AUTOMATING (RE)INSURANCE - PART 1

The State of (Re)insurance Automation

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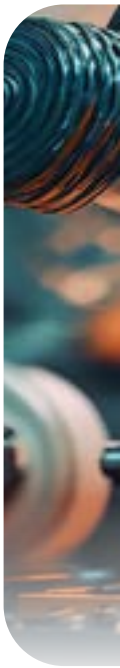
In a rapidly digitalising world, automation is increasingly being deployed to perform traditionally manual tasks. From robotics on the factory floor to robotic process automation in the office, automation is said to create operational efficiencies and enable staff to dedicate more time to value-adding activities.

(Re)insurance is typically a technology laggard, so does automation really have a role to play in our work? After all, we don't manufacture or distribute physical items and setting up reinsurance contracts is still a highly skilled balance of judgement between appetite for risk and capital. While we might increasingly rely on computational modelling and analytics, the job of structuring a retrocession, broking, negotiating and binding reinsurance seems at least by today's capabilities, out of automation's reach. But what about back-office data entry, accounting and settlement tasks? Or routine compliance checks? Let's get a better understanding of "automation" and then explore the possibilities for (re)insurance.

What is Automation?

Automation is the use of machines and computers that can operate without needing human control; it involves the use of robotics, software, and other tools to automate repetitive, time-consuming, and manual tasks in order to improve accuracy and consistency, increase efficiency and reduce costs. Automation frees employees up to focus on higher-value tasks. Automation can be applied in various industries and functional areas, such as manufacturing, supply chain management, customer service, human resources, and finance.

Automation in (re)insurance can involve the deployment of technologies such as Artificial Intelligence (AI) and Robotic Process Automation (RPA) within policy administration software to accomplish business processes without the need of human interference. The majority of (re) insurance procedures require back-office staff to complete time-consuming manual processes prone to error and slow results. According to IBM, there are four types of automation.



THE 4 TYPES OF AUTOMATION[1]

1

Basic Automation

Automation at its most basic level involves converting simple and repetitive tasks into automated ones. This stage of automation involves digitalising workflows by utilising tools that help to streamline and consolidate routine tasks, for example, by using a centralised messaging platform instead of having information stored in disparate silos. Business process management (BPM) and robotic process automation (RPA) are examples of basic automation techniques.

2

Process Automation

Process automation ensures consistency and visibility in business operations. It is usually accomplished through specialised software and business applications. Implementing process automation can enhance productivity and efficiency within an organisation. Furthermore, it can uncover new perspectives on business difficulties and provide potential solutions. Examples of process automation include process mining and workflow automation.

3

Integrated Automation

Integration automation refers to the capability of machines to imitate human actions by repeating tasks once the rules are established by humans. A prime example of this is the concept of a 'digital worker'. In recent times, digital workers have been defined as software robots that work in collaboration with humans to execute specific tasks. These digital workers possess specific abilities and can be assigned to work as part of a team.

4

Artificial Intelligence

Artificial Intelligence (AI) automation represents the most advanced stage of automation. This level of automation involves the integration of software that enables machines to 'learn' from previous experiences and make decisions based on analysed data. As a result, AI-powered virtual assistants in customer service, for instance, can lower costs while enhancing the experience of both customers and human agents to provide optimal customer service.

Where Are (Re)insurers On The Automation Journey?

We are at the beginning of realising what is possible with AI, but Basic, Process and Integration automation are well-established in many industries. Being a technology adoption laggard might suggest an ability for the (re)insurance sector to leapfrog straight to more advanced types of automation, but there is a need to overcome technical and/or functional debt and to successfully transition from one method of working to another. Few, if any, incumbent companies can contemplate achieving this as a "Big Bang" changeover and even tech-centric start-ups (or "fintechs") rely on the technical capabilities of their business counterparts. A fintech (re)insurer can only be as automated as the inputs it receives from its cedants and brokers, who will most likely be incumbents. It is reasonable to surmise that (re) insurance will follow the typical evolution of automation adoption seen in other industries, described below, establishing foundational technologies, and then supplementing or replacing existing systems of operation and systems of record, step-by-step.

THE EVOLUTION OF AUTOMATION ADOPTION[2]

Stage 1

Ad hoc

This is the initial stage where companies introduce automation into isolated parts of their processes, often as a result of manual inefficiencies or one-off projects. Automation is typically done with no central control or governance.

Stage 2

Controlled

In this stage, companies introduce central control and governance to manage and coordinate automation across their operations. Processes are standardised, and the use of automation is strategically planned and executed.

Stage 3

Managed

In this stage, companies focus on optimising their automation efforts, improving efficiency and scalability. Automation is integrated into the company's overall operations and processes, and the technology is continually monitored and improved.

