

Why Banks Must Bank on RPA

Abstract

The do-more-with-less culture fostered by a slow economy is pushing enterprises to look for ways to boost productivity. This is especially true of the financial services industry where banks have to continually evolve to keep up with customer expectations and counter competition from fintech players. At the same time, banks are under pressure to optimize costs. Rising personnel costs, scarcity of skilled resources, and the need to increase productivity has set the stage for the adoption of robotic process automation (RPA).

RPA represents the next wave of automation that will help address a slew of challenges in the financial services industry. This paper evaluates the application of RPA to banking processes, with specific focus on payment cards.

Building a Virtual Workforce with RPA

Robotic process automation (RPA) integrates automation with artificial intelligence (AI) to automate processes through the deployment of custom applications. The use of AI is about leveraging intelligent algorithms to resolve inefficiencies and drive enhanced customer experience at every point of interaction.

An RPA solution emulates human actions to automate the tasks that require human intelligence, without necessitating changes to the underlying systems and processes. RPA is about employing software robots with the ability to replicate human actions to eliminate inefficiencies in processing of information or data. Simply put, RPA envisages a virtual workforce with skills comparable to that of human beings.

The commoditization of financial services has spurred banks to improve front-end services and customer experience. Backend operations, however, have not received as much attention, and offer tremendous scope for improvement. Backend processing typically involves high volume, rule-driven, repetitive tasks that are labor-intensive, and therefore, prone to errors. When automated using RPA, these tasks will not require the constant intervention of skilled human resources who can thereby focus on higher value-adding activities. The investment is minimal as RPA does not entail any changes to the underlying legacy IT infrastructure. At the same time, it speeds up core processes, significantly enhances productivity and accuracy, lowers costs, and cuts time-to-market for new offerings.

Opportunities for the Credit Cards Business

Credit cards constitute a major component of the banking business. With several countries pushing for cashless economy, the share of payment card business is expected to grow significantly. Fierce competition and a thin spread mean that success depends on the ability to handle volumes efficiently. Process automation plays a significant role in enhancing both the efficiency and profitability of the credit cards domain.

Table 1 depicts some of the credit card processes that can be automated using RPA.

Function	Process	Opportunities for Automation (illustrative)
Origination	Application processing <ul style="list-style-type: none"> ■ KYC and other checks ■ Credit scoring ■ Decisioning 	Straight Through Processing (STP) and instant decisioning can be achieved through: <p>Artificial intelligence - Business rules for application validation and decisioning can be parameterized or coded and automated</p> <p>Automated interfaces – Both internal and external – bureau checks, KYC, and so on</p> <p>Automated underwriting process - Credit scoring, risk assessment, collaterals, LoC assignment, and terms and conditions assessment</p> <p>Document management – Physical application, signature capture and storing</p> <p>Workflow management – Exceptions handling and initiating fulfilment</p>
Fulfilment	<ul style="list-style-type: none"> ■ Card personalization ■ Delivery ■ Activation 	<p>Straight Through Processing</p> <p>Automated activation</p>
Authorization	Referral handling	Auto dialler for customer and issuer contacts
Transaction processing	Exception handling	Review, update, and re-process validation failed records
Clearing and settlement	Reconciliation Exception handling Interchange optimization	<p>Review, update, and re-process validation failed records</p> <p>Verification of the fees or charges collected by card schemes</p>
Collections	Delinquency monitoring	<p>Identification of delinquent accounts based on multiple parameters and business rules</p> <p>Dunning letters generation</p> <p>Monitoring and tracking</p> <p>Automatic card blocking based on business rules</p> <p>Alerts to customer support executives</p> <p>Collaterals tracking and appropriation</p> <p>Securitization</p>
	Collection agencies management	<p>Assignment of accounts to agencies based on business rules</p> <p>Monitoring and tracking the performance of agencies</p> <p>Re-assignment of accounts</p> <p>Payables computation</p> <p>Promise to pay tracking</p> <p>Auto dialler for telecalling</p>
Customer communication and alerts	<ul style="list-style-type: none"> ■ Event based and periodic communication ■ Transaction alerts 	<p>Transaction alerts</p> <p>Customer education on fraud risk</p>
Customer servicing	<ul style="list-style-type: none"> ■ Cross sell ■ Customer complaints handling 	<p>Auto dialler for telecalling</p> <p>Customer behaviour analysis and offers</p> <p>Redemption of rewards</p> <p>Automated messages to the customers on dates and events to remember</p>
Merchant management	<ul style="list-style-type: none"> ■ Merchant acquisition and fulfilment ■ Merchant settlement ■ Merchant servicing 	<p>Application processing and decisioning</p> <p>POS testing, certification, and merchant activation</p> <p>Merchant statements and other communications</p>
Partner management	<ul style="list-style-type: none"> ■ Issuing partner ■ Reward partner 	<p>Periodical partner communication</p> <p>Partner accounts – settlement and reconciliation</p>

