Considerations for Implementing Robotic Process Automation

Overview

Over 30% of Operations leaders are either piloting or have already implemented robotic process automation (RPA) to reduce Operations’ cost, expedite internal processes, and improve employee productivity. Unlike traditional solutions, robotics can be adopted faster and applied to any function or process, and so far, the results have been staggering. Financial services firms have seen substantial cost savings and payback in as little as three months. Operations leaders who have begun their robotics journey share their lessons with us about where to begin, how to get implementation right, and how to scale up robotics capabilities post-implementation.

Introduction

Operations leaders are under considerable pressure to contain costs in a highly competitive environment while balancing service excellence, scalability, flexibility, security, and compliance. It is no question, then, why many Operations leaders are turning toward robotic process automation (RPA). So far, 33% of Operations leaders are either piloting or have already implemented RPA to reduce Operations’ cost, expedite internal processes, and improve employee productivity. [1]

At its core, RPA is the application of a technology that allows employees to program a computer software, or robot, to complete tasks. RPA software can navigate across different IT systems to work the way a human does, as long as it has well-defined steps.

Operations leaders tell us this technology has delivered:

- Cost savings up to 75%,
- 100% accuracy,
• Reduction of full-time employees (FTEs),
• Shorter turnaround times, and
• Payback as fast as three months.

Furthermore, RPA offers an effective, lower-cost alternative to major technology implementations aimed at standardizing business processes and facilitating integration among different systems.

Given these substantial potential benefits, RPA is a fertile area for hype. Vendors provide Operations leaders with a significant amount of information about the benefits of RPA, but leave leaders feeling that vendors are only telling them what they want to hear. For Operations leaders who have already embarked on the robotics journey, little guidance exists on how to sustainably embed the technology into the firm’s culture and integrate this new tool with existing workflow management tools and continuous improvement initiatives.

To learn how financial services firms are adopting and addressing challenges that arise in implementing RPA, we conducted a series of interviews with member firms that have implemented robotics. From our findings, we offer a balanced view of the benefits and challenges of RPA and highlight the considerations financial services firms should take as they embed RPA in their Operations.

**What Is RPA?**

”Implementing RPA is not just about automating tasks, it is about creating a virtual workforce.”

*Vice President of Change Management at North American Insurance Company*

Process automation is not new. Screen scraping and product-specific workflow tools have been used for years to improve efficiency, boost productivity, and cut costs. RPA, however, is version 2.0 of automation and has revolutionized traditional types of automation by being system agnostic and having software interact with the user interface in the same way a human would.

Whereas traditional automation operates a layer beneath the user interface and uses scripts and code to complete standard activities, RPA uses “smart software” to complete high-volume and repeatable tasks. The technology can be configured by dragging and dropping process steps to alter the workflow. Because RPA operates
above the user interface, it is complementary to, not a replacement for, existing automation initiatives. The vice president of change management at a North American insurance company told us, “Implementing RPA is not just about automating tasks; it is about creating a virtual workforce.”

The benefit of using RPA software is twofold:

1. It enables Operations departments to implement solutions themselves.
2. It frees up the limited and valuable time of IT professionals to concentrate on enterprise-wide strategic IT implementations.

Robotic software can be used anywhere a human plays a part in navigating across IT systems. And the software can learn patterned, rules-based steps and execute them in a fraction of the time a human can. Although RPA can, in many cases, replace a human, the director of technology strategy at a North American insurance company explains that humans are still critical to the parts of the process that require decision making. The insurance company differentiates between two types of RPA:

- “Headless” automation requires no critical decision making or validation, allowing the robot to complete the tasks without human involvement.
- “Non-headless” automation requires a human to look at the data and make a decision.

**Benefits of RPA**

Providers of RPA software say the technology usually costs about one-third of an offshore employee or one-fifth of an onshore employee, and it can work nonstop with no human errors—if programmed correctly. [2] Robotic automation components can also easily be reused on other automation projects, further lowering development costs. The more processes that are automated, the more objects that exist in the robotic library, increasing the amount of reuse possible.

