

Analysis: Why Robot?



NEED TO KNOW

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- RPA implementations usually optimise labour costs by 30%
- Automation applied in the next two to three years could transition from efficiency to the potential elimination of cycle times completely in some cases

Technology is predicted to be a huge part of the future business landscape but fears remain over letting robots have all the power. Post investigates how robotics and artificial intelligence is helping insurance now and how it could do more in the future.

Automation based on **robotic** process automation and **artificial intelligence** augmentation is expected to be the cornerstone of the future workplace but a significant part of the insurance industry is yet to be convinced.

While research from Goldsmiths, University of London found that augmented workplaces score 33% higher on factors deemed to make the office 'more human', less than half of insurance executives said it had a positive effect on employee effectiveness and only 51% reported that their companies were open to embracing new technologies. So what is holding the sector back, how can automation work for the insurance industry and what will the impact be?

Digital transformation

The digital transformation of the insurance industry has been going on for quite a while, with businesses at various stages of the journey. George Zarkadakis, director of Willis Towers Watson's digital incubator and leader of the company's Future of Work Strategy says that automation technologies are now entering digital transformation programmes. He says that insurers that have already developed a data strategy are best positioned to adopt automation and beat the competition, for example, RPA implementations usually optimise labour costs by 30%.

"There is a lot of innovation in the insurance industry, with insurtech startups exploring new ways to assess and pool risk, as well as engage with customers in a personalised way", he adds. "This innovation wave is gradually transforming established business models in the insurance industry. We mainly see two areas where cognitive automation is beginning to establish itself as the new norm: using machine learning algorithms and unstructured data to better evaluate risk; and applying RPA, usually together with some degree of natural language processing, to automate manual tasks in back-office processes."

Jason Landrum, chief information officer at Sedgwick, adds that much of the automation to date has led to a reduction of cycle times in the claims process, ultimately resulting in claimants being paid faster and restoring them to a pre-loss state. "I believe that automation we will see applied in the next two to three years will transition from efficiency to the potential elimination of cycle times completely in some cases," he said.

The pace of change is expected to further accelerate when policyholders, intermediaries, insurers, financial institutions, and suppliers all become more familiar with intelligent technologies, helping to enhance decision making and productivity across the insurance lifecycle. Prateek Vijayvergia, vice-president of technology (application services) at Xceedance, says: "AI, RPA and a host of related intelligent technologies can also enable all parties in the insurance value chain to become more cost efficient and better equipped to optimise the experience of policyholders."

Nigel Edwards, senior vice-president and head of Europe at EXL, explains that the sectors in the UK leading the way in automation, such as retail and manufacturing, had done so out of necessity whereas insurance is a very personal industry. "Information is stored in the heads and hard drives of very experienced individuals," he explains.

However, factors including lower costs of operation, millennial culture and Brexit were bringing pressures to digitalise the insurance industry. "The insurance industry is alive to this and the time is now," Edwards adds.

RPA and AI: What's the difference?

While robotic process automation and artificial intelligence are similar technologies, they have different goals.

RPA automates repetitive, clerical tasks with the aim of saving businesses time. It is programmed based on a series of rules or "if-then" statements manually by a human that tells it what to do under certain conditions.

Strictly speaking RPA is a form of artificial intelligence but the latter term usually refers to machine learning or deep learning. Here programmes have the capacity to rewrite themselves in response to the environment and data there are exposed to.

Allianz is one insurer that has seized this opportunity, creating new job roles and opportunities to support its investment in RPA, aligned to its global 'Digital by Default' strategy.

Chris Wyard, head of underwriting data and management information development at Allianz, says: "Following successful proof of value in 2015/16 we have continuously scaled our investment in automation and RPA. We have aligned experts from across our business and IT to create a central team who are responsible for delivering productivity and efficiency benefits across the enterprise. We have also acknowledged that RPA has many other benefits to our business teams beyond automating manual processes, and use the technology as part of our data. RPA is helping us structure more data and drive greater insights than ever before, and our data teams are empowered to explore the enterprise for opportunities."

Driving innovation

Axa is also investing in this technology. Along with Harry the AI robot (see case study one) Axa carries out customer research in commercial lines using AI, gathering publicly available information from various sources, which helps to construct quotes more quickly and consistently and freeing up time to talk with brokers and clients and better understand their needs.

Claims and policy systems are one area where this technology could make a difference according to Peter Yang, chief information officer at Ventiv Technology. He explains: "Because claims and policy systems are often administered separately with no effective interface, many organisations require the loss adjuster to manually enter policy information into the claim record before the claim can be assessed. Because RPA bots mimic exactly the same process that a loss adjuster would have performed in capturing and re-keying policy data into the claims system, and because RPA bots do that by going through the policy system user interface (just as a loss adjuster would), there's no need for expensive integration efforts. You simply 'teach' the bots to do the job and then that repetitive task is no longer the loss adjuster's responsibility."

