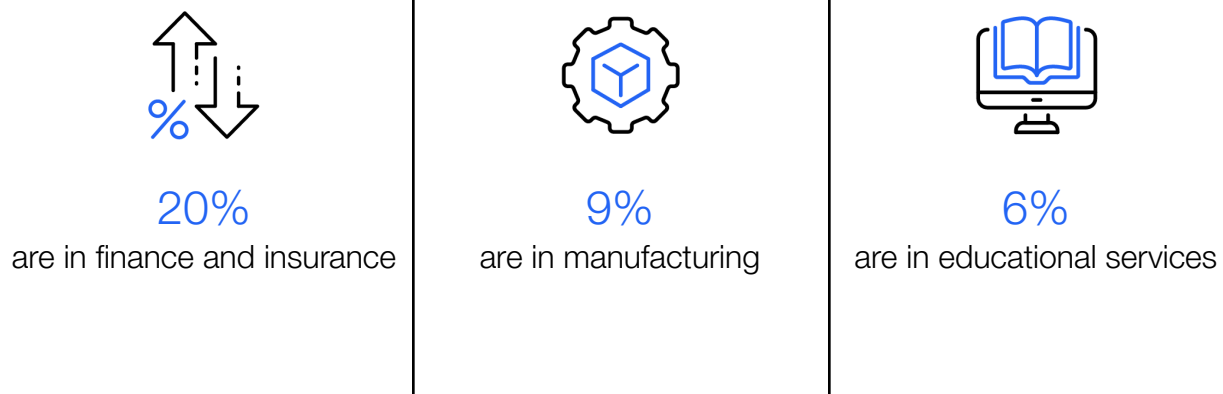






## Sector-Level Productivity Gains

Among OpenAI's large enterprise customers:



Many of the initial economic benefits of AI are being seen in sectors with work tasks that are particularly language- or pattern-heavy: reading scans, writing blog posts, and answering customer questions. What we're seeing across industry sectors so far, including from studies using OpenAI products, includes:

**Legal services:** OpenAI's o1 model increased lawyers' productivity by [between 34% to 140%](#) across six legal workflows. AI tools also substantively improved the quality of legal work. These effects were more pronounced with more complex work like persuasive writing and legal analysis.

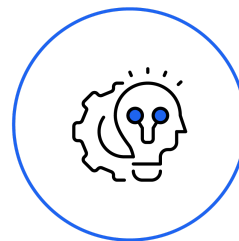
**Customer acquisition and support:** Access to AI tools can also help businesses to reach and support customers more easily. One study found that call center agents working with OpenAI's model were an average [14%](#) more productive in responding to customer queries. In particular, less-skilled workers saw the largest increases in how much their productivity improved. Similarly, content creators using AI to help them generate marketing materials found that they were saving over [11 hours per week](#).

**Consulting:** Using OpenAI's GPT-4, consultants completed work in a lab experiment [25% more efficiently](#) and did 12% more tasks, on average. Moreover, they produced work that was 40% higher in quality compared to that of the control group. There is also evidence that AI could help close skills gaps, as it augmented lower-performing consultants by 43% and higher-performing consultants by 17%.

**Government services:** In a year-long [pilot](#) with the Pennsylvania state government, workers equipped with ChatGPT reportedly saved an average of 95 minutes per day on work including drafting, researching, and accessing IT support. Cumulatively, those time savings are equivalent to adding an entire extra eight-hour workday to the week.

**Education:** In a July 2025 study of [more than 2,200 US K-12 teachers](#), the teachers reported that use of AI helped them to save nearly six hours per week on tasks including lesson planning, giving feedback, and modifying classroom materials. Cumulatively, that's the equivalent of nearly six extra teaching weeks per school year, that teachers could instead spend with students for in-person learning or other needs.





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## Entrepreneurship and New Work

As our CEO Sam Altman [has said](#), "[T]his is probably the best time to start a company since the Internet at least, and maybe in the history of technology" because AI can lower the costs of starting a firm and opens up new business opportunities. AI also helps new companies scale more quickly and launch AI-augmented products at lower cost. Indeed, Y Combinator has seen its Winter 2025 cohort of companies grow in total at around [10% per week](#), an unprecedented level attributed in part to the rise of "AI-first" startups.

Entrepreneurs are already adopting AI to grow their businesses. Around [40%](#) of small businesses report using AI today, while another survey shows that a [majority](#) of small businesses see the technology as increasingly important to their industries going forward. These firms are using AI to help them manage inventory, streamline marketing, handle customer support, and more. Their ability to continue to grow with AI is particularly important given that small businesses account for nearly [46% of private-sector employment](#) in the US.

We will also see entirely new types of work and companies emerge as a result of AI. By some accounts, most professions we work in today [didn't even exist](#) before 1940 and the advent of AI may accelerate this trend in the coming decades. This transformation would mean new roles and entirely new sectors that will provide employment opportunities and further fuel economic growth.





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## Conclusion

Americans' use of ChatGPT already is broad and impactful, even in these early days. The initial evidence suggests that AI is complementing workers in many instances, acting as a force multiplier for human capital and speeding up innovation. The challenge now is to scale these gains equitably and ensure that the benefits reach everyone, not just the early adopters.

OpenAI looks forward to working with policymakers, workers, educators and the public to better understand how AI is changing the economy and ensure that the economic gains that AI brings result in widespread growth and expanded opportunity.



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### About OpenAI

*OpenAI wants to ensure that as AI advances, it benefits everyone. We're building AI to help people solve hard problems because by helping with the hard problems, AI can benefit the most people possible—through more scientific discoveries, better healthcare and education, and improved productivity. We're off to a strong start, creating freely available intelligence being used by more than 500 million people around the world, including 3 million developers. We believe AI will scale human ingenuity and drive unprecedented economic growth and new freedoms that help people accomplish what we can't even imagine today.*

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**Cover image created with ChatGPT**

