



[Workers' Comp](#)

The new guy at work might soon be a robot

February 24, 2020

4 MIN READ

We've all seen those fascinating videos of robots on an assembly line – long, articulated [arms](#) whipping from task to task. That's what many of us rightly think of when we consider the growing role of automation in the workplace. While that's part of it, in the coming years we won't just watch robots in action, we'll work alongside them and even in tandem with them thanks to artificial intelligence (AI).

The prospects of having metallic coworkers can be both exciting and daunting. Letting a robot step in to handle some of the more boring or dangerous aspects of a job sounds great. But what if the robot takes over the job entirely? There are real reasons to be concerned about the societal fallout from job losses though history shows that while technology eliminates some occupations, these gee-whiz innovations end up giving rise to more jobs than they leave behind. Still, the transition can be bumpy.

Automation shows proven efficiency

Numerous reports indicate automation will reshape the workforce by dispensing with some jobs, creating others and, perhaps most important, blending with many more. There is [evidence](#) that people working with robots designed to assist humans – called cobots – leads to the greatest efficiency.

The early casualties of automation are easy to spot. It's little surprise that many of the simplest-to-automate jobs center on routine, repetitive tasks such as in manufacturing. Increasingly, however, robots will take on more complex and varying roles. Innovations such as AI mean many robots will burnish their skills through on-the-job training and rely less on following exacting programming laid out by humans.

It's these fast-learners that will pry open new parts of the economy to the forces of automation. A widely publicized 2017 [study](#) estimated that most large U.S. metropolitan areas could see 55 percent of their jobs lost to automation in the next two decades. Back-office work and food preparation are among those areas likely to be hardest hit. Researchers have added other jobs to the endangered list, including insurance underwriters and appraisers, telemarketers, tax preparers, and cashiers. (Think TurboTax and self-checkout at the grocery store.)

Automation isn't going anywhere

Occupations where an injection of automation could supercharge humans' skills are ripe for use of cobots. These types of jobs include tasks that aren't always routine yet that involve “advanced analytical, interpersonal, or manual skills requiring significant dexterity – for instance, teamwork, relationship management, people management, and caregiving,” according to a 2019 [report](#) on the changing nature of work from the World Bank.

A McKinsey Global Institute [review](#) of 2,000 activities that people do as part of their jobs found 45 percent of these efforts could be automated with existing technology. This will require reinventing business processes to incorporate the benefits of automation.

High-wage economies like the U.S. make the case for automation stronger. Introducing a robot to a workplace can have substantial upfront costs and some recurring maintenance expenses but doing so eliminates some portion of spending on salaries, health insurance, vacation, sick days, and, yes, workers' compensation. Even in developing economies like China, where wages have been rising as the economy barrels toward becoming the world's largest, automation is an easy choice. The country is the largest market for robots and, by one [estimate](#), the ROI for such technology is as little as two years.

The move toward increased automation is occurring in part because the price of robots has fallen dramatically. Yet cost-cutting is not the only reason some employers turn to automation. One U.S. company did so because it couldn't find sufficient numbers of workers in a tight labor market who were willing to do repetitive factory work. And many would-be job candidates were in poor health "because of alcohol, because of despair and depression, because of a spike in the use of opioids and other drugs," according to a *Washington Post* [profile](#).

Automation is not a new concept

Whatever the reason for bringing new technology into the workplace, history makes clear that such advancements are unstoppable. So, it's at least somewhat comforting to know that increased use of automation has, in the past, created more jobs, as the World Bank report noted. What's more important in the short term, however, is that there often are substantial disruptions to labor markets for periods of time as some jobs fade and others emerge.

Economists are debating whether the technology-grows-the-pie rule will hold with this latest workplace retooling. Some labor market experts are hoping the productivity gains that robots produce will create a halo effect of increased wealth as costs fall. They point to past technological breakthroughs such as electricity, aviation and [mechanized farming](#), which boosted productivity by orders of magnitude. However, some experts [warn](#) world leaders aren't doing enough to prepare for the possibility that robots could usher in even short-term structural unemployment, which occurs when large segments of workers have skills rendered obsolete. The question remains whether an economy that relies far more on automation will be able to absorb the displaced workers. We'll likely soon find out because, indisputably, the robots are coming.



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