

Rise of the machines: How artificial intelligence will reshape our lives

By business reporter [Carrington Clarke](#)

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The fourth industrial revolution is underway and it's threatening to wipe out nearly half the jobs in Australia.

KEY POINTS:

- The fourth industrial revolution will completely reshape the local jobs market, an economist says
- Financial start-up says its business model is already making jobs obsolete
- Job losses in finance have already begun

This latest round is characterised by intelligent robots and machine learning and PricewaterhouseCoopers economist Jeremy Thorpe said it's going to completely reshape the Australian jobs market.

"Over the next 20 years approximately 44 per cent of Australia's jobs, that's more than 5 million jobs, are at risk of being disrupted by technology, whether that's digitisation or automation," he said.

ANTICIPATING THE RISE OF THE MACHINE



[It seems only a matter of time before intelligence breaks free of its biological bonds - Joe Gelonesi talks to two philosophers with profoundly different visions of technology and the future.](#)

Stefan Hajkovicz, who is the principal scientist at the CSIRO, says it's white collar workers who are about to feel the pain.

"The sort of job losses that we did see in the manufacturing sector in Australia — the car manufacturing sector — are going to get into the [administrative services and financial services sector](#) in downtown CBD postcodes and that's the big challenge that lies in front of us," he said.

Mr Thorpe agrees, adding that white-collar workers in Australia were "the big growth sector over the last 30 years".

"We were the beneficiaries of globalisation and it's going to be a shock to the system when we see not just the growth temper, we actually see a decline in those sorts of jobs."

START-UPS THREATENING EXISTING JOBS

GIF: [Highly intelligent' robots have been represented on screen, including in I, Robot](#)

Australian financial start up Stockspot says its business model makes thousands of highly paid jobs obsolete.

It claims that by using algorithms and automation instead of people, they can provide better financial advice at a cheaper price.

Founder Chris Brycki said some jobs, particularly in the financial services sector, don't add value.

"Financial services employs about 10 per cent of our workforce and, really, a lot of those jobs are unnecessary," he said.

"A lot of research analysts, stock pickers, stockbrokers, they don't actually add any end value for the consumer."

DISRUPTION TO FINANCIAL INDUSTRY WILL FLOURISH IN NEXT FEW YEARS

Mr Hajkowicz said the technology behind digital currency bitcoin — known as blockchain — also threatens to seriously shake up the industry.

"Blockchain and distributive ledger technology, if it plays out the way we think it can, this is the technology that sits behind the bitcoin currency and can be used for smart invoicing or auditing processes," he said.

"It could turn the job of 100 auditors into one."

The job losses in finance have already begun, with Westpac reducing its headcount over the last year.

WILL THERE BE ANY JOBS LEFT AS ARTIFICIAL INTELLIGENCE ADVANCES?



[If you're an accountant, lawyer or data analyst, a robot may soon take over your job.](#)
But the real hit is still to come.

A Macquarie analyst recently predicted the big four might look to shed 20,000 jobs over the coming years.

It's already happened overseas. In the decade following the great recession, the banking workforce in the US dropped by around half a million people.

Mr Brycki said [we will feel the pain here soon.](#)

"The reason we are behind the US and the UK is that we didn't go through the financial crisis as badly, and that flushed out a lot of people from the industry," he said.

But it was only a temporary reprieve.

"A lot of people are still in the stale jobs in banks and it's not until the banks have to lay people off in the next few years that the [financial] tech industry and this disruption will really flourish," he said.

BIG TECH GIANTS MAY BE 'BETTER PLACED' TO BE A BANK

It's not just start-ups threatening existing business models.

The big tech giants are also continually innovating and threatening to push further into the finance space.

"Apple may be better placed to be a bank, Google might be better placed to be a bank than an actual bank because it has technology to facilitate the transaction," Mr Brycki said

He says young people eyeing off what are currently lucrative careers option will be forced to reconsider.

"I came in to the industry at the very top — it was around 2006 when I joined," he said.

"We'll probably never see that level of salaries and bonuses and the craziness in financial services because of the structural changes that are going to happen."

Mr Thorpe said the evidence is already building.

"It is the boiling frog syndrome that we are experiencing at the moment," he said.

"You may not realise that we're already seeing some jobs disappear, for some jobs are being restructured because of automation and digitisation."

This is part one of a three part special by The Business and Business PM which looks at how automation will reshape the Australian workforce.

<http://www.abc.net.au/news/2017-07-03/how-artificial-intelligence-will-reshape-our-lives/8674576>

Submitted by: Ruth Edge - Cardinia Shire Council