Robotic Process Automation: Hype or Reality?

Abstract

In recent times, every industry, including banking, financial services and insurance (BFSI), has adopted robotic process automation (RPA) due to its ability to automate rote processes without changing the underlying legacy application or infrastructure. The proliferation of RPA tools has also driven this trend. However, not all RPA implementations have been successful - in many cases, the desired benefits have not been realized mainly due to significant gaps between expectations and reality. RPA is a short-term fix to a longstanding pain point and has limitations. This white paper highlights the myths associated with RPA and presents an approach to make RPA work effectively for organizations.

Bursting the RPA Myths

BFSI organizations have leveraged RPA for back-office automation and reducing headcount. Given its ability to eliminate repetitive, manual tasks, BFSI firms have used RPA to automate legacy processes thereby freeing up human resources to take up higher value-adding tasks focused on improving service and meeting customer expectations.

Our experience of implementing RPA programs indicates that a significant proportion of RPA projects fail primarily due to a combination of incorrect information and unrealistic expectations. A large financial institution started its RPA program expecting to reduce back office operational costs by 25-30%. The bank initially aimed to automate most of the manual tasks in the back-office without upgrading underlying core systems. However, they realized that RPA was unsuitable for several high volume, back office tasks in areas like loan processing, customer service, disputes, card account initiation, trade finance and so on. This can be attributed to the complexity of the transactions with too many variations requiring human judgment, highly fragmented processes, and paper-based transactions. In addition, most large banks have invested heavily in upgrading legacy applications and a majority of procedural tasks have been automated.

Clearly, organizations that desire success in their RPA projects must evaluate the common RPA drawbacks and myths and set realistic and achievable transformation goals.

RPA will automate all manual tasks in the back office Organizations assume that robots will replace the human workforce. However, RPA automates only the rule-based, repetitive, procedural tasks and does not replace humans at every level. It lacks the ability to automate processes that deal with image-based documents, unstructured data and involve complex decision-making. Dispute resolution, mortgage origination, fraud investigation, payment repairs and investigation are examples of processes unsuitable for RPA. On the other hand, posting payment transactions from spreadsheets and copying customer details from external applications are examples of processes that can be automated using RPA.

RPA can be executed without involving technology teams RPA firms have stressed that the technology can be implemented by business teams without technical support. While business teams independently drive RPA programs in many organizations, successful implementation will require support from technology teams across infrastructure setup, application impact analysis, integration, configuration, production deployment, and maintenance and support.

RPA can automate every step in the process RPA lacks the ability to automate all process steps, especially aspects that involve human judgment, image-based data extraction, and unstructured inputs. For example, in the account opening process, the information from the physical applications must be manually entered and RPA can be leveraged only for downstream validation.

RPA can be delivered in a few weeks

Robots can be delivered quickly for smaller processes with fewer exception paths. However, typical BFSI use cases such as general ledger matching and payment repair processes are complex and have many exception paths for consideration. For more complex processes, RPA implementations have longer life cycles.

RPA teams do not require technology skills Even though RPA scripts are developed using tools with graphical interfaces, technology skills are critical for handling non-functional requirements like network issues, unavailability of webpage, and operating system crash. Back-office teams typically lack these skills.

Robots are cheaper than human resources

Organizations often neglect the costs related with maintenance and support, infrastructure and servers, licenses, business continuity, and ongoing process and system changes associated with developing robots. These costs can be sizeable and not budgeting for them can make the project more expensive.

Making RPA Work for Your Organization

Given the myths surrounding RPA, it is easy to have false expectations. Organizations that embark on RPA implementations without adequate understanding of its capabilities are setting themselves up for disappointment against the benefits that may accrue. To ensure successful implementation, RPA initiatives must be treated as strategic programs requiring comprehensive preparation from the initial stage. Based on our experience of delivering thousands of robots to production, we recommend some best practices that organizations must follow.

Select the right process

The process chosen for RPA needs to be RPA-compatible. Hence, operational due diligence is essential to qualify a process for RPA. The processes must be classified into appropriate deployment buckets and a phased roadmap must be built for seamless execution. In addition, organizations must ensure that the process is stable and not identified for system migration or enhancement. For example, trade finance or antimoney laundering processes are subject to frequent regulatory change, and consequently, application change, making them unsuitable for RPA.

Obtain IT support

RPA programs leverage internal ecosystems and support from IT teams spanning technology, infrastructure, security, and compliance is critical for success. For example, when automating card payments using RPA, a test environment with valid card numbers is required for script recording. If the IT team is not part of the planning phase of the project, the environment may not be ready.

Ensure organizational readiness

Validating the technical environment, ensuring effective stakeholder communication, managing expectations, and establishing security guidelines with the proper governance structure will ensure organizational readiness for RPA implementation. Rigorous change control processes are required for stable robots in production as RPA solutions are sensitive to change in the underlying business applications. Lack of readiness can adversely impact the process selection, product selection, team selection, and slow down or even stop the RPA program. We believe that establishing an in-house RPA Center of Excellence with the right mix of technology and business can help build and deliver RPA capabilities.

Aim for strategic pilots and quick wins

Running pilots can remove roadblocks, align the RPA strategy with business objectives, and get management buy-in to continue with RPA projects. For example, the customer service function has multiple request types like account enquiry, card transaction disputes, and authorization failure enquiry. Selecting processes related to change in phone number or email ID that can be easily automated using RPA will help quickly showcase benefits.

Automate automation

RPA implementations involve manual effort for feasibility analysis and selecting the right process for automation. In our experience, development effort constitutes only around 15% of the project effort while the remaining 85% constitutes activities that are part of the largely manual development life cycle. Automating the remaining phases and lean documentation will decrease the total cost of development.

Looking Beyond RPA

RPA is a tactical solution with the ability to automate simple procedural tasks. However, paper-based, complex tasks in the back offices of large BFSI organizations are not RPA-compatible. BFSI firms must therefore explore artificial intelligence (AI) driven techniques like machine learning (ML), natural language processing (NLP), regular expression (RegEx) and optical character recognition (OCR), to automate complex tasks and paper-based transactions.

BFSI firms must restrict RPA to automating repetitive, manual tasks and leverage AI-based OCR techniques to automate paperbased transactions in areas like trade finance, account opening, mortgage origination, customer service, insurance claims, and check processing and validation. Additionally, upstream digitization of the process will help reduce paper-based transactions eliminating the need for an OCR solution down the line.

Complex processes in areas like payment repair and investigation, general ledger reconciliation, transaction disputes, collection and recovery and credit decisioning in exceptions that require human intellect can be better automated using ML since these are easy to develop, scale, and maintain. For converting unstructured information or free formatted text into structured formats in areas like insurance claims processing, customer service emails and review of contact center call transcripts, NLP and RegEx techniques can be used.

Going forward, embracing cognitive technologies in addition to RPA will facilitate a scale up from merely automating manual tasks to intelligent automation where higher-order tasks requiring human perception and judgment can be automated using AI techniques. This will also help usher in a machine-first paradigm in BFSI where humans and machines collaborate to deliver top notch services and customer experience.

In a Nutshell

BFSI firms operating with legacy systems cannot afford to ignore RPA given its ability to non-intrusively automate simple, manual, repetitive tasks without changing underlying core systems. However, before embarking on an RPA project, BFSI organizations should clearly understand its capabilities and limitations. This will help firms set achievable goals and have realistic expectations around the benefits that will accrue. By selecting RPA-compatible processes, meticulous planning, and defining a strategy with rigorous controls, BFSI firms can successfully implement RPA programs and unlock value through cost and efficiency optimization.

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