



# **The Power of AI: Boosting Productivity and Transforming the Workplace**



**Artificial Intelligence is transforming how people work and interact with technology. The development of large language models and generative AI systems, such as ChatGPT, is leading to significant improvements in worker productivity across various industries. As AI continues to evolve, it is essential to understand its impact on worker productivity and how to leverage it for your business.**

## AI's Impact on Worker Productivity

A recent study by Stanford University and the Massachusetts Institute of Technology showcased the real-world application of generative AI in the workplace. Researchers measured the productivity of over 5,000 customer support agents at a Fortune 500 enterprise software firm. They found that tech support agents who used AI tools experienced a 14% average increase in productivity, measured in issues resolved per hour.

What is most interesting is who AI helped most. Less experienced and low-skilled workers saw the most significant productivity gains, with a 35% increase in work efficiency. However, highly skilled, more experienced customer service representatives did not experience significant productivity increases. For these workers, the AI suggestions were on par with what they already inherently knew and how they were responding.

We are seeing a similar phenomenon in software development. Programmers can access a variety of AI tools, including ChatGPT and Github's Copilot. ChatGPT can answer technical questions, provide code examples, and even debug existing code, all across multiple programming languages. GitHub Copilot can write code and entire functions in real-time right inside the code editor. With AI tools such as ChatGPT and Copilot, an inexperienced programmer can quickly perform at the level of a much more experienced programmer.

The ability to accelerate the ramp-up time and development of new and inexperienced employees by leveraging AI will undoubtedly impact companies and the overall labor market in the coming years. Companies will simply be able to do more with less. Employees can leverage AI to become more productive, perhaps decreasing one of the most significant



costs of operating a business: labor. And from a hiring standpoint, companies may relax their requirements, allowing less experienced candidates to fill open positions.

The effect of AI is not limited to inexperienced customer service representatives or programmers. AI is having a surprising impact on professional and creative jobs too. For example, ChatGPT can write marketing content, correspondence, and even basic legal agreements. DALL·E and Midjourney can create amazing, unique images faster than ever.

It's important to note that while these tools generate impressive results, they are far from perfect and can generate inaccurate results, known as hallucinations. There is still a need for a human in the loop to review results and correct any inaccuracies. However, reviewing and correcting is far easier than creating something from scratch.

## Adoption and Challenges of AI in the Workplace

Despite the potential productivity gains, adopting AI in the workplace is not without challenges. Businesses and organizations must invest in new skills, transform business processes, and adapt to the rapid evolution of AI technologies.

AI will become more integrated into many of the productivity tools employees use daily, such as Microsoft Office and Google Workspace. This will make it easier for employees to become more comfortable and familiar with using AI.

With that said companies should begin thinking more strategically about AI. Education is the first step. AI is moving quickly, so it's important to dedicate time to learning about AI and how it can be applied to business processes. Companies should consider appointing a champion to learn about AI, stay on top of the latest updates, review new tools, and educate others within the organization. Management can then identify use cases and begin implementing AI within the organization.



# Final Thoughts

This document is intended to provide a brief overview and is not a substitute for speaking with one of our expert advisors.

If you would like to discuss AI and its effect on your workforce and business processes, please contact our office. We'd be happy to discuss your specific situation.





## About Pugh CPAs

We got our start in Knoxville, Tennessee in 1969 and have grown into a regional firm with global connections. We've been in business a LONG time and that means we've worked with a diverse group of industries and clients. Of course, we do tax planning, compliance, auditing, and accounting but our passion is collaborating with our clients to ensure that your business and financial goals are met. It's critical for your business advisors to understand how your business operates within your industry—we get that! Our longevity is connected to the relationships we build with our clients and that's how we build trust. You can be confident that Pugh CPAs has the knowledge, skills and abilities to help you achieve your goals. Brilliant people with servant hearts work here.



Pugh CPAs  
315 N Cedar Bluff Rd  
Suite 200  
Knoxville, TN 37923-4548



(865) 769-0660



[info@pughcpas.com](mailto:info@pughcpas.com)



[www.pughcpas.com](http://www.pughcpas.com)

