Advances in digital technologies, data & analytics capabilities, and agile development methodologies are transforming the way insurance companies operate, and serve their customers and the markets in which they compete. Automation of traditionally manual processing is one application of these technological advances that is critical in driving operational efficiency, a superior customer experience and retention, and stronger and faster business intelligence that enables better decision making.

This series takes a closer look at three types and areas of automation technology: data capture, robotic process automation (RPA) and cognitive robotics. Insurers are applying – or are developing the capabilities to apply – each of these levers to improve operational efficiencies and customer experiences.

The force applied to each lever will vary according to the carrier’s organizational structure, types of processing, and numerous other factors. Nevertheless, a holistic approach to automation that makes use of all three levers is key to becoming a successful insurer of the future.

This report – the second in the three-part series – focuses on robotic process automation. Part one covered data capture and part three will deal with artificial intelligence and cognitive robotics.
REDRAWING THE COMPETITIVE LANDSCAPE

HOW INSURERS CAN MAKE THE MOST OF ROBOTIC PROCESS AUTOMATION

The potential gains for insurers from the adoption of RPA have created a great deal of enthusiasm and excitement within the industry. At its core, RPA is the use of software to mimic or replicate, at scale, the actions a person would perform on a PC. It automates business processes that are highly repetitive and rule-based, and that use structured data as inputs.

RPA can indeed deliver significant benefits to insurers, especially since RPA solutions can be implemented without complex system integrations. Instead, RPA sits on top of an organization’s existing infrastructure, interacting with the various systems and databases at the user interface (UI) layer. This makes it a fairly inexpensive and timely automation solution.

In addition, the platforms that deliver RPA have been built with business users in mind – they are intuitive and process based, and do not require that the users know software development languages in order to develop and configure ‘bots.’
This means some projects can be completed surprisingly quickly – we have found that a simple-to-moderately complex process can be automated in as little as 6 to 8 weeks, including the design, configuration, testing and transition to production. Organizations can therefore see a payback on their investment in as little as three to six months. This helps transformation efforts gain momentum and strengthens the business case for automation.

It’s a compelling case. A successful RPA implementation can yield a 40 to 80 percent reduction in processing costs and up to an 80 percent reduction in processing time. Licensing and infrastructure costs are also relatively low.
THE BENEFITS OF ROBOTIC PROCESSING AUTOMATION

In RPA, software bots execute the same processes as humans do by interfacing in the same ways with the same sets of applications. The bot, however, captures all details of the process and stores it for potential later auditing and use in analytics. It works 24 hours a day, seven days a week, at machine speed – limited only by the responsiveness of the underlying applications and the method that it uses to ‘read’ the screen.

RPA can also deliver major improvements in quality, such as the virtual elimination of processing errors. It generates a high volume of operational process data and metrics, supporting advanced analytics and operational intelligence in the areas of fraud detection and prevention, regulatory compliance, and customer experience management, among others.

Many back-office and other corporate functions are promising candidates for automation, including claims and benefits, policy administration, account maintenance, and finance, tax and accounting services. Functions that have already been outsourced or are being considered for outsourcing also tend to be good candidates for RPA, as they generally rely upon high-volume, rule-based digital processes.

AN INSURER UNDERTAKING RPA IN ONE MAJOR AREA SUCH AS UNDERWRITING AND POLICY SERVING MAY BE ABLE TO AUTOMATE A BROAD RANGE OF PROCESSES INCLUDING:

• UNDERWRITING AND PRICING
  Automation of data entry for clearance and registration processes and automation of the audit process for exposure revision.

• RATING, QUOTING AND ISSUANCE
  Automation of previously manual data entry for large schedule rating, and of form fulfilment activities not previously automated.

• POLICY ADMINISTRATION AND SERVICING
  Rejecting or cancelling a policy if a payment has not been made within the required period, or at the request of the customer; automating the checking of policy premium discrepancies and reconciliation as needed; payment reconciliation.

• REQUIRED MINIMUM DISTRIBUTION
  Automatic generation of first time eligible participant letters.

