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VoxEU:How the future of work may unfold: A corporate demand-side perspective

Advances in artificial intelligence have led to fears of job losses. Here **Jacques Bughin** examines the impact of AI on the demand side of the labour market.Ultimately, the effect on employment will depend on whether companies choose to use current forms of AI for innovation or pure automation, and whether they foresee a return from it

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Recent advances in artificial intelligence have led to public fears that these upcoming technologies will substitute a large part of job occupations (Brynjolfsson and McAfee 2014), but this fear is not new. At the time of the first Industrial Revolution, renowned economists such as John Stuart Mill and David Ricardo had already conceded the possibility of unemployment. The Great Depression also brought a revival of concerns, with John Maynard Keynes (1931) predicting that by 2030, the "most pressing problem in developed economies would be how to fill our leisure time".

A series of research by the McKinsey Global Institute grounded the debate in the

detailed technical capabilities and tasks of labour that could be matched by AI. On average, it founds a more realistic, albeit work-challenging, picture that by 2030, 25-30% of existing jobs might be running the risk of 70% of their tasks being automated (McKinsey Global Institute 2017).

You can read the full article here. Below are a few key quotes and some myths-busted.

"Early research from the labour demand side has already illustrated that some forms of employment may complement digital capital."

"Also, labour demand may shift up if technology leads to new service and product innovations. As a case in point, consider the news service Associated Press, which up to recently could only deliver reports on large corporations with its 65 journalists in the newsrooms. With the help of AI technologies, the company quickly managed to cleverly automate the production of simple stories of quarterly earnings for ten times as many small companies in the long tail. This output gain was not at the expenses of reporters; instead, in-house reporters were redirected to writing longer research articles on business trends, a major latent demand spotted by the company (Ramaswamy 2017)."

The analyses lead to some 'myth-busting'

1. AI is an employment killer. Not really; in fact, companies which will expand their investment in AI tend to drive employment up.

2. AI is all about labour automation. Any plan to invest for efficiency leads to a planned reduction in employment, yet plans to use AI as innovation are associated with higher employment.

3. Companies' use of AI is only for more rents. In fact, we find that expectations of profit growth may boost employment even if AI is adopted for efficiency and a fortiori for innovation.

Hence, by putting the narrative of a 'workless future' to the test of how labour demand may shift as result of AI adoption, we conclude that the narrative must be nuanced.

Ultimately, the effect on employment will depend on whether companies choose to use current functional forms of AI for innovation or pure automation, and of course whether they foresee a return out of it. The best hedge for the future of employment may well be to have innovative firms, as already suggested by Spieza and Vivarelli (2000).