Automating the Financial Services Industry

Opportunities Abound, and APAC Firms Are Leading the Way
Introduction

Across major industries, robotic process automation, or RPA, is being used as part of an organisation’s digital transformation strategy to automate burdensome, high-volume and time-consuming business processes. Best suited for rule-based transactional and repetitive tasks involving structured and/or semi-structured data, logic-driven robots, or “bots,” are used to capture and interpret information from existing user interfaces to process data, communicate with other systems, and execute tasks without affecting the organisation’s existing IT infrastructure.

For the financial services industry, the need to enhance the customer experience, achieve greater operating efficiencies to remain competitive, and comply with more stringent regulatory and compliance requirements have been key drivers of the increased interest in digital transformation in recent years. In Singapore, and the Asia–Pacific (APAC) region as a whole, leading local and international financial institutions have been quick adopters of RPA initiatives and have seen early success with the technology. A study by IDC of 10 financial services companies in Asia (including ANZ Bank, DBS Bank, OCBC Bank, UOB and Prudential Life Assurance) revealed that these organisations have realised cost savings and improved turnaround time.¹

With regulators across APAC encouraging innovation, including the use of regulatory sandboxes for piloting emerging technology, the trend toward digital transformation is expected to continue. Research firms predict that revenue from banking RPA software and services will grow more than four-fold, from an estimated US$214 million in 2018 to almost US$900 million by 2022,² and that 40 percent of banking and insurance companies in the APAC region will be using RPA by 2020.³ Globally, the RPA market is expected to grow to nearly US$6.9 billion by 2025 at a compounded annual growth rate of 55.5 percent between 2018 and 2025.⁴

Why Automate?

In addition to delivering faster processing speeds and reducing incidences of human error, automated processes produce a complete audit trail aligned with compliance, enhanced data-processing accuracy, cost savings and an increase in employee productivity. Another significant benefit is the ability to monitor and test a larger amount of data than traditionally possible, i.e., the entire population as opposed to a sample. See Figure 1.

- **Figure 1. Benefits of RPA**

<table>
<thead>
<tr>
<th>HIGHER QUALITY</th>
<th>Human error reduction to a minimum</th>
<th>Complete audit trail and aligned with compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCTIVITY INCREASE</td>
<td>Faster processes and availability</td>
<td>Employees can focus on value-adding activities</td>
</tr>
<tr>
<td>COST REDUCTION</td>
<td>Lower process costs and easily scalable</td>
<td>Rapid return on investment</td>
</tr>
<tr>
<td>EASE OF IMPLEMENTATION</td>
<td>Initial results possible within 30 working days</td>
<td>No significant IT support needed</td>
</tr>
<tr>
<td>GREATER LEVEL OF ASSURANCE</td>
<td>Ability to test an entire population</td>
<td>Reduced risk and improved compliance</td>
</tr>
</tbody>
</table>
Common Applications of RPA

Examples of Day-to-Day Manual Tasks Suitable for RPA
- Reading documents (scanning for key words)
- Opening and reading email
- Screen scraping and tabulating of data
- Applying formulas
- Toggling between systems
- Orchestrating processes
- Preparing documents using templates
- Storing and retrieving data
- Applying business rules
- Drafting and sending email
- Recording keystrokes
- Downloading files

Below are some of the more common functions suitable for automation within different business areas of financial services institutions.

