



# **Robotic Process Automation**



### INTRODUCTION

As a Shared Services Center (SSC) or back-office process owner, you are constantly under pressure to improve. Whether you are expanding the service offering, increasing the geographic footprint, or improving levels of service, the main objective is to improve while keeping overall cost of operations low. Achieving a top-performing shared services organization is a complex endeavor, particularly because SSCs are often built from decentralized units with different maturity process levels, cost structures, and cultures. Traditionally, organizations respond to these challenges by standardizing processes, optimizing tools, relocating services, or by implementing new forms of enabling technology. But once these traditional mechanisms have been exhausted, the pressure to continuously improve remains. The question is, "What can we implement now that will exceed traditional improvement approaches?" Robotic Process Automation (RPA) may be the answer.

### **RPA - WHAT IS IT?**

RPA is a technology solution that allows you to automate repetitive, rules-based processes through computer software. It defines steps at the "keystroke" level of detail using RPA "bots." Most RPA products are broadly comprised of three fundamental elements: the automation software, a robot controller, and the software robots themselves.

The automation software is used to define the "jobs," including any business rules or conditional logic. These tools have user-friendly interfaces that facilitate the creation of automated processes without programming skills.

The robot controller serves as a master repository for the defined jobs while supporting operational governance. It has the ability to assign appropriate roles and permissions to users. The robot controller also manages the deployment of robots to handle applicable processes while freeing up your employees to work on more value-added work.

RPA bots, also referred to as "clients" or "agents," provide multiple applications and value propositions, including the ability to record data or complete transactions. Unlike traditional Enterprise Resource Planning (ERP) applications, "bots" can be assigned multiple usernames and passwords to retrieve pertinent data, utilize external data (e.g., interest rates, currency exchanges), and run processes simultaneously.



The software robots carry out the instructions, interacting directly with business applications to process transactions and record data. A high-level view of a configuration can be seen in the figure below.

#### Manual **Processes** Prioritized by RPA COE Robot Robot 1 Controller Handled by **Prioritized Processes** Process Humans 1.2.83 **Automation** Software Exception Handling Process 4 Automates manual processes; newly automated processes Process 6 User Interaction are pushed to robot controller Security Protocols Robot 2 Process **Automated** Logging of **Processes Robot Activities** Pushed to robot Reporting/Analytics

**High-Level View of an RPA Configuration** 

The end result of an RPA implementation is that a subset of your full process execution is now being managed by automation software with less human interaction required for completion. RPA is most suitable for processes with high volumes, high business impact, and well-defined rules (i.e., not frequently changing or being updated). RPA is currently being used in a wide range of SSC functions, from finance and HR processes to customer service and data management processes.

For an example of how RPA is used, consider an exception queue in an ERP application. When an Accounts Payable transaction can't be automatically processed, it is sent to an exception queue that is monitored and managed by a human. Humans have to log into the system, review the exception, determine the issue, and resolve the problem. Leveraging RPA, this process can be made significantly more efficient. The robot can log into the ERP, using credentials just like a human, and evaluate the exceptions in the queue based on type or category. If the transaction took too long to process and timed out (Type 1), RPA will send it back to be processed. If the transaction had a common error, RPA can log into a second system, such as a vendor master, and retrieve related information about the supplier. If the exception is routine (Type 2), like a misspelled supplier name, RPA can compare the data from the two systems, make the adjustment, and send the transaction to be processed. If it is more difficult (Type 3), it will be sent to a human for review and resolution. Overall, RPA can quickly and efficiently clear the exception queue of all simple and routine exceptions and rely on human interaction only for the most complex issues.



# RPA VERSUS ARTIFICIAL INTELLIGENCE

RPA is not Artificial Intelligence (AI). Al can perform non-repetitive tasks which includes deciphering unstructured data with variation. RPA executes processes as they are recorded at the keystroke level and does not perform advanced pattern recognition or predictive analytics. However, we believe the "dots can be connected" easily as technology matures. If you have RPA in place as AI applications inevitably mature, you will have a powerful platform to combine machine decision-making (AI) and machine execution (RPA).

#### WHY USE RPA?

RPA is being implemented as the next iteration of transformational tools. Back-office process owners have long deployed process automation components, such as ERP suites, low-level automation tools, and self-service portals. However, many of these implementations have business processes that are less than optimal and applications that are not well integrated. This results in increased costs, redundant processes, data errors, and inconsistencies.

The pressure of lowering costs in addition to other performance requirements, such as service excellence, security, and compliance, make it difficult to close the gap between expected and actual benefits. RPA closes that gap in several ways.

### **Efficiency**

RPA saves time by automating high-volume repetitive tasks. On average, full-time employees perform at a 10% error rate and take much longer to perform tasks than bots. RPA can run 24/7 and only malfunction due to an instruction error from a human. Also, RPA software can be assigned multiple usernames and passwords, eliminating the need to design, implement, and test interfaces to multiple systems which also saves company time. Even the RPA implementation process is nonintrusive so large IT support structures are not necessary in order to achieve a seamless transition into using this new software.

### Scalability

In addition to efficiency gains, a process outsourced to robots is much easier to manage than one performed by people. RPA provides scalability and flexibility. The number of robots handling a given process can be increased or decreased relatively easily without recruiting, hiring, or training. Lastly, robots can be quickly reassigned when other more important processes arise, and they are already trained to successfully complete all automated processes.

# **Cost Effectiveness**

Furthermore, the reusable components of a software robot are likely to cost less than an onshore staff member or even an offshore staff member. Wage inflation, turnover, labor disputes, and other challenges are avoided by implementing RPA.





# **Consistency and Reliability**

Lastly, robots can produce seamless work without fatigue or quality variance. By setting logic-based rules, you are avoiding re-work and enabling 100% traceability for controls research and audits (versus relying on imperfect human memory). As robots follow these rules and are taught to produce 100% accuracy, your process output quality will improve dramatically. We believe it will soon be the norm that superior performing SSCs utilize RPA programs to process more and more at night and through the weekends while "old fashioned" companies use human agents to do the same work during a typical workday.

#### CONCLUSION

When evaluating ways to reduce costs while improving back-office processes located in shared services or corporate centers, RPA is an inexpensive and easy-to-use tool that you can leverage to do this. RPA is a transformational tool that has the ability to lower the cost of automation while increasing efficiency, scalability, consistency, and reliability. Not only will it keep you active in the current competitive landscape, but it is becoming a necessity for any back-office process owner—if RPA is not on your horizon, then you're falling behind.

For more on this topic, view our article on Keys to Successful RPA Implementation.

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### **EXTERNAL SOURCES**

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