Similar candidates can be found in areas including distribution (management of agent paperwork, conducting compliance, legal, credit and identification checks); claims (automating input of manually submitted notices); money handling (such as incoming wire and manual check allocations to policies and/or contracts); and general administration (extracting customer complaints from an intranet web form or external website and loading them into a complaints management system).
Despite the benefits of RPA, many insurers have failed to realize its full potential, and have not been able to use RPA effectively as the powerful, strategic transformation lever that it can be. Implementing RPA effectively within and across an entire organization requires a balance of many things, including: the RPA operating model and organization design; effective governance of best practices, standards, and execution strategies; change management; and last but certainly not least, the approach to identifying, prioritizing, and selecting process candidates for automation.

Accenture’s experience with RPA – in insurance and across the entire financial services industry – has allowed us to develop a unique, two-tiered approach that we believe delivers the best mix of tactical and strategic benefits. Insurers taking this approach can identify and address immediate opportunities – realizing quick victories which generate instant cost savings – while building momentum for more strategic and comprehensive operational transformation.
The first tier of this approach (the most commonly recommended approach within the RPA community) is a process-centric one, meaning that individual process candidates are assessed, scored, and prioritized for automation primarily on their own merits. For example, the individual processes yielding the highest level of efficiency gains at the lowest level of complexity (implementation cost) would be prioritized. Assessment and prioritization are typically completed using a scoring and assessment framework that considers key factors like volumes, average processing time, complexity, and the number of FTEs allocated to the execution of the process. Other factors might include:

- **THE NATURE OF THE DATA INVOLVED**
  Paper-based, non-electronic processes are less attractive candidates for RPA than those already using digital data.

- **THE NATURE OF INPUTS**
  Unstructured inputs (from external databases, social media and other sources) pose more problems than structured, internal inputs in standard formats.

- **WHETHER THE PROCESS IS RULE-BASED**
  Rule-based processes lend themselves more readily to RPA than do processes relying heavily upon human discretion.

- **THE NUMBER OF EXCEPTIONS HANDLED IN THE PROCESS**
  Processes with few, relatively simple exceptions are easier to automate than those with many exceptions.

This first (process-centric) tier is usually the first and only approach that insurers follow. It yields benefits quickly and efficiently. However, pursuing only a process-centric approach can leave a significant amount of value on the table without enabling meaningful strategic transformation.

The second tier of our recommended approach also makes use of the scoring and assessment framework described above, but instead of evaluating individual processes on their own merits, the goal is to holistically evaluate groups of processes that are executed by discrete functional teams. It is not unusual for a team to carry out as many as ten different processes, of which six or seven might be good candidates for automation. With the process-centric prioritization it is likely that only one or two processes would have been prioritized for automation initially or at all. This would result in significant cumulative value being unrealized, and the insurer failing to transform its operations in a meaningfully strategic way.

For example, more than half of the back-office operations teams at one leading insurer were found to support multiple processes, each of which required fewer than four FTEs. These teams, accounting for over a third of the insurer’s operations staff, would mostly have been ignored under a process-centric approach. The team-centric approach identifies the full breadth of potential that automation can achieve, prioritizing those processes as a group. It allows the insurer to achieve desirable ROIs by increasing the capacity of the team by up to 80 percent instead of the 30 - 40 percent that may be achieved by focusing solely on the one or two top-priority processes.

This team-centric tier enables insurers to transform the nature of their operations in a more strategic way by utilizing RPA comprehensively. It gives them greater flexibility and scalability, setting the stage for the application of advanced analytics and enabling a sharper focus on customer interactions.
THE POWER OF RPA

In recent years, insurance carriers seeking cost reductions and operating efficiencies have focused on five key transformation levers: centralization, relocation, standardization, optimization and digitization. Automation – particularly in the form of RPA – has opened up new possibilities for insurers seeking a competitive edge, not only through lower costs but also through service excellence and highly flexible operations. The automation of repetitive, monotonous tasks frees employees to focus on customer outcomes, in that way helping insurers to increase customer satisfaction and build stronger relationships. Staff satisfaction also increases as employees focus on work that is more interesting and adds value.

