



Robots have arrived in the insurance industry. Are you ready?



Robots are invading the insurance industry. And CEOs are welcoming them in. But as insurers become more sophisticated in their use of robotics and hand over ever-more control to robots, deeper concerns are emerging.

You can't physically see them (yet). And they aren't trying to take your job (yet). But robots are everywhere. They drive your internet searches and retail recommendations. They manage your office temperature controls and environment. They remind you of friends' birthdays and provide you with navigation advice. Robots sit in our phones, in our infrastructure and in our homes.

Over the past few years, businesses of all types have rushed towards robotics. The greatest focus has been around Robotics Process Automation (or RPA), particularly in functions like finance where processes are highly repeatable, regular and routine. But software robots ('bots') are also hard at work across the wider insurance enterprise – supporting management decisions, facilitating transactions and even managing aspects of office security.

Expect more robots to enter the workforce soon. According to a recent survey of more than 100 insurance CEOs conducted by KPMG International, more than a quarter of CEOs see automation – a key step towards robotics – as the answer to managing their current skills gaps. Almost everyone recognises the efficiencies that automation delivers by driving out inconsistency in decision-making, improving compliance and eliminating errors in processes. Many are starting to realise that wider use of software robotics could deliver significant additional value.

Robots at work

Consider, for example, the benefits that could be secured by adopting automation within just a small subsection of the finance function. We recently worked with a large insurance client to apply RPA within the account processing function and were able to shorten a three-hour data reporting process down to just 3 seconds. As a result, precious resources were freed-up within the finance function to focus on higher priority and higher value activities.

But that is not all. The company also quickly found that the data – and the insights they received from that data – was much more consistent and reliable. Manual errors had been eliminated, human variation had been removed and a reliable audit trail had been created.

At the same time, improving the processing speed of critical finance data provided the organisation's management with access to more timely information with which to make decisions. And with finance resources now focused on adding value rather than processing, the detail and insight provided in those reports also greatly improved.

AI: Artificial Intelligence or Automated Insurance?

Now, however, an even-more sophisticated type of robotics is starting to enter the workplace, enabled by cognitive computing, machine learning and, increasingly, by artificial intelligence (AI). Not satisfied with run-of-the-mill rules-based processing

tasks, these intelligent bots are starting to make decisions that – until today – were considered far too complicated for a machine to make.

Already, some of the more innovative insurers are testing the ability of cognitive bots to make routine business decisions in areas such as finance and claims management. Other financial services sectors are using these technologies to manage much higher-risk functions such as trading and reserving.

Insurance CEOs are certainly interested in cognitive computing, machine learning and AI. In our survey, 15 percent said they planned to put 'significant' investment towards these technologies over the next 3 years. But it also deeply concerns them. In fact, 91 percent of insurance CEOs admitted being worried about the challenge of integrating automation, AI and cognitive robotics into their existing business and operating models.

CEOs have good reason to worry. There have been some highly-public bot failures over the past year. In March 2016, an online 'chatbot' that was supposed to use AI technology to connect with teens over twitter rapidly devolved into the worst of the internet. The 'flash-crash' of the pound sterling in October was likely due to an overzealous trading algorithm that dropped the currency by almost 10 percent before correcting.

How are insurers applying robotics?

Some firms are adopting robotics into their claims management process to help predict the eventual outcome

of the claims process and suggest the most appropriate strategy based on that prediction (for example, recommending an early settlement on cases where the data suggests a high potential for long-term litigation).

Others are exploring how robotics could help identify potential mismatches between the policy terms set internally and those submitted by brokers. This is helping insurers to identify – at policy inception – policies that may lead to subsequent losses.

Creating the right environment for robots to thrive

There are some specific challenges that insurance CEOs will need to overcome before they can confidently implement more sophisticated types of robotics. Likely the most urgent relates to governance.

Much like other new technologies, business users are starting to create bots within their own functions. As these bots start to interact and one starts to depend on the output of another, important governance questions will arise. How, for example, will two sets of bots created by the actuarial function and the finance function interplay? How will they work together to calculate key business metrics? What controls are in place to ensure that their methodologies, calculations and algorithms are consistent?

Data will also create a challenge. Cognitive computing and machine learning relies on building a repository of reliable historical information from which the bots can learn. A bot trained on auto mortality statistics from the 1980s, for example, will likely not be coming to conclusions that are appropriate in today's environment. Making sure the machines are working from the right data (and that they are all agreeing on the same version of 'the truth') will be critical to safely unlocking the value of cognitive robotics.

Insurance CEOs will also need to deal with new cultural considerations. What role will bots play in the future operating model? How will bots and humans interact to ensure maximum value? What combination of bots and humans will consumers accept? How will questions of ethics and morality be managed and reflected? These are questions that will require clear vision from CEOs.

Whatever the answers are to these questions, there seems little doubt that the pace of robotics development is set to continue unabated. And curiosity levels continue to rise.

Winning the robot race

The good news is that there is still significant competitive advantage to be gained through the adoption of RPA and cognitive robotics. But the

advantages will go to those that start experimenting and implementing programs early.

Based on our experience, here are four quick tips to help insurance CEOs start building their robotics strategy.

- 1. Take a strategic view:** Don't let the robots proliferate out of control. Start with a strategic view of how robotics will enable the future operating model and ensure that all investments support the achievement of that goal. Goals should be focused on targeted outcomes, not outputs.
- 2. Be realistic about your capabilities:** Understand your current capabilities and infrastructure limitations. Focus on building capabilities in steps as skills and infrastructure is improved and expanded.
- 3. Aim for agility:** Create a more agile development environment – both within IT and across the business – and encourage the creation of a 'test and learn' mindset within the organisation.
- 4. Create smart governance:** Governance is critical to not only the management of data, but also the management of the underlying infrastructure. Flexibility will be key as the technology evolves and new use cases emerge.

Set the pace or risk falling behind: Insurance CEOs speak

This article is from our *Set the Pace or Risk Falling Behind* article series which focuses on key themes such as transformation, data and analytics and customer-centricity and offers new ideas and actionable tips in emerging areas such as automation, partnerships and cyber security. The articles are based on a survey of more than 100 CEOs at some of the largest insurance companies around the world..

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