Robotics represents the next phase in outsourcing—a way to further save labor costs and improve work efficiency. In fact, the Institute for RPA estimates that this technology has the potential to deliver an immediate savings of 25% to 40% of labor costs. [3] With numbers like that, it’s no wonder RPA caught the attention of Operations functions, which are designed to save costs and provide consistent process and business support. In fact, over the next two years, 55% of Operations leaders expect to increase spending on RPA (figure 1).
Figure 1: Operations Expected Change in Annual Spend Over the Next Two Years

Operations’ Expected Change in Annual Spend Over the Next Two Years
*Percentage of Respondents, Global, 2017*

- **Increase**
- **No Change**
- **Decrease**

RPA

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$n = 569 \text{ (RPA)}$ and $564 \text{ (AI)}$.

In our conversations, Operations leaders tell us the top three outcomes they have seen from RPA:

1. **Process automation speed and efficiency**—“The results [of RPA] have been quick to realize...in the past four years in succession, we have dropped operational costs each year in absolute terms, while absorbing operational volume growth. We are on a consistent track to seeing real productivity improvement.”

Alistair Currie, former COO of ANZ Banking Group
2. **FTE savings and resource displacement**—“We exceeded our FTE savings target by 25%. So far, we have been able to release staff as each process went live, and the project has enabled us to move a significant number of FTEs away from manual roles and into customer-facing positions.”

Business Systems Manager at Co-Operative Bank [4]

3. **Improved customer service and experience**—One North American bank used RPA for GUI consolidation in the call center. The automation pulls in data in real time from 20 different systems and presents the data to the call center agent so they can serve the customer quickly and effectively.

### What Is the Hold Up?

So far, only 14% of Operations leaders report having fully implemented this technology (figure 2). If RPA can offer financial services firms substantial speed to benefit, why haven’t more Operations leaders adopted it?

![Figure 2: Operations Current and Planned Implementations of Robotics Process Automation](image)

RPA only became advanced enough to replace humans in the past couple of years. Because of its relatively recent debut, many firms are simply uncertain about where and how to begin implementing RPA. However, even for those who have done their research and understand RPA’s benefits and applicability, Operations leaders tell us that many organizational reasons may make adoption of the technology difficult.

In our conversations, those who have implemented robotics indicated that they had to overcome at least one of the following hurdles:

1. **Difficulty in building a business case**—Despite RPA’s lower cost compared to an onshore or offshore employee and its quick payback through cost savings and increased productivity, these financial benefits are often difficult to prove to senior leadership who are unfamiliar with the technology. The director of technology strategy at a North American insurance company mentioned that when the team first embarked on its robotics journey several years ago, obtaining funding from the business was painful. Ultimately, it had to put a three-year roadmap in front of business leaders and prove the benefits of pilot projects to secure funding.
2. **Time required to review and document processes**—Reviewing and documenting a firm's current processes takes time and effort. After documenting a process, Operations must convert the steps into “instructions” for the robotic software to follow. The SVP of loan services at a North American bank told us, “When we started working with the consultants on what we thought were relatively simple processes, we found that there is more judgment and variation involved in our processes than we give them credit for sometimes.”

3. **Perception that existing applications aren't compatible**—Many Operations stakeholders believe their legacy systems won’t be compatible with RPA tools. Although this may have been true of technologies introduced in the past, today’s RPA tools have been specifically developed to fully integrate with nearly every system in today’s industry. The AVP of transaction processing at a North American bank told us that Operations received a considerable amount of pushback from IT before it understood that RPA could actually help prolong the life of legacy systems.

