

Workplace 4.0: The evolution of artificial intelligence



Industry 4.0 will also bring about some dramatic changes for human employees in the workplace. They will have more responsibility than ever in the factory of the future. They will have to coordinate complex processes, control interdisciplinary communication and make decisions on their own.

After decades of intense automation, one thing is clear: It has improved the workplace, made the economy more productive and saved jobs.

Artificial intelligence is becoming intelligence augmentation

But now machines are on the verge of thinking for themselves. Are we really entering an era in which machines will overtake human beings? That is the scenario put forth by artificial intelligence. But there is also an alternative concept known as intelligence augmentation (IA), which is using machine intelligence to strengthen or expand human intelligence. Designs for self-driving cars illustrate the different approaches. In the first scenario, the steering wheel disappears and the driver becomes a passenger. In the second scenario, the driver's steering wheel remains intact, but the vehicle prevents traffic accidents by intervening in dangerous situations.

We are stronger together

The fact is: As digitalization progresses, it is empowering machines. So does that mean less activity and responsibility for people? Or will clever machines offer support to improve specific human activities? Human beings are still unique when it comes to judgment, creativity and the ability to handle things with tact and sensitivity.

Using artificial intelligence to augment these skills has a great deal of potential. Until now, teams trumped individuals. After several tries, the "Deep Blue" mainframe computer beat the world champion in chess. But to this day, that same computer has yet to win against a team consisting of good chess players, a commercially available laptop and special chess software.

The future is asking important questions

The future of the workplace is not likely to be a race of “man against the machine,” but instead a competition of multiple teams in keeping with the motto “man with the machine.” However, that also brings up a number of essential questions.

What powers can be assigned to augmented brains? Who is liable in an emergency? What opportunities will be available to low-skilled workers on future job markets? Do we need a training offensive? In the end, will we have more jobs, or less? What alternatives do we have as we shape the working world of the future?

Will “augmented people” lose key capabilities? Or will they achieve new heights in creativity? And will intelligent machines demand their own rights some day?

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