Robotic Process Automation: Riding the Next Wave of Automation

Robotic Process Automation (RPA) is the new hot topic in Private Banking. What is it and what value does it bring to the bank? In this article, we will touch upon the basics of RPA while visualizing its benefits through a Synpulse conducted case study.

At present, many business processes of Private Banks are spread across poorly integrated systems and are heavily reliant on manual processes. Consequently, productivity is often low and the processes consume large amounts of human time and effort. In an attempt to solve the issue, many banks have involved themselves in extensive IT transformations. However, such transformation programs can be cost intensive with protracted implementation cycles and a lengthy payback period. With the rise of global labor costs, banks need alternative solutions to address their inefficiencies quickly. This is where RPA can come in.

RPA, which involves configuring software robots to automate manual tasks at the user-interface layer, can be used to mimic the way humans interact with various systems. Processes that are repetitive and rule-based are particularly suited for automation. At a global bank, the adoption of RPA provided an automated execution of customer service activities, reducing average execution time from over 20 minutes to just two minutes. As a result, the bank achieved productivity improvements of £1.5 million annually with a projected positive ROI in less than two months[1].

While the RPA market today is small, the technology is gaining traction and the market is projected to reach USD$2.9 billion globally by 2021[2]. In the near future, RPA will be the key to automating banking processes, driving productivity for banks and lowering costs.

RPA as a Business Efficiency Driver

The beauty of RPA is that any process with clearly defined rules and workflows can be automated to an extent. With recent advancements in technology and increases in computing power, the ability of robots to perform a task accurately and robustly has improved significantly. The robot is now sophisticated enough to maneuver between different applications and user interfaces while performing complex calculations and data transformations based on pre-defined rules. Even better, robots are able to integrate themselves with numerous applications such as Excel, Word, Outlook, and PDF reader to achieve maximum efficiency. An early survey[3] shows that an insurance company has successfully reduced manual handling to 2% as robots were able to handle 98% of the operational processes.

By utilizing RPA, a bank can build a virtual workforce consisting of hundreds of robots «sitting» on their desktops or virtual machines. These robots can be monitored and used to automate processes such as KYC/client onboarding, corporate actions, reconciliations, invoicing, master data maintenance and test automation, just to name a few.

Given that the licensing cost of a robot is up to 65% less expensive as compared to the cost of offshore-based FTEs[4], organizations have typically focused on the benefits of RPA from the angle of cost savings. While this is a clear advantage of RPA, Synpulse experience shows that there are five key benefits of RPA that go beyond cost savings:

↻ **Decrease in Cycle Time** — The speed and efficiency of robots mean that they can execute a process faster than a human could. Based on the Synpulse case study, detailed below, a robot can reduce process cycle time by 87%

↻ **Flexible & Rapid Integration** — As a robot only mimics human behavior at the user-interface level, it can be easily integrated into the existing IT architecture and does not require complex interfaces to be built

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[1] The Forrester Wave™: Robotic Process Automation, Q1 2017

[2] Ibid

[3] Everest Group, The Service Delivery Automation Market

[4] irpanetwork, <<Introduction to Robotic Process Automation A Primer>>

○ **Elimination of Human Errors** — Unlike humans, robots are not prone to human errors or miscalculations. A robustly designed robot with detailed exception handling can ensure nearly 100% accuracy

○ **Scalability** — A robot worker is free of human limitations (e.g. need for training) and can be cloned and scaled quickly as long as the interactions are pre-defined

○ **Full Audit Trail** — Reputable RPA vendors provide activity logs that include changes made to a robot, along with who made those changes. Hence, any fraudulent interventions can be quickly identified and rectified

