The robotic revolution

Summary

- A recent report found one in three jobs are at risk of automation by 2030.
- Within the pensions industry, robotics could be used for low-skilled admin tasks.
- Robotics should not mean fewer humans in the industry, just a division of labour based upon the skills required.
- Robo-advisers have already entered the pensions industry, along with 'chatbots' for customer service roles.
- Another area where robots could be expected to play a role is in that of risk and fraud detection.
- Anutomation may result in people being able to retire earier.

Nick Martindale considers the impact of robotics and automation of the pensions industry

For decades there has been talk of robots taking over the world, as generations of children brought up watching *Dr Who* will be able to testify. Up to now, such developments have largely been confined to the manufacturing and industrial sector, but the potential of big data, artificial intelligence and machine learning mean this is now infiltrating other sectors. A recent report by the Bank of England and PwC estimates that one in three jobs are at risk of automation by 2030.

Automated processes

Within the pensions industry, there are a number of areas in which robots – or, more specifically, robotics – could impact both the number and nature of existing positions. Administrative tasks are perhaps the most obvious case, says PASA chair Margaret Snowdon, as computers tend to be faster and cheaper at carrying out relatively low-skill tasks.

"Logical and repetitive tasks can be done entirely by machine and that can include checking and quality control," she says. "We hold on to the notion that only humans can check and verify but, in reality, machines can do this far more reliably, provided they are properly configured. Machines can carry out calculations; produce and send letters; verify member identity; value schemes based on data, rules and assumptions; display benefits; offer options, request information; pay benefits, and report on activities."

At the moment it is only a lack of investment in such systems, compounded by poor data held by pension schemes and providers, that is holding this back. "Automation is not worth a candle if the data is wrong or missing," she warns.

Working together

Yet this doesn't necessarily mean jobs will disappear altogether. "In most cases this has not resulted in headcount reductions but more a labour shift into more technically demanding knowledge-based roles," says Trafalgar House director Daniel Taylor. "Machines excel at repetitive boring tasks, while humans excel as knowledge-based creative thinkers. If that equation holds, we are unlikely to see overall headcounts fall."

Further down the line, it's possible to see valuations, trading and policy amendments being carried out by robotics, as well as the more basic administrative tasks, says evestor.co.uk CEO Anthony Morrow. "However, there will always need to be some form of oversight of the systems that are being used," he says. "What we will see is that the oversight becomes higher up the organisation as the risks of things like artificial intelligence become better understood and therefore better managed."

It's likely that entirely new positions will be created, too, says at Voyager Solutions lead consultant Paul Taplin. "Humans will be needed to manage a robotised process, with tasks involving training and operational management of robots," he predicts. "A robot will also proactively require human involvement for advanced analysis, interpretation and decision making at certain steps, where insights and subjective assessment is required."

Robo-advisers

Increasingly, robotics is now starting to enter the advice space too. "Robo-advisers are live now, giving regulated advice on how much to contribute and where to invest based on client goals and personal circumstances, which product to choose, whether a blend of annuity and drawdown is a good match for their circumstances, and how to navigate the taxation landscape," says Wealth Wizards CTO Peet Denny.

With more people requiring financial advice in the wake of the pensions freedoms reforms, automated advice could help fill the gap for those with smaller pots. "Firms providing human advice will continue to focus on higher-

net-worth individuals, but it will become crucial to become more responsive as clients start to expect turnarounds of hours or days instead of weeks or months," adds Denny. "There will always be too few human advisers to service all of the need."

The use of 'chatbots' can also help with some customer service roles, offering responses to the more basic enquiries. "The robot is able to understand the intent of questions asked and convert a relevant answer back into a natural language response," says AHC head of web consulting and development Sam Charles. "For many people, this provides a more approachable means for software interaction – particularly as many chatbot interfaces mimic or use common text messaging services, like Facebook Messenger."

It's even possible that the use of artificial intelligence could extend to starting personalised conversations with customers or investors, creating a more efficient way of staying in touch without losing the personal element. "Automation in the client space is typically most advantageous when it maximises client engagement without as much human labour involved, for example, configuring persona-driven content that is served up in an investor's client portal," says InvestCloud EVP, Europe and innovation, Will Bailey. "The thinking is done by humans ahead of time to profile the investors, but the execution is done by machines."

Yet some form of human interaction is likely to be necessary when approaching customers or dealing with their enquiries, both to supervise any advice given out or to step in if customers want to speak to a human. "Some of the purely digital propositions recognised early on that customers – at least for now – still want humans involved, to help, to validate, to reassure," says Altus principal consultant Simon Bussy. "The key for firms is to work out which parts of the process, or which particular customer needs, can be automated without a problem, and which parts still need the human touch."

Risk management

Another area where robots could be expected to play a role is in that of risk and fraud detection. "One exciting and yet untapped development are the opportunities robots can bring to a risk-based operating model," says Taylor. "Currently, most administrators process work based on some broad universal principles. Robots, however, can be used to analyse, prompt and escalate cases based on a set of progressive, intelligent algorithms." Here, too, however, humans will be required to oversee decisions, and make the final call on any potential risks.

The rise of robots in society more generally will impact some sectors more than others. "The list is already long: from online travel agents to car factory bots to automated checkouts in every supermarket, even to journo-bots writing articles for the media," says Bussy. "In time, self-driving cars, lorries and other transport could take as many as 20 per cent of jobs in the transportation sector, while many service industry jobs are easy to automate. That could wipe out tens of millions more jobs."

Work impact

In turn, this could create issues around the volume of work humans are required to do, as well as raising the spectre of people in certain sectors not having – or being able – to work as long as they may once have planned. A recent report by the TUC called on the government, businesses and trade unions to work together to respond to the challenge of increased automation, including using the proceeds of higher productivity to reverse changes to the state pension age, raising the spectre of people spending longer in retirement.

This was also the subject of a recent conference hosted by Hymans Robertson. "If employment is limited to fewer people, it's not hard to imagine a scenario whereby the state pension is scrapped," says Hymans Robertson partner Calum Cooper. "If there is no work there is no pension." He moots the idea of a means-tested universal living allowance, where people of all ages receive a minimum level of income from the state.

Such a scenario, though, would have implications for employer and private pensions, too. "Pension firms must adapt their models, investments, risk analysis and internal processes to plan for very different time horizons," says Bailey. "Firms need to consider both the period of one's contribution to a plan, but also the ongoing commitments of the plan to pensioners."

Snowdon, though, believes that, in the pensions space at least, jobs are more likely to evolve into higher-level posts than disappear; something which could then allow people to tackle any more fundamental societal shifts. "Skilled pension professionals, freed up from boring, low-value tasks will be able to focus on service and the help that members want and this could be key to restoring confidence in the industry and in saving for retirement," she says. "It could help avoid the spectre of pensioner poverty. Now that's a future I would like to see."

Written by Nick Martindale, a freelance journalist