<table>
<thead>
<tr>
<th>SALES</th>
<th>COMPLIANCE</th>
<th>OPERATIONS</th>
<th>IT</th>
<th>FINANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade order threshold monitoring</td>
<td>Customer due diligence (CDD)</td>
<td>Client account management</td>
<td>User profile set-up, management and termination</td>
<td>Standardised journal entry</td>
</tr>
<tr>
<td>Client onboarding, including know your customer (KYC), legal and background checks</td>
<td>Transaction monitoring and investigation</td>
<td>Trade reconciliation</td>
<td>Data entry and payment preparation</td>
<td>Data entry and payment preparation</td>
</tr>
<tr>
<td>Post-trade allocation requests</td>
<td>Screening</td>
<td>Valuation and reporting</td>
<td>Identity access management</td>
<td>Validation analytics, allocation and posting to ERP</td>
</tr>
<tr>
<td>Loan title document analysis</td>
<td>Trade surveillance</td>
<td>Client statement generation and distribution</td>
<td>Management report creation and distribution</td>
<td>Accounts receivable and payable</td>
</tr>
<tr>
<td>Policy/contract signing and renewal</td>
<td>Risk-based audit planning</td>
<td>Handling elements of complaints</td>
<td>Software installation</td>
<td>Reconciliations</td>
</tr>
<tr>
<td></td>
<td>Audit testing</td>
<td>Vendor management</td>
<td>Server application monitoring</td>
<td>Financial planning and analysis</td>
</tr>
<tr>
<td></td>
<td>Risk, compliance and audit analysis, reporting and variance tracking</td>
<td></td>
<td>Security and event management and reporting</td>
<td>Operational finance and accounting</td>
</tr>
</tbody>
</table>

1 For examples of how internal audit departments in other industries are using digital technologies, including RPA, see Protiviti’s publication Internal Auditing Around the World, Volume XIV, www.protiviti.com/iaworld.
Implementing RPA in Financial Institutions

The best way to begin an RPA programme is to select a process that is manually intensive, structured, repetitive, requires minimal judgment, involves fewer systems and is located in a single geography end-to-end. The selected processes should be ranked in descending order of priority, based on the benefits and returns on investment that are expected to be gained by the business, and not just because they can be automated.

There are three main phases of implementation, illustrated below.

**RPA PILOT/PROOF OF CONCEPT**
Financial institutions embarking on the journey of digital transformation for the first time should consider implementing a pilot or proof of concept, which can be used to demonstrate the value of automation for this and other processes and gain stakeholder buy-in. A pilot can involve one or two processes — ideally, those that can be automated in a short time frame and whose results, such as operational performance and productivity, can be reviewed and verified fairly quickly. A pilot will also allow any organisational challenges to be identified, so that subsequent automations proceed more smoothly.

**DEVELOPING THE RPA ROAD MAP**
Following the outcome of the RPA pilot, companies can start to shortlist the different processes identified as suitable for automation. Each process is analysed for viability based on the attributes mentioned in the beginning of this section and then prioritised according to its importance to the business and the expected ROI. Thereafter, the technical team, in collaboration with the business, prepares a project timeline, as well as a catalogue of other relevant functions and processes that would be affected by the transformation. With each step process-mapped in detail in this way, the organisation is able to create a clear and transparent transformation plan that makes sense to the business and ensures acceptance of the improvements. It is recommended that proper documentation is maintained at every step of the planning stage for audit purposes, including details of the considerations and options explored, and the budget and employee resources involved in the various projects.

**PREPARING FOR RPA IMPLEMENTATION**
Based on the RPA road map, stakeholders agree on the shortlisted processes to be automated. The implementation team analyses and eliminates any gaps between existing processes and RPA technology functionality and redesigns and standardises processes before automating them. It is important to complete this step so that the automated processes are integrated seamlessly into the organisation’s workflow upon completion. The process owner tests the redesigned process and approves it, after which the implementation work can commence.

**RPA SOFTWARE SELECTION**
Selecting RPA software is part of the implementation process. Selection should take into account the objectives of the RPA strategy (e.g., effort saved, accuracy improved) and whether the software can accomplish these goals. It is also important to understand and compare features in the different software options to determine suitability for the selected process (e.g., the software’s ability to read documents of different formats and cater to variability of a process, such as invoices received in multiple layouts). Another consideration is the ability of the software to deliver on strategy objectives in the long term, such as the ability to scale up quickly to meet the demands of the business, as well as capabilities involving cognitive technology and AI.
Measuring Success

To assess the effectiveness of the RPA implementation, qualitative and quantitative measurements (key performance indicators, or KPIs) should be established by the implementation team and agreed upon by senior management. KPIs can include the length of time between submission and output, output accuracy, and number of cases closed within a predetermined time frame when compared to a human full-time employee. Processes that are switched to RPA should be measured against these KPIs to gauge success and reveal any shortcomings of the automation. Finally, as with any change programme, the essential elements for success include effective and robust project management, contingency planning, risk and change management, and communication.