Apart from tangible benefits for organizations, RPA can also help boost employee morale. With the transfer of manual and repetitive tasks to robots, organizations can reallocate human resources to more high-value, interesting work that require human judgement and analytical interpretation. This can lead to increases in human productivity and creativity, while reducing stress that usually arises from doing a manual, repetitive task.
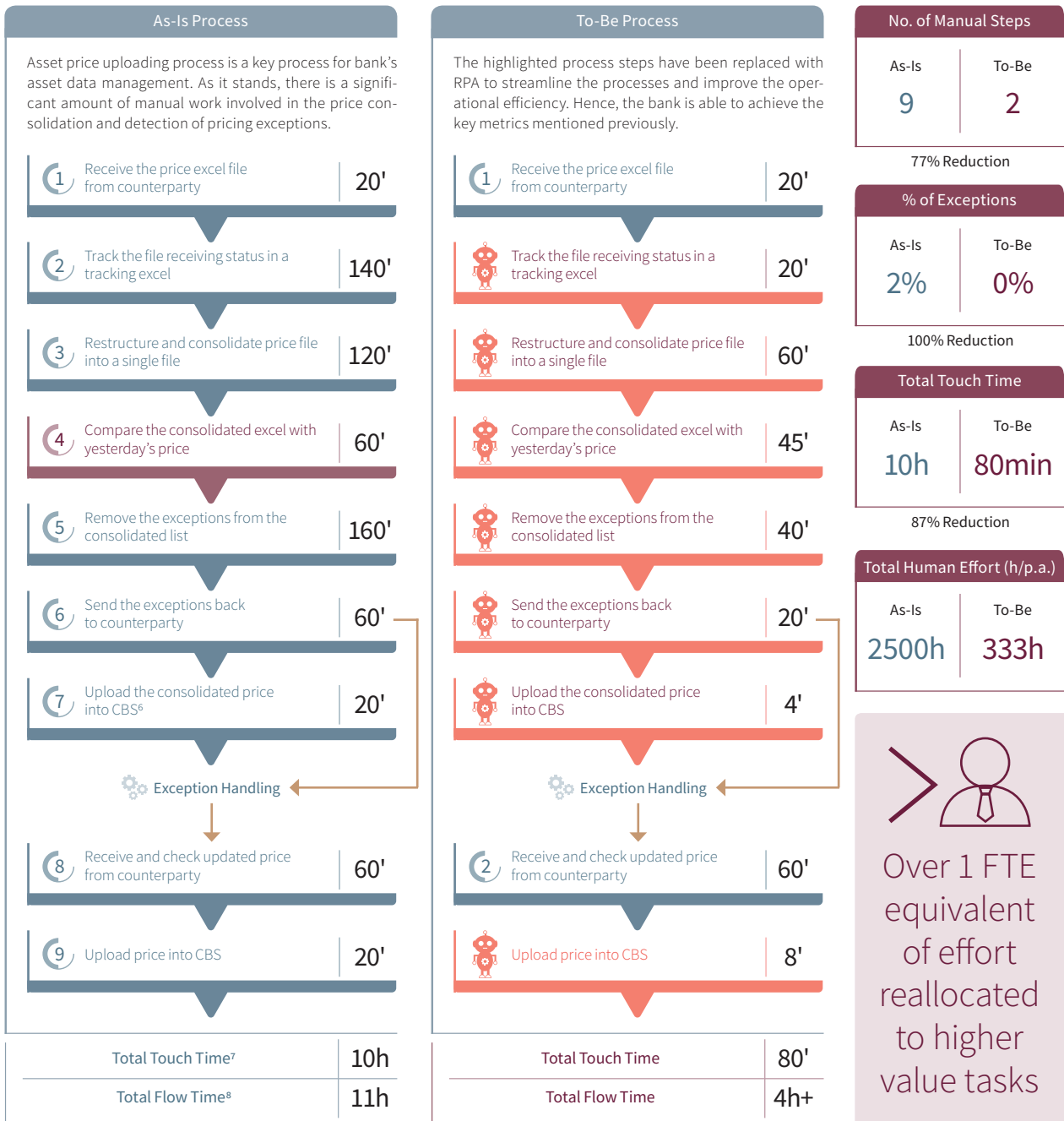
A Synpulse Case Study