Case study

Harry the AI claims robot

Harry the AI robot works in Axa's household team, attaching correspondence to claims records. When carried out manually, the task can take four minutes but Harry can tackle the task in 42 seconds. Harry completes more than 1000 of these tasks a day, saving 17,058 man hours.

Matt Potashnick, chief information officer for Axa UK and Ireland, however, said when using AI, employee engagement is key. "Regular communication with our staff has ensured that Harry was not seen as a threat but an opportunity. Harry has also been humanised: when an IT glitch stops him from working, we call it a sick day. Harry has been popular with his colleagues. Other parts of the business want to partner with Harry, to help with their admin."

Motor insurance is one of the sectors leading the way when it comes to embracing automation, having been early adopters of enhanced capture, sharing and validation of data, driven mainly by the pricing demands of consumers.

However, Lou Lwin, group head of operational planning for Markerstudy, believes that, while the sector was at a pivotal moment where the technology to transform insurance is available, there's conflict integrating this into existing and historic infrastructure.

He says: "We've spent significant resources focusing on digital transformation on a project-by-project basis. Some of these changes were small but they were operations-affecting and started to have a big impact on the efficiency of the workforce. This allowed us to focus on some of the bigger items.

"Initially there was resistance in some quarters to the new technology being implemented, including RPA and machine learning. But then our employees started to see the results and appreciate that this removed a significant amount of the tedium and admin in their roles, allowing them to focus on the more exciting stuff. By introducing 'digital colleagues', they began to see it as something that would aid them in their respective roles. This technology does not replace their jobs, but rather helps them work smarter and more efficiently."

Apart from increased efficiency, automating systems can also lead to collecting high quality data that can be used to inform future decisions on products, services and internal operations.

Tom Maleczek, chief technology officer at Charles Taylor, adds: "That said, the majority of examples in the insurance industry to date focus on automating or optimising current business processes, whereas the real opportunity that these technologies present is the ability to completely transform or disrupt business models and operating models for insurance or expanding products and services into new markets, for example risk management or risk prevention services."

Case study

Lauri the insurance lawyer

Keogh's artificial intelligence insurance lawyer Lauri combines a number of technologies to streamline the process of dealing with a claim from start to finish. Starting with natural language processing of emails, working through machine learning of documents and finally delivering robotic process automation of the Keoghs case management system. If needed, Lauri will allocate the case to a Keoghs handler should human intervention be required or desired.

Dene Rowe, director of innovation at Keoghs, said: "As Lauri communicates directly via system-to-system integration, or failing that, email using natural language processing, there is no need for handlers to log into old-fashioned legal portals, ensuring no change in communication other than the vastly improved speed and efficiency with which an outcome is provided. Not only does this make Lauri the first truly automated AI insurance lawyer launched to the market, but it also means that insurers do not need to grapple with new technologies or systems; avoiding duplication, re-keying and providing greater efficiency in the way that claims are managed."

Chris Hallett, insurance product manager at Synectics Solutions, observes that new entrants to non-motor markets were building upon these findings and may well reap significant rewards in the future: "Those who stand to gain the most will be insurers, brokers and providers in the more traditional commercial insurance space, where paper files remain the order of the day. Extracting accurate data from such unstructured sources, particularly for fraud prevention purposes, is not easy but certainly not impossible. As ever, data is king and finding better ways to generate then analyse structured data will always reap rewards."

However, Ashley Moss, CEO at DWF360, argues there will inevitably be an impact on staff if RPA/AI is successful: "Loss adjusters on the other hand are aligned similar to underwriters whereby a physical review of the evidence put forward at point of claim would be required, although this depends on how smart the media automation is received and utilised vs on-site loss adjusting/ inspection activity being required."

"Recent technology developments such as automation and robo-advice could be seen as disruptive and a threat to the existing protection market, but I believe this is an opportunity," adds Paul Foody, chief operating officer at Inchora. "This technology is ultimately going to be an enabler to drive efficiency gains and help advisers focus on what they are good at – providing advice. There will always be a need for human interaction when dealing with more complex products or cases, this is where we still need highly trained human advisors but we can't ignore that customers are looking for a better experience that could be aided through technological advancements."

However, rather than a stream of redundancies on the horizon, there appears to be a determination among insurers to redeploy staff.

Replacing employees

Matt Potashnick, chief information officer for Axa UK and Ireland, explains: "Robots aren't replacing employees; they are working for them, performing mundane tasks. Technology is not deployed to reduce headcounts. It is an enabler allowing for a deeper conversation with brokers or customers. We cannot rule out automation impacting roles in the future but it is our aim that any job affected by automation is redeployed."

Wyard adds that investment in automation and RPA is allowing its teams to focus on adding greater value to the customer and their business units: "Our data teams have access to more sources of insight and that allows us to improve our business decisions, data models, products and services. RPA has enabled Allianz to accelerate its digital and data strategies."

"The introduction of automation in addition to the decrease in cycle times has also helped offset the general drought in the industry of adjusting talent", adds Landrum "As technology continues to evolve it will help companies keep pace with being able to meet the demand of the claims processes while struggling with a decreasing workforce."