

# Robots could replace nearly a third of the U.S. workforce by 2030

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By **Danielle Paquette** November 30 at 12:48 PM

Over the next 13 years, the rising tide of automation will force as many as 70 million workers in the United States to find another way to make money, a new study from the global consultancy McKinsey predicts.

That means nearly a third of the American workforce could face the need to pick up new skills or enter different fields in the near future, said the report's co-author, Michael Chui, a partner at the McKinsey Global Institute who studies business and economics.

“We believe that everyone will need to do retraining over time,” he said.

The shift could displace people at every stage of their career, Chui said.

By 2030, the researchers estimated, the demand for office support workers in the U.S. will drop by 20 percent. That includes secretaries, paralegals and anyone in charge of administrative tasks.

During the same period, the need for people doing “predictable physical work” — construction equipment installation and repair, card dealing, security guarding, dishwashing and food preparation, for example — will fall by 30 percent.

Other advanced economies, such as Germany and Japan, will see at least a third of their workforce similarly disrupted, the report concludes.

China's share will be smaller (12 percent), since more employers there will still find it cheaper to employ humans.

Machines can increasingly perform tasks that people have long handled. They scan Tylenol and lip balm at the drugstore. They build pickup trucks. They take your grilled cheese order at Panera.

Technology could replace up to 375 million employees worldwide by 2030, the McKinsey authors estimate.

The jobs most at risk involve repetitive tasks. About half the duties workers handle globally could be automated, according to the report, though less than 5 percent of occupations could be entirely taken over by computers.

Caretakers, psychologists, artists, writers — anyone who relies on empathy or creativity at work — can expect to have the most job security as automation continues to spread, said Jason Hong, a computer science professor at Carnegie Mellon University in Pittsburgh.

“Artificial intelligence is now taking over even white collar jobs,” he said, “but those that require lots of human touch and communication won’t be easily automated.”

Still, the McKinsey researchers foresee “substantial workplace transformations” across the globe, which they think calls for more public investment in job training centers and education.

“The shift could be on a scale not seen since the transition of the labor force out of agriculture in the early 1900s in the United States and Europe, and more recently in China,” the authors wrote.

A [May survey](#) from the Pew Research Center revealed anxiety among bosses. About a third of business leaders and technology watchers in a group of roughly 1,400 expressed “no confidence” that the country’s education system and job training programs will evolve quickly enough to meet the next decade’s labor demands.

But the McKinsey study, an eight-month endeavor, offers hope.

Susan Lund, a labor economist at the firm, said automation will open more jobs — workers who create robots, workers that run computers, occupations we can’t yet imagine — and ultimately boost U.S. productivity and general well-being, as long as the workforce can adequately adjust to a new climate.

Earlier this month, she pointed out, Stanford University researchers found that a machine [could better diagnose pneumonia](#) than radiologists.

“This is how our children could end up with a better standard of living than we have,” Lund said. “We want to be able to transition our workforce so that the people displaced can get new jobs and we can capture the benefits without the downside.”


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**tom brunila** 19 minutes ago

And to whom will the products produced by robots be sold? Workers are not only workers they are also customers who by stuff made by other workers.

A robotized production line has very high fixed costs which makes its break-even point higher. That is, it needs to produce, and consequently sell, more products before making a profit. Whereas a production line manned by people has lower fixed costs and a lower break-even point.

When you cut production by 20% on a line with people you just fire a number of employees and they will stop costing you. When you cut production by 20% on a robotized line your robots will stand idle in the factory and cost you money. You have to pay interest on the loan that you bought them with, you have pay back on the loan you took when buying them. No, companies don't pay in full what production machinery they buy on the day they purchase them. They are paid off from the money they make for the company. Over maybe ten years.



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**mnc77024** 37 minutes ago

Ready for it. Do you realize how many inane things I hear about from "coworkers"? Not gonna

miss them.

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**rj bbq** 49 minutes ago

Let's make this quick just continue to raise the artificial mandated min wage.  
This is the absolute best way to reduce jobs with or without robots.

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**tragiclabs** 1 hour ago

#MAGA

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**bigg.bunyon** 1 hour ago

And it's a safe bet some of the first to be replaced will be the people with \$5/hr skills being paid that oh-so-famous-and-fair \$15/hr wages. There are no free lunches and sooner or later the bill comes due. Historically, this is nothing new; it's simply the continuation of the Industrial Revolution. Robots have been welding for decades in the auto industry and that's just a single example among thousands ... ten of thousands maybe. The root cause of the human problem here is that many people cannot understand the need for skills and education or that once acquired needs to be updated on an ongoing improvement basis. I knew plenty of word processing individuals who once were typists in the typing pool. I also knew some who refused to accept the switch from typewriters to word processors (Wang specifically) and later to computers. Those people, along with a certain group of welders, were left behind. It turns out your mama was right: "Stay in school". And she knew there was no expiration date on the need for education of all types and that "staying" meant far after your high school or even college days ended. My mama said that to me all the time, she also said, "Some people never learn". Mama understood and finally got it through my thick skull. Too bad mamas like her seem to be in such short supply now days.

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**ontime** 2 hours ago

Like the computer, the work load for us humans was to get easier, instead we put in more hours than ever and new jobs keep appearing to support the work loads created....Robots again will do the heavy lifting but humans will oversee the maintenance and oversight the calibrations and repair for these new aids, man is just not going to become irrelevant in a short time span....

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**kevin lee** 3 hours ago

I drive for a living, and I keep hearing that robots will take my job any day now. Realistically I don't think it will happen for at least a few years. The problem is, I'm 9 years away from retirement. Is the government going to spend thousands of dollars and two to four years to retrain me for a new job that I can work for a year or two before I retire?

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**frank evans** 3 hours ago

Let's see congress work for Americans. Make a law that no human job can be replaced by a robot except packaging of food product to reduce disease and or illnesses.

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**edbarbar** 3 hours ago

Yes! We should do this. People should still be making hand carved wooden spoons rather than having good stainless steel spoons, and all the jobs that have been created since.

The industrial revolution saw a massive relocation of people from the fields to cities. Everyone has more stuff since. But, as the Grapes of Wrath showed us, people are incredibly resilient, some have character, and some have compassion.

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**edbarbar** 3 hours ago

Best to import low skilled labor. Since robots are coming, we need as many people on welfare as possible so those who own the robots have a market for their products.

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**patricia fondren** 5 hours ago

With so much automation and robots replacing human bodies, by doing all the manufacturing, paperwork, transportation, who will be buying the products they are producing?

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**edbarbar** 3 hours ago

All the low skilled people on welfare.

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