How Protiviti Can Help

Most business leaders would agree that digital transformations, which often include an RPA component, are important in helping organisations stay ahead of competitors and keep pace with ever-growing customer demands. Like any transformation, it is important to view RPA as an evolving and expanding process that is integrated with the long-term goals and growth strategy of the business, not as a one-time event serving a single, limited purpose.

Protiviti helps organisations implement effective RPA programmes that meet their long-term strategic goals. Our services include:

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RPA STRATEGY</strong></td>
<td>Develop RPA strategy, taking into consideration specific objectives, governance, IT infrastructure, security, culture and change management protocols.</td>
</tr>
<tr>
<td><strong>INFRASTRUCTURE EVALUATION</strong></td>
<td>Assess and evaluate readiness of IT infrastructure and data structure; evaluate suitability of automation software options.</td>
</tr>
<tr>
<td><strong>PROCESS EVALUATION</strong></td>
<td>Evaluate and identify processes suitable for automation; support the standardisation of identified processes.</td>
</tr>
<tr>
<td><strong>PROOF OF CONCEPT</strong></td>
<td>Perform pilot execution of RPA offerings and develop the business case necessary to obtain stakeholder buy-in and support.</td>
</tr>
<tr>
<td><strong>CENTRE OF EXCELLENCE (COE) DESIGN</strong></td>
<td>Develop the design of an effective COE structure and related governance model to enable a stable and governed RPA function.</td>
</tr>
<tr>
<td><strong>BOT DEVELOPMENT</strong></td>
<td>Configure a sustainable RPA environment and develop, test and implement bots to achieve targeted benefits.</td>
</tr>
<tr>
<td><strong>OPERATION AND MAINTENANCE</strong></td>
<td>Provide ongoing support of RPA activities and execution of the COE; provide ongoing maintenance and exception management of production bots, including monitoring and testing the effectiveness of the automated processes.</td>
</tr>
<tr>
<td><strong>TRAINING AND CHANGE MANAGEMENT</strong></td>
<td>Develop and deliver training to support end users and administrators; provide change management expertise and support to address the operational and organisational impacts of automation.</td>
</tr>
</tbody>
</table>
ABOUT PROTIVITI

Protiviti is a global consulting firm that delivers deep expertise, objective insights, a tailored approach and unparalleled collaboration to help leaders confidently face the future. Protiviti and our independently owned Member Firms provide consulting solutions in finance, technology, operations, data, analytics, governance, risk and internal audit to our clients through our network of more than 70 offices in over 20 countries.

We have served more than 60 percent of Fortune 1000® and 35 percent of Fortune Global 500® companies. We also work with smaller, growing companies, including those looking to go public, as well as with government agencies. Protiviti is a wholly owned subsidiary of Robert Half (NYSE: RHI). Founded in 1948, Robert Half is a member of the S&P 500 index.

CONTACTS

Carol Beaumier
Senior Managing Director
APAC Financial Services Lead
New York
+1.212.603.8337
carol.beaumier@protiviti.com

Suneet Gorawara
Managing Director
Financial Services
Hong Kong
+852.2238.0499
suneet.gorawara@protiviti.com

Sidney Lim
Managing Director
Technology Consulting
Singapore
+65.6220.6066
sidney.lim@protiviti.com

Michael Pang
Managing Director, Technology Consulting
Hong Kong
+852.2238.0499
michael.pang@protiviti.com

Ronita Dutta
Director
Financial Services
Singapore
+65.6220.6066
ronita.dutta@protiviti.com