

# LEVERAGING EMERGING TOOLS AND TECHNOLOGIES IN FINANCE: ROBOTIC PROCESS AUTOMATION (RPA)

## *Definitions, Usage, Benefits, and Challenges*

Based on APQC's [Open Standards Benchmarking®](#) financial management data and custom benchmarking research, APQC's *Leveraging Emerging Tools and Technologies for Finance* series examines leading-edge technologies, their prevalence and use cases in finance, and the key benefits and challenges of implementation. This article focuses on robotic process automation (RPA), a technology that can improve quality and save finance teams time and money by automatically executing tasks.

## WHAT IS RPA?

RPA is a form of server-based process automation that combines process steps with decision models or business rules with little to no human oversight. It is typically applied to high-volume transactional processes with limited variation. For more complex processes, organizations may apply robotic desktop automation to incorporate human decision-making or use intelligent automation to integrate machine learning and AI.

The finance function is a major focus for many organizations' RPA implementations. Finance teams spend hours each week performing transactional, rote, and frankly boring tasks involved in processes such as accounts payable. RPA can automate many of these tasks and free up employees' time for more strategic and value-added work. This can improve employee and customer satisfaction, save organizations time and money, and reduce risks associated with manual entry and human error.

The cost/benefit of implementation also adds to the appeal of this technology. Implementing RPA is cheaper, faster, and requires less IT involvement than almost any enterprise resource planning (ERP) software. [Leslie Willcocks](#), a professor at the London School of Economics' department of management, analyzed 16 RPA implementations and found that return on investment ranged from 30 to 200 percent in the first year. "There are benefits for employees, too," said Willcocks. "In every [RPA implementation] case we looked at, people welcomed the technology because they hated the tasks that machines now do, and it relieved them of the rising pressure of work."

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## KEY TERMS

- ♦ **Intelligent automation:** Process automation that begins with process steps, business rules, experience-based context logic, and decision models as the foundation to incorporate machine learning or artificial intelligence for decision points throughout the process; sometimes referred to as unattended automation.
- ♦ **Robotic desktop automation (RDA):** Process automation that runs on an individual's computer and pauses during execution at decision points for human judgement and/or inputs to move forward; typically applied to complex processes that require dynamic inputs or have high levels of variation and sometimes referred to as attended automation.
- ♦ **Virtual environment:** A system wherein automation software and programs are managed and controlled.
- ♦ **Workflow management:** The analysis and coordination of tasks, roles, and business rules involved in process execution, with the aim of identifying opportunities to improve and automate aspects of processes.

## PREVALENCE AND USE CASES

APQC's [Exploring Process Automation](#) research found finance is the number-one function in which organizations are implementing RPA. A majority (55.8 percent) of those surveyed said their finance functions are currently undergoing process automation initiatives. Organizations are particularly focused on transactional, repeatable processes such as those involved in general accounting, accounts payable, and accounts receivable.

## GENERAL ACCOUNTING AND REPORTING

Research from APQC's Open Standards Benchmarking® [General Accounting and Reporting Assessment](#) finds that a majority of organizations already use RPA for general accounting and financial reporting. Of those surveyed, 55 percent use RPA for general accounting (Figure 1).