4. **Cultural resistance**—The idea of creating a “virtual workforce” elicits security concerns among Risk functions and resistance from change-averse managers. Few financial services firms have a culture of innovation that lends itself to getting all stakeholders on board to implement new technologies. To combat this, Operations executives reiterated several times that it is critical to have constant and ongoing conversations with leaders in Compliance, Finance, and HR about how the software will be used and socialized in the organization.

**Considerations When Applying RPA**

Whether beginning the robotics journey, confronting the challenge of getting stakeholders on board, or considering how to scale up your existing robotics capabilities, take into account a variety of considerations throughout the planning, implementation, and capability-building phases of implementation.

**The Planning Phase**

**Evaluate Sourcing Options**

One of the first decisions that must be made in any RPA journey is how to source the software. Firms have options—they can build, buy, or partner with vendor companies —and what a firm chooses depends on internal needs and risk appetite.

Many firms told us that if an outsourcing option is chosen, it is important to:

1. Scope who owns the intellectual property for the bots, and
2. Ensure the bots will have ongoing maintenance if anything were to happen to the relationship.

One member told us that in addition to bringing in a software vendor to provide licenses, they hired business consultants to assist with the operating model, robot testing, and change management.

Most firms use a combination of internal and third-party development (figure 3), and in most situations, Operations leaders work with a vendor to build the capability and to train internal staff. In this situation, after the initial implementation, the only points of interaction with the vendor occur if something breaks and the firm needs support.

Figure 3: RPA Technology Development Options

At a North American bank we spoke with, the robotics capability is entirely vendor supported, but the bank plans to train its IT staff to conduct all the maintenance work. Figure 4 outlines the pros and cons of available sourcing options.
Socialize RPA Throughout the Business

The firms we interviewed universally agreed that you must have both senior-level support and the right messaging in place for RPA initiatives to succeed. One firm suggested that to implement RPA, you need executive sponsorship and an advisory committee in addition to the support of HR, Communications, and all of the businesses you will affect. At a North American bank, the chief innovation officer expressed excitement about the technology, which has been critical to the bank’s ability to gain enterprise-wide support. Westpac New Zealand Bank explained that gaining support from the key sponsor, Lean specialist, IT team, Risk and Compliance team, and HR team was critical to ensure a smooth implementation of RPA (figure 5).
Identify Processes for RPA

In general, RPA is well suited for processes with well-defined rules, high volume, and repetitive tasks (figure 6). To assess if robotics is a good fit, determine whether your firm can process map the human activity of navigating across IT systems. Leaders told us that for already heavily automated processes, robotics may not present a big opportunity. However, a software robot can be used in combination with automated processes, just as a person would be involved today.

During the proof-of-concept phase, Operations leaders told us to choose processes that use the company’s key systems (e.g., core banking, enterprise content management systems) to help the most important stakeholders quickly see the technology’s value. One member further advised, “Do not touch broken processes or those that are not mature. If the system is not robust, do not automate it.”

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<thead>
<tr>
<th>Key Individuals and Teams</th>
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<tr>
<td><strong>Key Sponsor</strong></td>
<td>Advocate for funding and support from the CEO level.</td>
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<tr>
<td><strong>Lean Specialist</strong></td>
<td>Assess processes using Lean methods.</td>
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<tr>
<td><strong>Information Technology</strong></td>
<td>Create the governance and infrastructure for RPA, and ensure that implementation does not affect the business.</td>
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<tr>
<td><strong>Risk and Compliance</strong></td>
<td>Consider which systems the robots will have access to, review compliance requirements, and manage risks associated with access.</td>
</tr>
<tr>
<td><strong>HR</strong></td>
<td>Provide robots with a user account, and determine their placement within reporting lines.</td>
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Source: Westpac; CEB analysis.
In our conversations with members, there was no consensus on which processes to begin with when implementing RPA. Some firms started with simple processes to get their feet wet, and others started with the most complex so they could iron out any RPA implementation challenges quickly. A North American bank piloted three processes to test different RPA capabilities:

1. Move images from a digital fax, and save them in a shared folder.
2. Aggregate data from disparate IT systems.
3. Compare information from two systems and make a rules-based decision.