Table 1: Credit Card Processes Ideal for RPA

RPA offers multiple benefits to financial institutions. However, successful implementation requires extensive knowledge of the domain, technology expertise and experience, an understanding of tools and accelerators, and continuous monitoring. Considering the complexities involved, financial institutions should consider partnering with service providers with expertise in RPA. Having partnered with leading third-party tool vendors, most service providers are able to deliver a smooth, problem-free implementation. Third-party tools do not impact the functionality of the mainstream application and eliminate the need for customization and enhancement, which brings down costs and effort.

Some Use Cases from the Banking Industry

Most banks have already embarked on RPA journeys and experienced better business outcomes. Here are some examples from the industry.

ATM testing

A global bank deployed an ATM testing robot to automate the test cases that were earlier conducted manually. The robot came with five components:

- Vision system for screen reading and identifying keyboard number, card slot, cash, and receipt identification
- High dexterity robotic arm to reach out to all areas of ATM operations
- End effector to handle multiple cards as well as perform keyboard, cash, and receipt operations
- Processing unit
- Defect logging engine that interfaces with the defect management system

The robot tested various aspects including the screen, keypad, card dispensing mechanism, cash and check handling mechanism, cash counting mechanism, and debit and credit card differentiator, to deliver up to 80 percent cost and time savings.

Transaction processing and sweep operations

For a leading bank in the UK, robots were deployed in the areas of transaction processing and sweep operations. This eliminated manual effort, which reduced turnaround time (TAT) by 30 to 35% and significantly improved accuracy, increased productivity by 20%, and sizeably reduced full-time equivalent resources.

Account opening process

A global bank has used robots in the account opening process to extract information from input forms and feed it into different host applications. This has helped the bank eliminate time-consuming, error-prone manual data entry processes, and reduce TAT by nearly 30%, while driving 100% operational accuracy and cutting costs by \$50,000 a year.

RPA Implementation Approach

Based on engagements with several global banks, we have outlined the following elements that are key to successful RPA implementation.

Assessment

Conduct a detailed analysis to shortlist the processes suitable for RPA. List the operational issues that can be resolved through RPA. Assess their feasibility and impact.

Strong business case

Document the cost and efficiency gains that RPA will deliver. Consider running a proof of concept to demonstrate the benefits along with metrics on costs, time and effort, efficiency, and resource utilization.

Well-defined execution strategy

Choose the appropriate operating model considering your organization's needs and identify key people to manage the execution. Check out the service provider landscape and identify the right partner — this is crucial as the right partner can help in end-to-end implementation spanning ideation, solution definition, planning, execution, and support. The execution can either be on a turnkey basis with the partner taking up complete responsibility or on a collaborative model.

The right partner can also help identify the appropriate third party tools to be used. These tools do not require customizations or enhancements, and significantly bring down the cost and effort. Moreover, they function as independent peripheral applications without interfering with the mainstream applications.

Conclusion

Banks can benefit tremendously from a virtual workforce that can cost effectively transform the backend without interfering with the underlying infrastructure. This in turn will translate into faster processes, efficiency gains, and quicker time-to-market. These advantages cannot be ignored in the current environment when banks are battling a variety of internal and external challenges. Banks should consider adopting RPA solutions to overcome competitive challenges and retain their market position.

About The Author

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Prasad Hosadurga is a Domain Consultant with the Cards and Payments Practice of TCS' Banking and Financial Services business unit. He has over two decades of experience in retail banking, credit cards (operations and systems), banking IT, and core banking solution implementation. Since he joined TCS in 2003, Hosadurga has played an active role in consulting and delivery engagements covering analysis, solution definition and design, and planning and implementation. He has also been part of several card platform implementation and migration projects for global financial firms.

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