

Adapt or die

Reports that robots, automation and artificial intelligence are going to put millions of us out of work may sound troubling, but should we believe them? That largely depends on whether we're technology optimists or pessimists.

But it is the pace of technological change that is unprecedented in the modern era and which poses the greatest challenge for jobs.

These days algorithms dictate the automated trading of trillions of dollars' worth of assets in the financial markets. Artificially intelligent chatbots are taking over from humans in call centres. And soon, planes and cars could be operating autonomously, endangering the jobs of those who drive professionally.

Robots have been doing the repetitive monotonous work in our factories for decades. But now they can flip burgers, flick away unripe tomatoes on a high-speed sorting machine using image recognition, lay bricks, even co-operate to open doors and escape. Giant 3D printers can make houses out of concrete in a fraction of the time humans can.

The International Federation of Robotics says in manufacturing there are now 74 robot units per 10,000 employees on average, compared with 66 units in 2015. The highest growth rate is in Asia, China in particular.

Software automation, informed by machine learning and artificial intelligence (AI), will have an enormous effect on our workplaces and the jobs we do. Clever chatbots may replace most call centre staff within 10 years. A virtual assistant can handle 60%-80% of all customer conversations now without any need for a human agent to intervene - five years ago it would have been 25%-30%. Chatbots are certainly eliminating jobs - we need fewer and fewer human agents each year. The ones that are left will be highly skilled super-agents looking after the most complicated cases.

Research firm Gartner predicts that by 2020, 85% of questions will be answered by virtual assistants. When you think that a huge telecoms company like AT&T employs about 100,000 call centre agents to look after its 120 million customers, that's a lot of jobs that could disappear pretty quickly.

But the cost-savings are too big for large corporations to ignore. And they say customer satisfaction increases as these chatbots learn from the millions of previous customer conversations and become smarter.

In the last 30 years, we've had digital transformation, the rise of the internet, globalisation. Robotic process automation - RPA - will remove the need for staff to do boring, repetitive, rules-based activities, such as inputting data or handling payroll, tech optimists say.

Video-conferencing provider Polycom, envisages a time where AI will effectively run virtual meetings for us, using facial recognition to identify who is speaking and calling up relevant documents and statistics to support points being made.

The management of sound and video will be so much better. Participants will feel like they're actually present and augmented reality will help us collaborate and annotate documents much more productively. Meetings will be about the ideas, not the mechanics. Without technical barriers we can focus on the work at hand, whether that's providing telemedicine or distance learning services.

But even the optimists admit that as low-skilled jobs disappear, people will need to learn new skills to compensate. There's an urgent need for education reform - people need to learn design thinking, creativity, analytics and programming.

Adapted from <http://www.bbc.com/news/business-43259906> By Matthew Wall
Technology of Business editor 16.3 2018

Questions

1. According to the text, what will put millions of us out of a job?
Robots, automation & AI
2. What tasks are already being done by AI chatbots?
Call centre work
3. What tasks are robots already undertaking? Give 2 examples from the text.
Possible answers:
Monotonous tasks 2) flipping burgers 3) sorting unripe tomatoes 4) laying bricks 5) opening doors 6) making house from 3D printers
4. What do the following figures in the text refer to?
 - i) **74 per 10,000** robot units/employees in 2018
 - ii) **60-80%** customer conversations handled without the help of humans
 - iii) **85%** the % of questions that will be answered by virtual assistants in 2020
5. How will AT&T be affected by the changes talked about in the text?
Thousands of jobs will be lost
6. What are advantages of replacing people with robots?
Cost reduction & increased customer satisfaction
7. What does RPA stand for?
Robotic Process Automation
8. What kind of tasks can RPA perform? Give 2 more examples from the text.
Boring ii) repetitive III) rule based iv) inputting data v) handling payrolls