The bank chose to start with processes that would remove lower-value work and deliver faster service around these processes; this method would prove the value of RPA quickly to internal stakeholders. However, a UK-based bank started with complex processes to derive maximum benefit. The bank focused its first RPA initiative on rules-based decision making for delinquencies in an effort to remove staff emotion from decision making, which was leading to inconsistencies.
To prioritize what processes to start with, many organizations collect ideas from the enterprise on which areas harbor the greatest opportunity for improvement. Brian Golden, senior manager of the Process Automation Competency Center (PACC) at CUNA Mutual Group, told us his team started by creating an enterprise heat map to evaluate various processes on several factors:

- Type of data (structured/nonstructured)
- Volume processed
- Expected growth
- Opportunity for real value back to the business
- Impact on the customer experience.

This heat map has helped the firm prioritize processes for RPA based on strategic priorities and gain consensus throughout the enterprise.

### Relevant Resources

- Explore [Robotics Vendor Profiles](#) to learn what vendors are in this space.
- Use our [Robotics Spotter Tool](#) to determine which processes and activities are good contenders for RPA.
- Access tools for [building a business case](#) for robotics.
- Learn more about [Dow’s journey with robotics](#).

### Getting Implementation Right

#### Build a Robotics Team

The belief that “RPA tools are so friendly that anyone in Operations could configure RPA solutions” is hype, according to executives. The VP of change management at a North American insurance company says this belief sets up companies for failure. Although a large RPA team is not necessary, Operations leaders say that important skills for RPA analysts include Agile experience, scrum, Lean/Six Sigma certifications, and familiarity with business processes and optimal workflow. According to one firm, a robotics team should comprise three to four technical business analysts, three technical consultants, and four developers (figure 7).
The VP of change management at a North American insurance company told us the most difficult task was finding development resources. She was looking for someone with a very specific skill set—a technical background with some Agile experience and scrum. She also mentioned that when hiring employees to do the design work, it is important to find people with continuous improvement experience.

Many firms worry the reduction in FTEs resulting from RPA will lead to pushback from employees who fear a robot takeover. However, none of the firms we spoke with had this experience.

At one bank, natural attrition has made up for the reduction in manual work. Leaders of another bank tell their employees that robotics is an opportunity for their staff to take on higher-value work. The AVP of transaction processing at a North American bank told us the team began implementing robotics in areas staffed by agencies so any material impact on staffing would only be seen within its contractual workforce.
"RPA is a very different way of thinking. This needs to be a coordinated effort between business and technology. Without the other, it will fail."

Transaction Processing Manager at North American Bank

The consensus among all firms we talked to is that although Operations is the function most suited to run RPA, given all the opportunity for the function, IT must be involved. Another consensus is that most firms, in retrospect, said IT should have been involved much earlier than it was.

A transaction processing manager at a North American bank told us, “RPA is a very different way of thinking. This needs to be a coordinated effort between business and technology. Without the other, it will fail. Everyone needs to be at the table from the beginning.”

Several of the firms we spoke to said they received some pushback from their IT departments about Operations’ ownership of robotics. However, IT leaders better understood the use cases, saw that RPA does not disturb underlying IT systems, and envisioned IT’s continued role in providing security and guidance, the department became supportive.

At one insurance company, the director of technology strategy expressed the importance of staying in close contact with technology partners to ensure the robotics team knows what IT changes are happening so the robots can be updated accordingly. She reiterated the importance of staying in touch with people who are making any changes to processes where RPA has been applied.
Work with Business Partners to Manage Risk

“Work closely with Information Security, the risk organization, IT, and change management as robotics is being implemented.”

