Humans and artificial intelligence: Rivalry or romance?

Artificial intelligence (AI) has been developing at a frightening pace. It is debatable to what extent it has improved our lives – being able to use geolocation and search for the best restaurants or places of interest is great; however, AI is at the same time eliminating plenty of jobs, fast. A frequently cited report points out that a staggering 47 per cent of jobs in the US will be automated soon. Another study suggests that 45 per cent of the daily tasks currently done by humans could be automated if current trends continue. These numbers are inconceivable, considering that the worst case of unemployment to be recorded was during the Great Depression, in 1929, where an estimated 25 per cent of the population was out of work.

In our most recent book, we mentioned the case of a Chief Financial Officer at an investment bank. Last year, he was given the task of reducing the size of his staff by 80 per cent because off-the-shelf digital technologies could be doing the jobs that were currently occupied by humans. And in 2017 we have seen large banks close record numbers of physical branches, making thousands redundant in the process. Judging by this, humans are starting to look like horses before the arrival of automobiles.

The (human) empire strikes back

It's certain that we will hear more and more alarmist accounts. However, we have seen it before – many times, in fact. Back in 1963, it was J F Kennedy who said, "We have a combination of older workers who have been thrown out of work because of technology and younger people coming in […] too many people are coming into the labour market and too many machines are throwing people out". Going further back, when the first printed books with illustrations started to appear in the 1470s in Germany, wood engravers protested as they thought they would no longer be needed.

But this all begs one question: If technological progress represents a comprehensive threat to humans, then why do we still have jobs left? In fact, many of us are still working, probably much harder than before. The answer: machines and humans excel in different activities. Machines are frequently no match for our human minds, senses and dexterity. For example, even though Amazon's warehouses are automated, humans are still required to do the actual shelving.

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And this doesn't only apply to physical jobs. The real story behind today's AI is that it cannot function without humans in the loop. Google is thought to have 10,000 'raters' who look at YouTube videos or test new services. Microsoft, on the other hand, has a crowdsourcing platform called Universal Human Relevance System to handle a great deal of small activities, including checking the results of its search algorithms. And this blend of AI and humans, who follow through when the AI falls short, is not going to disappear any time soon. Indeed, the demand for such on-demand human interventions is expected to continue to grow. The 'human cloud' is set to boom.

Closer together

The above illustrates a very important lesson – humans will be needed. The key is how to integrate humans and machines in various activities and how to steer AI towards the creation of new economic interfaces, rather than towards the mere replacement/displacement of existing ones. At the moment, the probability of AI getting things right is between 85 and 95 per cent. Humans, on the other hand, generally score 60 to 70 per cent. On this basis alone, we need only machines and not humans.

Yet, in some highly data-driven industries such as financial and legal services, there can be no error – any mistake can result in huge financial costs in the form of economic losses or expensive lawsuits. Machines by themselves are not enough. Furthermore, AI can only run an algorithm that is predefined and trained by a human, and so a margin of error will *always* exist. When mistakes take place, AI will not be able to fix them. Humans, by contrast, are able to create solutions to problems. We believe that the best solution is to use machines to run production up to the level of 95 per cent accuracy, and supplement this with human engineers to mitigate risks if not to strive to improve accuracy.

Humans and machines will – and must – work together. As business consultants, educators and policy advisors, we all strongly believe that, ultimately, what really matters is how to prepare people to work increasingly closely with machines.

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Notes:

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