The benefits of RPA in increasing operational efficiency can be concretely shown through numbers. To illustrate this, Synpulse has analyzed various operational processes using our BANK**INABOX**® solution by quantifying a few key metrics, namely:

○ Reduction in number of manual process steps

○ Reduction of exception rate (improved accuracy)

○ Reduction in total touch time

○ Reduction in cost through a decrease in man hours

In order to illustrate the economic benefits of RPA, we will take a closer look at a common bank process: Asset Price Uploading. ▥ 2 details the «As-is» and «To-be» processes of a certain organization that Synpulse analyzed in a business case study. After the implementation of RPA, we measured a 77% reduction in the number of manual steps performed by the pricing team. The team has since shifted its focus to exception handling. As a result, RPA enabled a drastic reduction of more than 2100 hours of work per annum for the Asset Price Uploading process.

1 Decrease in Cycle Time
On average, a robot can reduce process cycle time by 76%. Compared to human employees, robots execute processes faster with greater efficiency. Our analysis shows that RPA reduces process cycle time up to 70% for highly manual processes.

2 Flexible & Rapid Integration
Deploying a robot is non-invasive & does not require complex interfaces since it operates at the user-interface layer.

3 Elimination of Human Errors
Unlike human employees, who may be susceptible to human errors, a robustly designed robot with detailed exception handling can ensure nearly 100% accuracy.

4 Scalability
A robot worker, being free of human limitations, can be scaled up and down without need for training or time-consuming resource planning.

5 Full Audit Trail
Activity logs from reputable RPA vendors are capable of tracking not just actions taken by robots but also all changes made to a robot, including who made those changes.
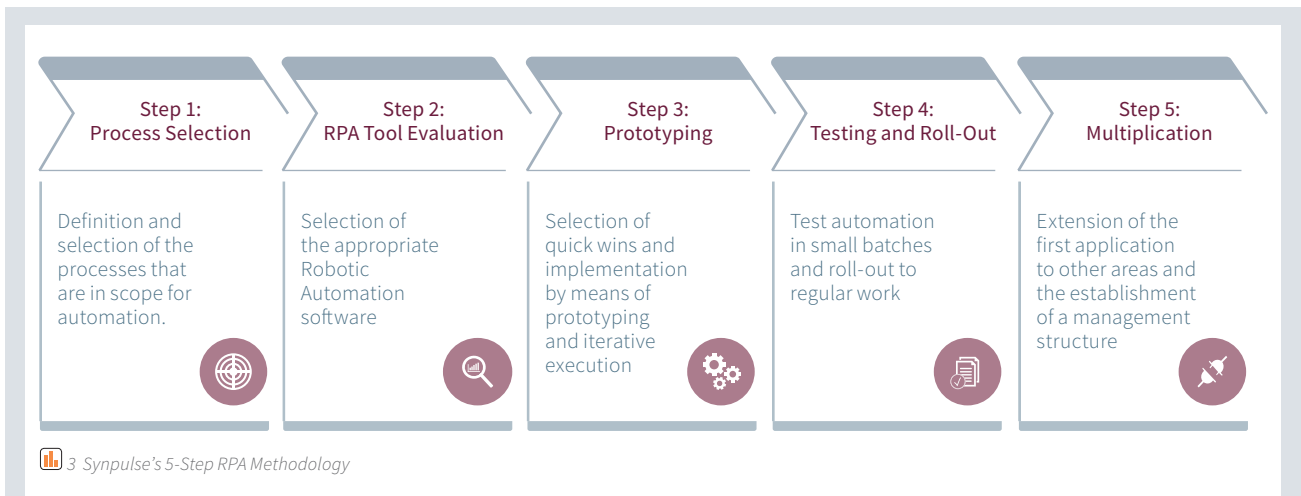
▥ *1 5 Key Benefits of Robotic Process Automation*

As-Is Process

Asset price uploading process is a key process for bank's asset data management. As it stands, there is a significant amount of manual work involved in the price consolidation and detection of pricing exceptions.