VP of Change Management at North American Insurance Company

For enterprises considering the use of RPA, security risks often top the list of potential concerns. The perception is that RPA will create an environment of intelligent robots operating without any oversight. In fact, 34% of Operations leaders who have not yet implemented RPA say ensuring data security is their top challenge in adopting the technology. [5] And among Operations executives we spoke with, most agreed that the hardest part of RPA implementation was getting the security right.

The VP of change management at a North American insurance company noted, “Every application has some sort of security risk with it, and this needs to be thought about early on. Work closely with Information Security, Risk, and IT change management as robotics is being implemented.”

Rachel Swindells, a process engineering manager at Westpac, told us the hardest partners to get on board were HR and the Information Security Group. With access to the same systems as humans, robots needed a user account, which meant HR had to figure out how the bots fit into reporting lines and business modules.

“We were only able to get permission to give the robots a small amount of access and then moved up to giving them more,” she explained.

Once Operations proved to their partners that they accounted for all security risks, the Information Security Group gave permission for robots to have the same access as humans for particular processes.

Apply Process Improvement Methodologies

At many firms, RPA initiatives are a part of lean process and business efficiency initiatives, and lean methodologies are embedded within RPA implementation. One Operations leader advised that once processes are identified for RPA, process maps should be designed and optimized with automation in mind. Many organizations miss out on this step as they race to get business processes automated, but firms have told us that the use of Lean management techniques led to greater results. Another firm cautioned that automating a badly organized process may appear to
yields improvements in the short term, but additional automations over time increases the risk of cascading process breakdowns.

Relevant Resources

- Partner with IT to prevent bot failures.
- Learn the five steps Westpac New Zealand took to pilot RPA.
- Learn key lessons from those who have implemented robotics.

Scale Up Robotics Capabilities

Educate Your Business Partners

RPA requires sustained support from key stakeholders in deployment and beyond. One firm told us, “Robotics is a journey—not in how you configure the process, but in how you bring the rest of the organization along in the journey of thinking about this automation.”

Because RPA is a very different way of thinking compared to business process management automation or hard coding, it is best executed as a coordinated effort between business and technology.

Firms struggle with socializing robotics throughout the firm, as some leaders are skeptical that software can do what people can do. It is important to teach senior executives what RPA is and its value for the organization. While at some firms people are seeing the potential universally, others have a bit more hesitation.

Westpac conducted demos of the software every two weeks throughout the business so others could visualize the benefits. At one North American bank, constant socialization of the technology has led to so much excitement around RPA that the team is receiving innumerable automation opportunities from all over the business.

At a North American insurance provider, the implementation of RPA was not just about automating a couple of tasks but about creating a virtual workforce that could work around the clock. RPA proponents knew that the idea of robots would scare the enterprise. Getting senior leadership support was pivotal to their success in implementing RPA. They made it clear to the business that RPA is just another tool in the toolbox for optimizing processes.
Develop a Center of Excellence

RPA works best when used consistently, at scale, and as part of a culture of continuous improvement programs. Firms that lack consistent RPA standards across departments will face duplication and the challenge of coordinating multiple tools and teams.

Many firms express interest in robotics but are unsure how to implement governance around the new technology. We spoke with several Operations leaders who have created centers of excellence (COEs) to provide a support model and govern robotic initiatives in the organization. Firms organize these COEs in a variety of ways:

- For Brian Golden of CUNA Mutual Group, the creation of the COE was an important way for the robotics team to work with the business. At CUNA Mutual Group, the RPA COE is integrated with the Business Process Management COE based on the relationship between creating automation capabilities and managing the value chain. This Process Automation Competency Center reports into the Customer Operations Executive Team, and IT plays a critical role in supporting the COE regarding security requirements and alignment of the solution architecture.

- At a North American insurance company, the product managers within the COE are aligned to specific businesses and help define and prioritize unique RPA opportunities in the business line. They then work with the business to usher the projects into production. The COE is housed within the Operations/Shared Services organization.

