BY JULIAN VERRIER

Robotics strategy @ SCOR

NEW TECHNOLOGIES AT THE HEART OF SCOR'S LATEST STRATEGIC PLAN

In an increasingly stochastic and complex environment, the future of the reinsurance industry depends upon embracing new technologies and the ability to manage and analyze data. With "Quantum Leap" – its latest strategic plan presented in September 2019 –, SCOR is committing to a profound transformation to create the reinsurance company of tomorrow, fully adapted to this new ecosystem. To this end, SCOR is accelerating its use of new technologies – such as artificial intelligence, robots, blockchain, big data, multi-cloud and satellite imagery – to innovate, expand its product and services offering and increase its efficiency.

All areas of the company are involved, from underwriting to asset management and from risk analysis to claims settlement. They all rely upon a unique transversal accelerator: the use of new technologies to provide scalability, increased agility and better integration of innovations.

SCOR has identified five key technological clusters, for bringing more innovative reinsurance solutions to each key step of the reinsurance process and providing new products and value-added services as well as a seamless digital customer experience. Advanced robotics is among those key technological levers.

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SCOR IS NOT NEW TO ROBOTIC PROCESS AUTOMATION
SCOR's automation program started two years ago with a first wave of automation launched within the finance department. This first wave embraced the development and run of more than 10 automated assistants mainly focused on accounting and financial processes.

Financial closing processes have proved the highest maturity and benefits for automation. Following a proof of concept approach, the first developments involved simple and structured tasks in order to prove the value of robotic technology and to develop skills progressively and quickly after several financial processes hit the production stage, providing continuous and effective support to employees during critical financial closure times.

Among those processes already deployed and running are an internal consolidation process with respect to the consolidation system as well as a process that feeds the consolidation system with mutual funds that are managed externally from the main management information system. The first one involves the automatic loading and consolidation of financial data for IFRS and Solvency reporting in a dedicated accounting system. The second one provides the automatic creation of consolidation adjustments for specific funds managed by external third-parties in the accounting information system.

This kind of use cases are generally considered as typical applications of Robotic Process Automation technology based on the input of structured data, like Excel files or already digitized data, and small repetitive tasks – the first step to take when starting the RPA journey.

CLOSING A SECOND WAVE OF AUTOMATION
Expanding robotics beyond the frontiers of Financial processes, SCOR's second wave of automation is almost completed. This second wave led to discover new areas of application in each business unit and corporate function. This was also the opportunity to ramp-up the complexity of the robotic assistants, granting them with access to more and more systems.

For instance, SCOR is currently industrializing a prototype that manages the Managing General Agents (MGA) compliance control process supporting the P&C business unit in its exchanges with MGAs on the US market: the automated assistant checks the reception of relevant emails from which it downloads the attached bordereaux and uploads them in the management system. It then performs technical and functional checks and feeds a specific dashboard to report its conclusions and to monitor process activity. This use case has been identified and developed in 2019 for the US-specific MGA business and tested on a specific operator. With its value being proved as a crucial feature for the control and risk mitigation of the MGA business, this robotic assistant will soon be industrialized over all MGA operators.

Another use case example at an earlier development stage is the dispatch of confirmation letters to cedants (attesting that the account statement for prime payments has been received) for the Life business unit in the APAC region. This daily process is currently carried out manually and starts with the request of these account statements from the cedants. These statements are then manually integrated before the confirmation letters can be sent. Although less technically complex, the automation of this process is of primary importance because of its significant potential for scalability in other SCOR entities and locations.

PAVING GROUND FOR THE THIRD WAVE OF AUTOMATION WITH COGNITIVE AND ARTIFICIAL INTELLIGENCE TECHNOLOGIES
SCOR's Research and Development team currently works on automating more and more complex processes with the introduction of cognitive bricks within the RPA framework, giving brain (Artificial Intelligence, Machine Learning), sight (Computer Vision, OCR) and hearing (Natural Language Processing and speech recognition) to the existing robotic hands. The objective of this is to quickly develop SCOR's capabilities to capture and exploit all kind of data, both structured and non-structured, and to address more and more complex business processes. One of the first goals of this third automation wave is to make every process involving unstructured data on PDF (or even paper) eligible to automation. This is achieved by enhancing RPA with data capture capabilities through Intelligent Optical Character Recognition technology (IOCR) and machine learning.

SCOR is also implementing a dedicated organization to centralize the management of all intelligent automation needs, setting up a Robotics & Intelligence Automation Center of Excellence (R&IA CoE) at a global level, agnostic of technologies. This matrix organization – spanning over IT and all business units, in very close collaboration – aims at positioning SCOR robotic process automation experts alongside the innovation department, leveraging their respective skills and competencies in order to address all kinds of automation and optimization requests. This Center of Excellence is currently setting up a structured and extensive framework to guarantee shared methodologies and tools across the entire SCOR Group. In parallel, a scale-up program is launched to enhance automation solutions in production and to industrialize the developments with the use of cognitive technologies such as Optical Character Recognition, Natural Language Processing and Machine Learning.

These cognitive technologies are key enablers for one of the first initiatives of the R&IA Center of Excellence: assisting SCOR Asset Managers with the requests for proposal (RFP) they receive from investors, automatically reading the RFPs and suggesting the best answers. The aim of this project is to optimize the number of answered requests by automatizing their management while ensuring the highest standard of quality.

Two main challenges up-front:
1 The first one is to collect and organize all the necessary information directly from the business units and group functions that hold the master data. Automatically indexed, these data could then be directly used or combined with other information to answer specific questions or requests from investors.
2 Since the investors' requests format isn't standardized, the second challenge is to automatically read their documents, understand the questions and match the proper answers.

INTELLIGENT AUTOMATION WILL MAKE THE DIFFERENCE
Beyond the hype, both RPA technologies and RPA partners are now mature enough to significantly change the way SCOR supports and boosts its business initiatives. SCOR will continue to widely deploy robotics to automate regular and repetitive tasks. But combining the RPAs' fast deployment capabilities with cognitive technologies will enable SCOR to go further and to tackle more and more complex automation issues. In this respect, in 2020 SCOR will reach one of "Quantum Leap's" objectives: deploy and industrialize intelligent automation throughout the entire Company. ∎