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In new report on automation, some good news for Minnesota's workers

By [Walker Orenstein](#) | 02/07/2019

Photo by Rob Lambert on Unsplash

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As technology continues to change the American workplace and the U.S. economy, roughly one quarter of jobs in the country are at high risk of becoming largely automated in the next decade and beyond, according to [a new report from The Brookings Institution](#), a Washington, D.C., think tank.

But the effects of automation will vary wildly based on location and industry, the report says. And while automation and technology have their supporters and detractors, Brookings says the future likely holds complex changes for the country, but neither “apocalypse or utopia.”

Here's what the report says about Minnesota.

Minnesota stands out

One of the top takeaways of the Brookings analysis is that more jobs in the Midwest are at risk compared to the rest of the country, largely because of a “longstanding and continued specialization in manufacturing and agricultural industries.” Data accompanying the report say occupations in those fields, such as welders and machinists, are among the most likely to face automation.

South Dakota, Iowa, Wisconsin and Indiana all rank in the top 10 states for jobs with high potential for automation, according to the report. Minnesota, however, is a relative outlier. It’s ranked No. 40, which is the lowest in the region. Only Illinois, which was ranked No. 37, came close.

Luke Greiner, a labor market analyst at Minnesota’s Department of Employment and Economic Development (DEED), recently **published a similar analysis** that came to the same conclusion: There are fewer jobs here at a high risk for automation compared to the rest of the country.

So why is Minnesota different? Greiner said even though the state has large manufacturing and agriculture presence, it also boasts strong numbers of jobs in fields that are not as susceptible to automation. For instance, health care “is obviously a very healthy part of our economy and few of those occupations are at risk,” Greiner said.

Differences within Minnesota

As with many issues, however, the impact of automation will vary greatly around the state. Minnesota’s low-risk rating is driven largely by Minneapolis, St. Paul, Duluth and Rochester.

The Brookings report says across the country, “smaller communities in general face much higher automation risks of current workplace activities than do large ones.”

The report doesn't measure every city and town in the state. But in the Twin Cities, 23.5 percent of jobs are deemed to be at high risk of automation, according to the Brookings report. In Mankato, that rating is 26.5 percent. In St. Cloud it's 30.4 percent.

Greiner said rural areas are typically more susceptible to automation, especially if there's a large cornerstone employer in an industry in which jobs are threatened by automation. For example, Greiner's DEED analysis says jobs in meat, poultry and fish cutting are at high risk of being altered by automation. In cities like Worthington and Marshall that rely to some extent on those industries, the change could be huge, Greiner said.

"If automation does have big impacts, you could have some communities that probably feel little to no impact and others that ... could be totally different," Greiner said.

Automation could bring positives

Just because a job is at risk of automation, Greiner said, doesn't mean it will simply be eliminated. Very few will be, he said. Instead, many jobs will be "augmented" by technology. The Brookings report says machines will often only substitute for certain tasks, rather than take over every duty in a present-day job.

Here's an example: The trucking industry has been working on that by experimenting with platooning, a practice in which semi-trucks synchronize their driving with the help of technology in order to follow each other closely on highways and save gas through drafting. Each truck still has a human driver. Minnesota's Legislature is **considering whether to legalize platooning this year.**

Using technology to ease some tasks may be a good thing for businesses struggling to find workers as baby boomers retire. Minnesota currently has more than 140,000 open jobs despite an ultra-low 2.8 percent unemployment rate, a fact attributed at least in part to retiring workers.

“I’d say our department and the data tell us we’re probably going to need automation,” Greiner said. “We’re going to need it to supplement our slowing labor force growth.”

The report also says jobs involving greater automation usually, but not always, bring higher wages in part because people need different skills to operate and oversee the technology. Those higher wages, particularly in rural areas, can spark a stronger economy, which in turn can stimulate more jobs, the report says. Greiner said for that reason it’s still possible that states with a higher risk of automation may be better off in the long run compared to Minnesota.

Fewer entry-level spots

The flip side of higher-skill jobs increasing from automation is that fewer of today’s entry-level jobs will be available to people entering the workforce. That could make it tougher for immigrants, young people and others to find low-skill work.

The Brookings report says men, Latinos, African-Americans and American Indians are overrepresented in jobs at risk of automation. For that reason, automation could be a double-whammy for workers in food manufacturing, an industry that often **employs many immigrants** in Greater Minnesota, Greiner said.

“Some of those jobs, if they get augmented to become more specialized and higher paying ... that will definitely have implications especially, for instance, with populations where language is a barrier,” Greiner said.

Greiner said that there will still be many low-skill jobs that don’t require a bachelor’s degree in industries that are growing or at least stable. He said **HVAC technicians** aren’t likely to be automated away, for example, while a cashier’s job might.

“Really what that says is moving forward, educational requirement isn’t necessarily a good indicator for job safety,” Greiner said. “What is a good

indicator is the nature of the job itself and the actual skills.”

ABOUT THE AUTHOR:

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Walker Orenstein covers the environment and workforce issues for MinnPost. He previously covered state government and politics for The (Tacoma) News Tribune. A St. Paul native, he is a graduate of the University of Washington. He can be reached at worenstein@minnpost.com, and you can follow him on Twitter at [@walkerorenstein](https://twitter.com/walkerorenstein).

COMMENTS (2)

SUBMITTED BY EDWARD BLAISE ON 02/07/2019 - 06:04 PM.

As a supplier of automation systems to manufacturing, the idea that this is a bad thing is without a basis in fact. The skills to implement operate and maintain the automation system secures better paying jobs and increases the competitiveness of the company in a global economy. The need for skilled machinists and welders has never been higher. The skills to program an automated welding cell or machining center are key parts of these jobs.

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SUBMITTED BY DAVID LAPORTE ON 02/09/2019 - 09:18 AM.

I had a look at the Brookings' Report. It's true that Minnesota comes in at #40. However, our jobs that are at "high risk" for automation are not much less than Indiana (ranked #1): 24.7% versus 29%. And even 24.7% is unacceptably high, particularly if you're one of those people.

There's broad agreement from think tanks across the political spectrum that we should increase our educational efforts in higher order thinking and social/emotional intelligence which can't currently be duplicated by technology. We also need to promote resilient lifelong learning since the longterm future of technology is unpredictable. Children born today will be in the workforce until the end of the century.

The American Association of Colleges and Universities regularly surveys employers across the country about what they want to see in new hires. In 2018, the top 14 deficiencies that were prioritized by employers fall under higher order thinking and social/emotional intelligence. So, even if technology was not a threat, it would be important to improve these skills.

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