Stage 4

Intelligent

This is the final stage of automation maturity, where companies use advanced technologies such as Artificial Intelligence (AI) and Machine Learning to enhance their automation efforts. Automation is self-learning, adaptive, and proactive, allowing companies to make data-driven decisions and improve their overall operations and performance.

The speed of evolution and the specific stages a company reaches will depend on its size, industry, and the specific challenges it faces.

Many (re)insurers already automate at least some of their processes, even if only to remove the most basic and repetitive of tasks from employees' desks, such as assigning policy or claim numbers or validating data entered into policy administration systems, for example.

In P&C insurance, automation has primarily been deployed to improve operational efficiency and speed-to-market. In personal lines insurance, automation is revolutionising the claims process, for example, with individual policyholders now able to file standard types of claims, shape their restoration journeys and receive settlements quickly, using smartphone apps for the engagement method, with a significant reduction in the need for human adjusters. According to claims management firm Charles Taylor, around a third of the personal claims it processes involve automation.

Referring back to diagram 2, we would suggest that fintech insurers are typically at stage 3 or 4, incumbent insurers may be as far along as stage 2 and planning for stage 3, while (re)insurers are at stage 1 or the earlier phases of stage 2.

Why Bother With Automation?

Automation can improve (re)insurance combined ratios and loss ratios by reducing operational costs and increasing scalability and efficiency in several ways:

#1
Increased Processing Speed
The automation of manual tasks, such as policy administration and claims processing, reduces the time required to complete these tasks and increases overall processing speed.

#2
Reduced Operational Costs
Automation can reduce manual effort and the risk of errors, leading to cost savings and improved operational efficiency.

#3
Improved Claims Management
Automation can enable faster and more accurate claims processing and settlement, reducing the risk of delayed or denied claims, and improving the overall claims management process.

#4
Better Risk Management
Automation can enable real-time monitoring and analysis of portfolios, allowing reinsurers to quickly identify and respond to risks, adjust pricing and coverage, and reduce overall exposure to losses.

#5
Better Decision Making
The automation of compliance reporting processes, reduces the risk of non-compliance and improves the accuracy and reliability of regulatory reporting.

#6
Efficient Scalability
Automation breaks the linear relationship between manual work volume and headcount as computers can scale far more easily and cheaply.

Cost-efficiency is a Key Driver

McKinsey's Global (Re)insurance Report 2022 warned (re)insurance profitability has come to a virtual standstill, with many (re)insurers currently struggling to cover the cost of capital. If implemented well, investing in automating processes can be effective in reducing spend over the longer term. The front office is arguably the least attractive area for automation in (re)insurance, as it involves skilled analysis and negotiation. Back-office activities, though, are seldom an area of competitive advantage, although they are a significant cost.

