

# Greater automation is coming but it will not drive unemployment in Europe

Job losses due to automation in Europe's leading economies will be offset by a shrinking working-age population and new digital and green jobs, IT analyst Forrester predicts.

By **Pete Swabey** 19 Jan 2022

**A**utomation will destroy 12 million jobs in Europe's five largest economies by 2040, according to a new forecast by IT analyst company Forrester. But instead of driving unemployment, this will help companies withstand a decline in the working-age population, Forrester predicts, and will be counterbalanced by the creation of new green and digital jobs.

Other experts broadly agree with Forrester's forecast, but warn that the impact of technology on employment is especially difficult to predict.



*'Automation is not something you do to cut costs or reduce your workforce... It helps you fill the gap.'* (Photo by wellphoto/iStock)

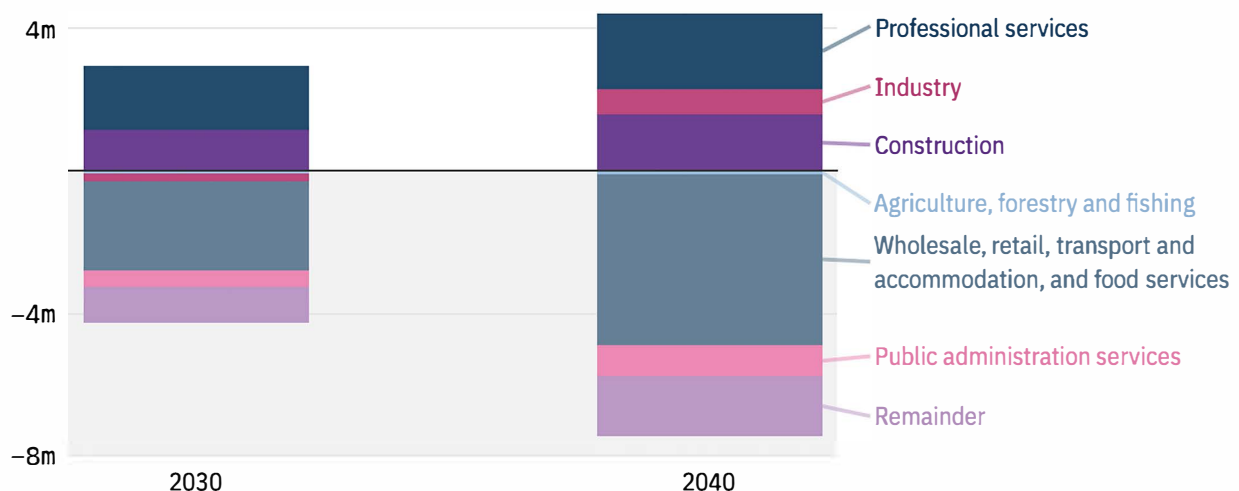
## Automation and unemployment in Europe

The automation of work, especially repetitive, predictable tasks, places 25% of jobs in the UK, France, Italy, Germany and Spain at risk of elimination by 2040, Forrester estimates. The most likely scenario is that 12 million jobs – out of today's total of 158 million jobs in the five countries – will disappear by that time, the analyst company predicts.

Job losses will be especially high in the wholesale, retail, transport, accommodation, and food services sectors, Forrester says, which have a high concentration of repetitive roles.

### Wholesale, retail, transport and leisure services are set to lose the most jobs to automation

Projected impact of automation on job numbers per industry from 2020 levels in Europe-5 countries\* (Likely scenario\*\*)



\* France, Germany, Italy, Spain and the UK

\*\* Current employment + changes to worker demographics + jobs lost to automation + new jobs created

Source: [Future Of Jobs Forecast, 2020 To 2040 \(Europe-5\)](#)

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However, two factors mean that this will not significantly increase unemployment in these countries, Forrester says. The first is that Europe is facing a "demographic timebomb," explains principal forecast analyst Michael O'Grady. The ageing population in these five economies means they will have 30 million fewer working-age residents by 2040.

This means that without automation, companies would struggle to fill roles and maintain productivity. "Automation is not something you do to cut costs or reduce your workforce," O'Grady says. "Automation is a way to keep productivity high with fewer workers... It helps you fill the gap."

Professor Leslie Willcocks, emeritus professor of work, technology and globalisation at LSE's Department of Management, agrees. "The report is right to suggest that automation is better seen as a coping, rather than a pure job displacement, mechanism," he says. "China, Japan and Germany lead in moving rapidly into automation to offset shrinking workforces while needing to boost productivity."

Secondly, Forrester expects nine million new jobs to be created by 2040 thanks to digital transformation and the green revolution. These will be created in the construction and industrial sectors, to help build renewable energy capacity, green buildings and smart infrastructure, and in professional services, to help companies adopt and exploit new digital technologies.

As a result, O'Grady says, "the net job losses from [automation] are actually fairly small." When incorporating new job creation, the net loss of jobs in the five countries by 2040 will be less than 0.5%, Forrester predicts.

These new jobs will not be created over night, however, Forrester warns. Governments will need to continue their investments in green jobs – the UK, for example, aims to create two million 'green-collar' jobs by 2030 - and developing digital skills. Europe already has a shortfall of half a million ICT professionals.

While automation's effect on overall employment levels might be low, its impact on the skills required by employers cannot be underestimated, says LSE's Willcocks. "There will be radical shifts in skills," he says, "with low skills work reducing from 44% to probably 32% by 2030, and a big uptick in work that involves distinctive human skills [such as] critical thinking, interpersonal skills, cognitive non-routine work, and STEM skills. This means radical improvements in European education and training agendas."

This shift caused by automation will have other social costs across Europe besides unemployment, Forrester warns. Government revenues may be reduced as less work is conducted by taxable human beings, for example, and workers' bargaining power may also be threatened.

## **How will remote work impact automation and unemployment?**

Predicting the impact of technology on employment is difficult, even in the short term. "It is brave of Forrester to speculate beyond five years as these days variables change quickly, and their interactions are not easily anticipatable, nor their consequences," says Willcocks. "This is especially true for technology trends."

Carl Benedikt Frey, director of the Future of Work programme at the Oxford Martin School and co-author of the 2013 study that reignited the debate over technological unemployment for the AI era, shares this view. "I think there's simply no way of knowing what the labour market is going to look like in 2040," he says.

Unpredictable factors include the rate of immigration into Europe, wage growth, technological advances, and the pace of regulation. The impact of automation so far has not been consistent between countries in Europe, Frey observes, thanks perhaps to the relative strength of institutions such as trade unions -another factor that may change over time.

Another unknown is the impact of the COVID-19 pandemic and the accompanying shift to remote work. Frey believes this could catalyse outsourcing, whether to crowdsourced platforms or offshore providers. "If more people can work remotely, that also then means that potentially some of [their] tasks can be outsourced, and you can very easily imagine a world where you can subdivide tasks and crowdsource or offshore some of them," he explains.

Increased outsourcing might slow the pace of automation in the short term, Frey says, but the division of jobs into distinct tasks could in turn become a catalyst. "It might very well be that the simplification of tasks through offshoring will eventually lead to automation as the end game," he explains. "So we might see the possibility of offshoring as a substitute to automation early on, but may end up spurring automation in the long run."

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