#	Step	Time
1	Receive the price excel file from counterparty	20'
2	Track the file receiving status in a tracking excel	140'
3	Restructure and consolidate price file into a single file	120'
4	Compare the consolidated excel with yesterday's price	60'
5	Remove the exceptions from the consolidated list	160'
6	Send the exceptions back to counterparty	60'
7	Upload the consolidated price into CBS[6]	20'

⚙ Exception Handling

#	Step	Time
8	Receive and check updated price from counterparty	60'
9	Upload price into CBS	20'

Total Touch Time[7]	10h
Total Flow Time[8]	11h

To-Be Process

The highlighted process steps have been replaced with RPA to streamline the processes and improve the operational efficiency. Hence, the bank is able to achieve the key metrics mentioned previously.

#	Step	Time
1	Receive the price excel file from counterparty	20'
	Track the file receiving status in a tracking excel	20'
	Restructure and consolidate price file into a single file	60'
	Compare the consolidated excel with yesterday's price	45'
	Remove the exceptions from the consolidated list	40'
	Send the exceptions back to counterparty	20'
	Upload the consolidated price into CBS	4'

⚙ Exception Handling

#	Step	Time
2	Receive and check updated price from counterparty	60'
	Upload price into CBS	8'

Total Touch Time	80'
Total Flow Time	4h+

No. of Manual Steps

As-Is	To-Be
9	2

77% Reduction

% of Exceptions

As-Is	To-Be
2%	0%

100% Reduction

Total Touch Time

As-Is	To-Be
10h	80min

87% Reduction

Total Human Effort (h/p.a.)

As-Is	To-Be
2500h	333h

Over 1 FTE equivalent of effort reallocated to higher value tasks

■ RPA   ■ Manual Step   ■ Automated Step

📊 *2 RPA Case Study conducted by Synpulse at a financial services organization*

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[6] CBS: Core Banking System

[7] Total Touch Time: Total manual human effort in the entire process

[8] Total Flow Time: Total time including human effort and delays in the process

3 Synpulse's 5-Step RPA Methodology

Step 1: Process Selection	Step 2: RPA Tool Evaluation	Step 3: Prototyping	Step 4: Testing and Roll-Out	Step 5: Multiplication
Definition and selection of the processes that are in scope for automation.	Selection of the appropriate Robotic Automation software	Selection of quick wins and implementation by means of prototyping and iterative execution	Test automation in small batches and roll-out to regular work	Extension of the first application to other areas and the establishment of a management structure

Adding Structure to Automation

While there is no doubt that RPA has immense potential as a business enabler, a bank still needs to develop a structured RPA automation strategy to ensure that RPA is applied in areas that will bring the most benefits to the business. Without a structured RPA approach, a bank will not be able to have a holistic view of all the potential benefits, leading to poor prioritization of processes and under-utilization of RPA's potential. More importantly, a successful RPA implementation goes beyond choosing the right processes and automation vendor. A thorough understanding of the processes and the encompassing technology is required to identify opportunities where the processes can be re-engineered to achieve maximum gains.

3 shows Synpulse's RPA methodology which adopts a five-step approach to bring RPA from conceptualization to realization.

Robots' Call for Action

The time is ripe for organizations to embark on their RPA journey. The potential that RPA has in disrupting the way the industry currently functions is immense. Apart from saving on labor costs, RPA can enable organizations to improve accuracy, reduce implementation cycle time, and reallocate resources to client-focused and profit-generating activities. A number of organizations are already in varying degrees of implementation, from a simple proof of concept to enterprise-scale implementation.

With our experience, expertise and delivery model, Synpulse can help your firm to implement a RPA pilot in just six to eight weeks to generate a rapid ROI at a low initial cost.

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