



The Potential Impact of Artificial Intelligence on the Workforce

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New technologies are sometimes feared as job destroyers, with workers and policymakers worried that a pursuit of efficiency will reduce the need for human labor. But history tells quite the opposite story—new technologies boost worker productivity, allowing workers to dedicate their energies to entirely new endeavors that lifts overall economic activity and expands opportunities for workers. That is, new technologies create new jobs or modify how workers approach a task. Over time, new technologies create entirely new industries and job categories. Economist David Autor found [60% of jobs today did not exist in 1940](#), noting that in the last 80 years, 85% of job growth is attributable to technology. We should expect artificial intelligence to be no different.

What Types of Businesses are Using AI?

Over the last six years, businesses have adopted AI functions, according to [McKinsey & Company's Global Survey on AI](#). Respondents' leading use was service operations optimization, improving and expediting the consumer experience. The U.S. Census Bureau found nationwide [3.8% of businesses use AI](#). The survey further found the information sector and manufacturing adopted AI the most.

A recent working paper from the National Bureau of Economic Research finds that the [typical company adopting AI](#) has more than 5,000 employees in either manufacturing, information services, or health care. The research also points to start ups with a younger entrepreneur at the lead as AI-adopters.

Key Oklahoma industries are researching opportunities to fold AI into tasks. [The National Aviation Research Plan for 2024](#) includes a plan to develop an AI tool that would better prepare pilots for hazardous weather. The [energy sector](#) is also looking at AI adoptions to help manage the complex systems that pipeline and the electricity grid require. Farmers and ranchers are also adopting AI into their tools. [The Farm Bureau Federation](#) found AI is being built into tractors and other large machinery to help with crop management and soil composition analysis.

What is the impact of AI on employees?

In the U.S., [Pew Research Center reports](#) 19% of all workers are highly exposed to AI. Most of these workers have a bachelor's degree or more. Pew Research also found that being more exposed to AI pays off for employees—workers with more exposure to AI are paid \$13 per hour more on average than those who are not.

Globally, it is estimated that some [300 million jobs are exposed to AI](#) or automation. But this is no indication that 300 million jobs will be eliminated based on this exposure. It may simply mean that certain routine tasks are automated, freeing up employee time for other non-automated tasks. Moreover, if jobs are lost to automation, there will be a surge of new occupations created.

In Oklahoma, according to the [2023 Business Trends and Outlook Survey by the Census Bureau](#), 5% of businesses are looking to adopt AI in the future and 3.5% currently use AI. Both the future adopting businesses and current users reported that while tasks may be taken over by AI, the business' total employment would not change.

What's the impact of AI adoption on the economy?

The efficiency and boost to overall productivity brought by AI adoption holds the potential to be tremendous. [Goldman Sachs](#) estimates that through the adoption of AI and automation technology the world could see an increase of 7% in GDP and one and a half times more productivity. Such a boost would rival or exceed the last major technology-driven productivity boom seen with the introduction of the internet.

The most AI-enthusiastic [economists estimate](#) that productivity will increase ten (10) fold within the next quarter century if advanced AI is adopted. This amount of productivity would increase economic growth by 20 to 30 percent each year, a nearly unimaginable feat. Other more conservative estimates show exponential or near-exponential growth in specific industries, along the lines of what new technology adoption has done in the past. In any event, the emergence and continued development of AI hold tremendous potential for productivity and economic growth.