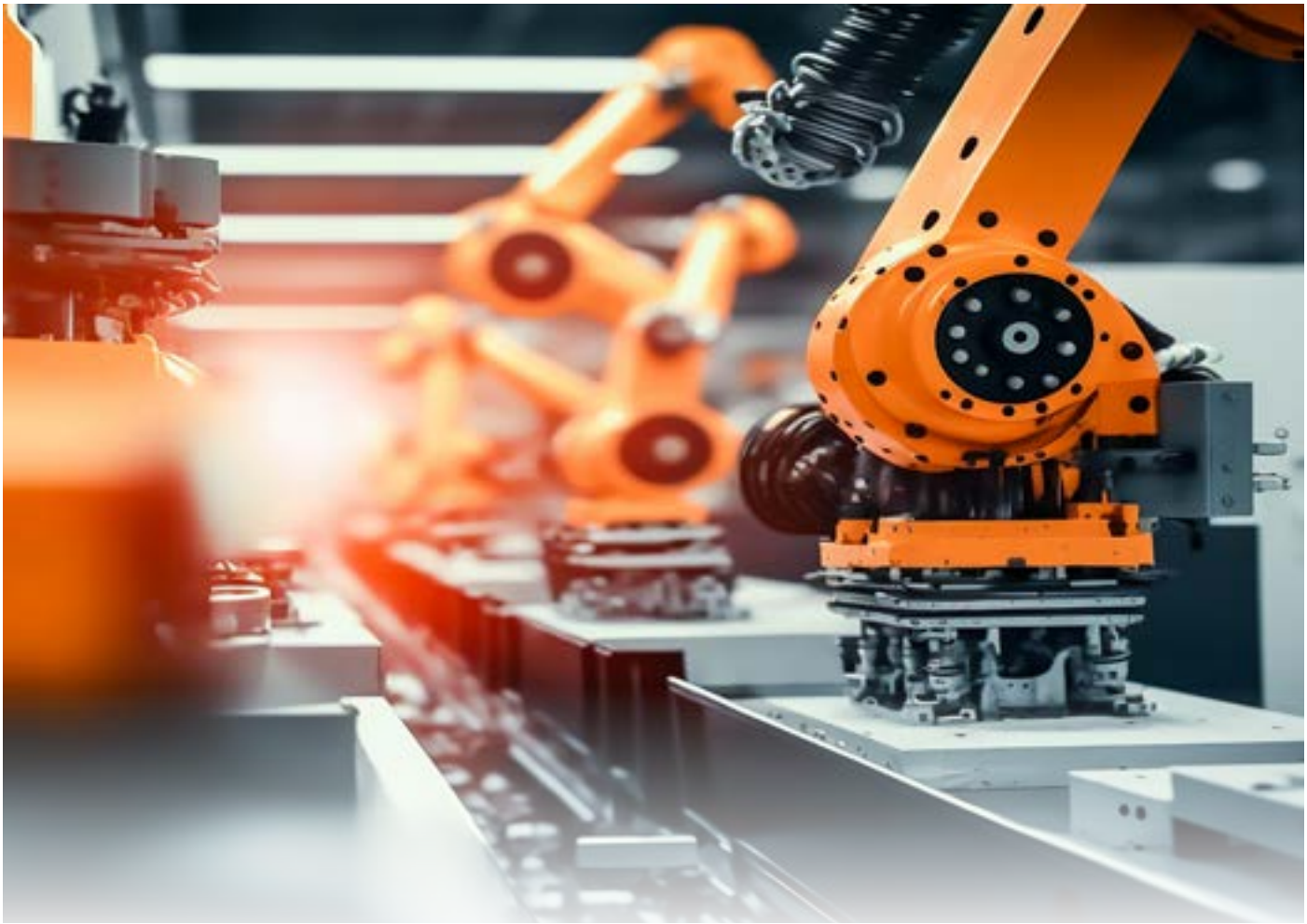
Function	Method	Benefits
Data Management	• Use of data management systems to automate data entry, storage and retrieval processes. • Use of data quality tools to automate data validation, standardisation and enrichment. • Integration with external systems to automate data exchange and syncing.	• Improved data quality and accuracy. • Enhanced analytical capabilities and enablement of new insights and models. • More reliable, granular and timely KPIs. • Reduced manual data entry and retrieval efforts. • Improved data security and privacy.
Policy Administration	• Use of digital forms and workflows to automate submission, quote and policy creation, underwriting, issuance and renewal processes. • Use of AI and NLP to automatically extract data from unstructured data sources to populate PAS systems with submission, quote risk, premium and claim data. • Use of rule-based systems to automate policy pricing and risk assessment. • Integration with external systems such as credit bureaus and government databases to automate data validation and verification.	• Increased policy issuance speed and accuracy. • Reduced manual effort and errors. • Improved customer experience.

Function	Method	Benefits
Claims Management	• Use of digital forms and workflows to automate claims processing, settlement and payment processes. • Integration with external systems such as medical providers and loss adjusters to automate claims data validation and verification. • Use of machine learning algorithms to automate claims triage and prioritization.	• Faster claims processing and settlement times. • Increased accuracy of claims processing and payments. • Improved customer experience.
Accounting and Settlement	• Use of AI, RPA and/or rules-based processing to automate financial transactions, accounting and reporting processes within Policy Admin Systems. • Integration with banking systems to automate payment processing and reconciliation. • Use of analytics tools to automate financial reporting and analysis.	• Improved financial reporting accuracy and speed. • Reduced manual efforts in financial transactions and reporting. • Improved compliance with financial regulations.
Compliance and Regulatory Reporting	• Use of compliance management software to automate compliance reporting processes. • Use of data analytics tools to automate data validation and reporting. • Integration with regulatory databases to automate regulatory reporting requirements.	• Improved compliance with regulatory requirements. • Reduced manual efforts in compliance reporting. • Improved accuracy and reliability of regulatory reporting (e.g. automatically performing AML and KYC checks on new business, renewals and periodically on written business)

Conclusion

Automation is on the rise in the (re) insurance industry, allowing for improved efficiency and better risk management. By automating manual tasks, (re)insurers can reduce costs and improve decision-making. Technologies like AI and RPA enable real-time analysis, which helps quickly identify and respond to risks, adjust pricing and coverage, and reduce exposure to losses. As automation evolves, it promises great benefits to the (re)insurance industry.

In part 2, we will discuss key considerations for (re)insurers before implementing automation technology. By taking a strategic approach (re) insurers can make informed decisions about the role of automation in their operations and maximise the benefits.



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