COEs play a critical role in housing an inventory of all automation objects, keeping track of what they are used for, and understanding in what contexts they are reusable. One firm reminded us that when implementing robotics, it is very important to maximize the reusability of objects throughout the business. At a North American insurance company, it took the team four weeks to create the automation for one process, but they were able to reuse so much of it that the next process took only two days to complete. In addition, the COE should identify new opportunities for robotics and delegate responsibilities to the process teams (figure 8).
Figure 8: Robotics Governance Responsibilities and Benefits

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<tr>
<th>Robotics Governance Responsibilities</th>
<th>Benefit</th>
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<tr>
<td>Segment management responsibilities between the CoE and process teams.</td>
<td>Decreased reliance on external support by 25%</td>
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<tr>
<td>Segregate project management and robotics execution roles within the team.</td>
<td>Increased deployment speed for new processes by 2.5x</td>
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<tr>
<td>Use an internal portal to identify new opportunities for robotics and quickly resolve issues.</td>
<td>Streamlined process for identifying candidates for robotics</td>
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Source: Beta Financial* CEB analysis.
*Pseudonym.

Prove the Benefits

All Operations executives we spoke to echoed the importance of continually measuring the ongoing return on investment. They explained that this is pivotal to maintaining support from the business for additional RPA investment.

At one insurance company, the director of technology strategy told us that because obtaining funding for robotics was challenging, the team had to start with small projects and continually prove the benefits of the technology. Once they got started, however, the benefits of RPA were not hard to prove. The insurance company saw a reduction in paper and processing time, an increase in accuracy and consistency, improvement of turnaround times, and rapid payback.

Rachel Swindells at Westpac told us that the company saw a 2:1 financial benefit of pilot products when compared to the cost of implementation. Operations also experienced a reduction in processing time for pilot projects, a decrease in turnaround times for customers, and 100% accuracy in all output (figure 9).

At one insurance provider, the benefits of RPA have been so well socialized, that the VP of change management told us, “Not a day goes by that someone doesn’t ask us about RPA and how it could fit into their organization.”
Figure 9: Results to Date at Westpac

Results to Date at Westpac

- **2:1** Financial benefit of pilot projects when compared to the cost of implementation
- **40%–80%** Reduction in processing time of pilot projects
- **100%** Accuracy of pilot projects output
- **25%–75%** Improvement in turnaround times potentially increasing customer experience scores

Source: Westpac; CEB analysis.

**Relevant Resources**

- Learn the elements of effective governance of robotics efforts.
- Learn how a leading firm gained buy-in from stakeholders for RPA.
- Prove that robotics is creating benefits for your firm.

**The Future Is Automated**

As interest in RPA grows, so will RPA’s potential. Operations executives are already starting to reap the rewards of a virtual workforce, but the benefits will multiply as the technology improves. The integration of other emerging technologies, such as speech recognition, natural language processing, and cognitive learning tools, will improve RPA’s capabilities and Operations’ potential achievements with the technology.

This integration will transform virtual workforces into autonomous, automated solutions. With this, the kinds of jobs found in Operations will change considerably.
The future will likely see an adaptable, innovative, and responsive workforce able to use recently automated solutions to build new organizational capabilities.

**Conclusion**

With RPA’s potential to reduce the costs of Operations, expedite internal processes, and improve employee productivity, the excitement around it is palpable. Although vendors and external literature have widely espoused the benefits of RPA, the challenges of implementing this technology are less known. By learning the considerations others faced in starting their robotics journeys, getting the right people on board, and scaling up their capabilities, Operations leaders can ensure a smooth implementation and sustainable development of RPA.

For more resources applying RPA and other emerging technologies in your Operations function, review our Emerging Technologies resource center.

**Endnotes**


**About This Research**

- We conducted interviews with Operations leaders to learn about their approach to their robotics journey, common challenges, and lessons along the way.
- We surveyed Operations leaders to understand the degree of implementation and investment in robotic process automation.