AN ALERT FROM THE BDO INSURANCE INDUSTRY PRACTICE

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AN INTRODUCTION TO ROBOTIC PROCESS AUTOMATION FOR INSURERS

By Imran Makda and Joe Sremack

The evolution of technology has come a long way in the last five decades, from the advent of core computing in the 1970s to digital transformation and big data in the 2010s.

This coming decade will once again bring about exponential advances in technology with the further adoption of machine sensors, internet of things, connected homes, artificial intelligence, autonomous vehicles and quantum computing. These new technologies are rapidly transforming the business landscape across all industries—and the insurance industry is not immune to these changes. In this article, we will explore one small aspect of this technological revolution by taking a closer look at Robotic Process Automation (RPA).

RPA IS HELPING INSURANCE ORGANIZATIONS DO MORE WITH LESS

RPA is transforming the way organizations across different industries do business. It allows organizations to automate certain types of work processes to reduce the time spent on costly manual tasks and increase efforts to deliver mission critical work. RPA is helping organizations do more with less: helping them automatically process and store data without having to perform manual data entry, generate financial reports without...
spending considerable amounts of time in Excel, and execute
customer outreach campaigns without spending hours in a
customer relationship management (CRM) program. These
types of optimizations have been made a reality through RPA,
with organizations just beginning to scratch the surface of
its possibilities.

RPA DEFINED
RPA is the use of software that automates manual tasks. It
eliminates the need for employees to conduct repetitive tasks
by integrating software that performs the same set of steps as
the employee. The software is designed to complete routine
tasks across multiple applications and systems within an existing
workflow, and specifically to automate the transfer, editing,
reporting and/or saving of data.

RPA’s benefits extend to both the back office and the C-suite,
dramatically improving the efficiency of mundane, administrative
tasks. For example, RPA can automatically collect data from
multiple sources, perform a data manipulation—such as applying
data formulas in Excel—and then export or save the information to
a readily available location.

One of the main differentiators of RPA from other solutions is that
it performs tasks that do not require deep cognitive capabilities.
RPA is the automation of a process, but the software is not
improved or changed based on the inputs or its results. This is
different from machine learning or artificial intelligence (AI)
software, which can learn and improve based on the continuous
evaluation of its inputs and results.

BENEFITS OF RPA
- Error-free, consistent results
- Employees can be utilized for higher-value work
- Increased job satisfaction (not spending time doing repetitive,
  low-value work)
- Faster, more predictable delivery timing
- Documented trail of work performed
- Identification of anomalies or other red flags

RPA provides several major benefits. The most immediate impact
from RPA is that routine tasks are performed consistently and
error-free. RPA also yields an audit trail of work performed,
which can be valuable when the output of a process produces an
unexpected result. In addition, RPA solutions can be configured
to identify anomalies or red flags that may not be identifiable by
an employee.

Long term, perhaps the most important benefit is increased job
satisfaction. When employees are asked which parts of their jobs
they dislike the most, the tasks they list usually include manual
work that could be handled by an RPA solution. Increased job
satisfaction results in a more rewarding and productive work
environment. Moreover, the results of newly-automated processes
are often of higher quality and the cost savings can be recognized.

Below is a chart that lists several types of tasks by back-office department that can be automated in most organizations:

<table>
<thead>
<tr>
<th>HR</th>
<th>New employee forms</th>
<th>Employee termination documentation</th>
<th>Employee benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance / Accounting</td>
<td>AR/AP tracking</td>
<td>Financial reporting</td>
<td>Actuarial and loss reserving process</td>
</tr>
<tr>
<td>IT</td>
<td>New user setup</td>
<td>Software requesting</td>
<td>Equipment inventory tracking</td>
</tr>
<tr>
<td>Underwriting</td>
<td>Policyholder onboarding</td>
<td>Policy and document management</td>
<td>Billings and collections</td>
</tr>
<tr>
<td>Claims</td>
<td>Loss setup and information gathering</td>
<td>Claims adjudication process</td>
<td>Claim payments</td>
</tr>
</tbody>
</table>

While the list above appears to be limited to single-department
tasks, many of these are cross-department tasks in nature.
Consider a process where the finance department needs to work
with IT and sales to request multiple data sets, get input and share
the results. Rather than emailing those departments to pull the
same data set every quarter to develop an Excel-based report, an
RPA solution automatically performs the data pull and generates
the entire deliverable. This not only saves time and effort across
the various departments, but also enables the finance team to
spend more time doing meaningful analysis of the reports and
develop projections and deeper insights.
**RPA AND INSURANCE COMPANIES**

Here are some examples where RPA can streamline insurance operations, reduce response time and increase productivity and efficiency:

**Financial Reporting:**

Many mid-sized companies rely on Excel or other reporting tools to complete the financial reporting close process. With thousands of transactions each reporting period, this process is time-consuming and data-intensive. RPA technology can streamline the financial close process by automating the more redundant tasks, such as reconciling bank and investment accounts, premiums and claims, as well as preparing quarterly and annual bank filings.

Another area that can be significantly improved by RPA is the actuarial and loss reserving process. For a typical mid-sized company, data gathering and actuarial analysis is an annual exercise, which can take anywhere from a few weeks to a few months depending on the sophistication of the company’s processes. Since most companies have premiums and data claims data spread-out across various systems, accumulating, scrubbing and reconciling the data before it can be reviewed by an actuary is often labor-intensive. RPA can streamline this operation by facilitating the data gathering, reconciliation and reporting functions to allow for more frequent and timely reviews.

**Claims Process:**

An RPA program—called a “bot”—can be used to manage the claim adjudication process. The bot can monitor a report of loss submitted by a policy holder, create a notice of loss, collect loss information, upload the information into the claims system, send alerts to the claims team, dispatch appraisers, send an automated message to the policy holder and relay the information to other systems that are used to track response time, customer satisfaction and quality control measures. This can result in faster response times, quick closure of claims and satisfied customers.

For example, the new InsurTech startup Lemonade advertises on its website that, when using its mobile app, it takes customers 90 seconds to get insured and three minutes to get paid with help from an artificial intelligence bot known as “Maya.”

**IMPLEMENTING RPA**

The most common method of RPA implementation is via individual bots or single programs that perform tasks automatically. The bot can be accessed through a desktop or web-based application. Alternatively, organizations can implement a server that controls a set of bots within a department or across the organization. The server-based approach is a more robust system that is typically employed when there are a larger number of bots throughout an organization that need to be managed centrally, whereas the individual bot method is appropriate when only a few bots are used.

The cost of an RPA solution, a common concern for any organization, depends on these factors:

- Complexity
- Number of bots
- Time to develop and implement
- Level of customization

An enterprise-wide RPA solution involving hundreds of bots can be expensive. A smaller implementation with only 10 bots or fewer, however, can be implemented relatively inexpensively and within a short period of time. Companies who sell RPA solutions often have a suite of pre-built bots that can be quickly customized and implemented without requiring a new bot to be developed. As the RPA market matures, the cost will continue to decline.

Below are the key steps for determining whether an RPA solution is appropriate for your insurance business:

- Identify where most time and effort are being expended on manual tasks
- Identify bottlenecks of key processes—specifically identifying manual tasks
- Implement a pilot program to tackle a high-value discrete task that can have immediate value

RPA will play an increasingly important role in insurers’ digital transformations. It offers organizations an exciting new way to improve their operations while also boosting employee job satisfaction. RPA solutions have become a widely adopted strategy for enhancing various parts of organizations’ operations by allowing employees to focus their time and efforts on more high-value and meaningful work. Benefits of RPA have been possible with relatively small capital investments and IT resources.

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