As seen in the figure below, RPA is evolving rapidly with the appearance of increasingly powerful forms of cognitive robotics and artificial intelligence (AI). Most insurers are already using basic automation to reduce costs and improve operational efficiency. Insurers using advanced RPA solutions can go beyond cost reduction and operational efficiency to transform the customer experience, create new products and services, and provide coverage for different types of risk. Global insurers – with complex organizational structures and multiple locations for processing transactions – may seem more resistant to RPA solutions, but often find that the software bots at the heart of RPA are more readily transferable throughout the organization than people-based skills. This is because the underlying coding of bots for certain processes can be easily modified and replicated to fit related processes on different systems in other regions or businesses. These insurers typically find that RPA is scalable and can result in a flexible yet robust “virtual” workforce.

SPECTRUM OF INTELLIGENT AUTOMATION TOOLS

Intelligent automation tools have advanced significantly over the past decade

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<th>SCRIPTING</th>
<th>REPLACING</th>
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<td>Assisting Activities</td>
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<th>DESKTOP AUTOMATION</th>
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<th>COGNITIVE ROBOTICS</th>
<th>INTELLIGENT DECISIONING DIGITAL ASSISTANTS</th>
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<td>• Basic “arms”</td>
<td>• Virtual workers</td>
<td>• Cognitive “brains”</td>
<td>• Smart “hybrids”</td>
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<td>• Manual operator initiates a sequence of automated steps</td>
<td>• Scheduled engine mimics execution of manual user’s repetitive activities without requiring intervention or assistance</td>
<td>• Artificial intelligence and automation technology to change the processes</td>
<td>• Computer generated character that simulates a conversation to answer questions or queries and provide guidance</td>
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<td>• Consolidating data from multiple sources into a single view to complete a process</td>
<td>• Applying technology to manipulate existing application software to complete a process</td>
<td>• Systems that gain knowledge from data as “experience” and generalize what is learned in upcoming situations</td>
<td>• Allows human-like reasoning to be applied in larger volumes (e.g. transaction monitoring, fraud identification, call filtering)</td>
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One of the great advantages of RPA is the speed and relatively low cost of implementation. However, while an RPA solution can be implemented in a matter of weeks, a successful solution requires that many different elements are in place. These include:

• **AN ORGANIZATIONAL COMMITMENT** (from the most senior levels downwards) to robust processes, regulatory compliance and appropriate documentation;

• **EFFECTIVE GOVERNANCE**, not only in terms of process management but in areas including training, recruitment and change management (a center of excellence model for automation has worked effectively for many insurers);

• **A COMPREHENSIVE APPROACH TO STANDARDS, IDENTIFICATION AND DEVELOPMENT** of the RPA elements, rather than small groups automating processes on their own;

• **EXPERT TEAMS WITH DEEP KNOWLEDGE OF BEST PRACTICES**, along with a willingness to industrialize automation capability to maximize value;

• **BUY-IN FROM INDIVIDUALS AND GROUPS AFFECTED BY AUTOMATION** (including the CIO and IT groups), with a thorough understanding of roles, responsibilities and desired outcomes established at the very beginning; and

• **RECOGNIZED TARGETS AND BENCHMARKS**, with clear accountability, timetables and metrics in place to track success, identify bottlenecks and shift priorities as needed.

The human factor in RPA is critical and should not be underestimated. Some organizations are reluctant to replace the valuable, hard-won experience of their people with data and software-based solutions. Others do not want to be seen to be targeting headcount reductions. A successful RPA transformation helps humans and machines work together, making it clear that technology will enable and empower the organization’s people rather than replace them.
Automation driven by increasingly powerful forms of RPA and AI has the potential to redefine the competitive landscape in insurance. While most insurers will use RPA to some extent, the most successful implementations will be based on the use of advanced technologies combined with a two-phase approach that addresses both processes and teams.

Insurers need integrated, holistic RPA technologies, but they also need the right RPA strategy and the governance structure to keep it on track. With these elements in place, they can position themselves to realize the full benefits of a dramatic industry transformation.
ABOUT THE AUTHOR

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