

## Are robots about to take away 18 million jobs?

Robots are set to wipe out large sectors of the work force. Photo:DPA

# A study commissioned by ING-Diba claims that 59 percent of Germany's work force could be replaced by machines and software in the coming decades. The impact on German society is set to be radical.

The results of the study paint an almost doomsday-esque scenario for Germany.

Almost two thirds of its workforce will be unemployed. Of the 30.9 million people currently in full or part-time employment in Germany, 18 million will be made redundant by improved technology, the report claims.

Although the study looked into the effect that advancing technology will have on the work place in several European countries including Finland and the Netherlands, it was Germany that came out the worst.

This, argues the report, is the price Germany will pay for its strong industrial sector. Factory workers and the administrative army behind global giants such as Volkswagen and BMW will soon become superfluous as advanced algorithms and sophisticated machinery are developed which can do their jobs faster and more efficiently.

### A story of rich and poor

Despite the fact that Germany will face the brunt of the rise of the machines, the revolution will affect the lower classes much more significantly than the wealthier sections of society.

Generally, the lower your qualification the more likely you are to be replaced, claims the report.

Administrative workers such as secretaries are set to have their positions almost entirely taken over by computer algorithms. Eighty-six percent of them could lose their jobs to advancing technology, the study suggests.

The news is almost as bad for mechanics, machine drivers and mechanical technicians, over two thirds of whom are set to have their jobs taken are from them.

For the educated classes the story is quite different.

Doctors are particularly irreplaceable. In the academic classes, of the almost 4 million currently in employment, less than half a million need fear a certified robot taking over their practise.

The story is similar for business leaders. Of the 1.4 million people who occupy this elite sector, only 160,000 would be threatened with redundancy.

#### **Revolution or evolution?**

The report hesitates to say, though, when these changes will take place. But it is unlikely to be from one day to the next.

Robots are still prohibitively expensive to build on an industrial scale. Then there is the likely societal resistance which will attempt to fight off against the mechanization of our lives.

But the study's authors are in no doubt that change is on its way.

"The take over has already begun," Carsten Brzeski, head of economics at ING-Diba, who co-authored the report, told Die Welt.

"There are already some industrial sectors which have been completely taken over by robots."

In Asia for example, progress on robot technologies is particularly advanced.

Toshiba have already developed human-looking secretarial robots which went to work in April in Tokyo, welcoming customers at an information desk at the Nihonbashi Mitsukoshi main store.



Meanwhile China is the world leader in purchasing industrial robots - 35,560 were sold there in 2013.

### Machine becomes master

It is not all bad news, though. The take over of machines will create new jobs, the report authors claim, as humans will be needed to maintain the machines and to make sure that they work in an optimal environment.

"Technological progression will create room for the development of new tasks and activities for humans," Inga Burk, co-author of the report, told Die Welt.

In particular there will be increased employment in technological research and development.

But Brzeski warned that many of the people who lose their jobs will struggle to find new employment.

"Our experience with technological developments which have already taken place shows that it is unrealistic to hope that workers who have been replaced by robots can simply find work in other sectors," the economist said.

"This change will have its winners, but sadly also its losers."