### Extent of RPA in General Accounting

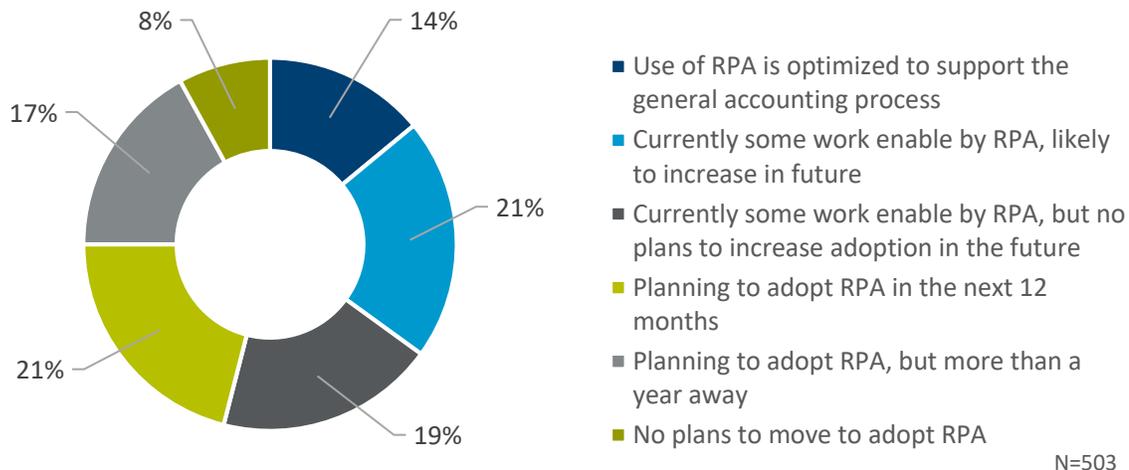


Figure 1

The adoption of RPA is even more pronounced in financial reporting: 65 percent of those surveyed use RPA, and nearly one out of three say they have optimized its use (Figure 2).

### Extent of RPA in Financial Reporting

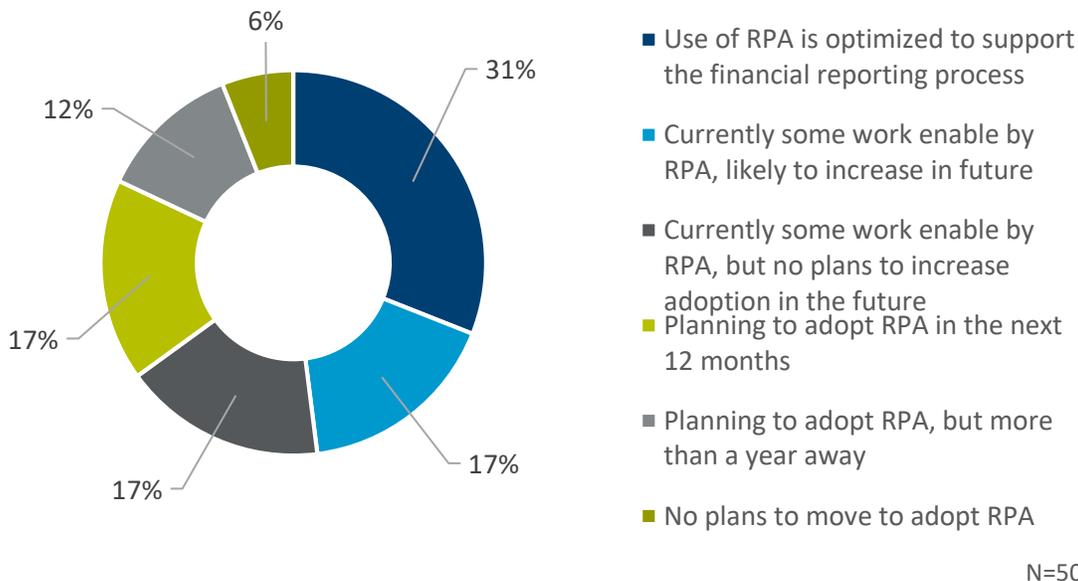


Figure 2

## ACCOUNTS PAYABLE

It's no secret that accounts payable (AP) involves many repetitive and time-consuming tasks, which makes it another strong candidate for process automation. Robots can perform tasks such as scanning invoice data, matching invoices and purchase orders, maintaining vendor master data, and reporting and analyzing AP data with greater speed and accuracy than most humans. APQC's Open Standards Benchmarking® [Accounts Payable Assessment](#) reveals widespread use of RPA for AP. Of those surveyed, 59 percent already use RPA for AP and 39 percent are planning to adopt. Only 2 percent do not plan to adopt RPA for AP (Figure 3).

*A lot of organizations started their RPA work specifically in finance...AP in particular is a really ripe area that a lot of organizations look at for an early start to automation.*

—Holly Lyke-Ho-Gland  
Principal Research Lead, Process and Performance Management, APQC

*Extent of RPA in Accounts Payable*

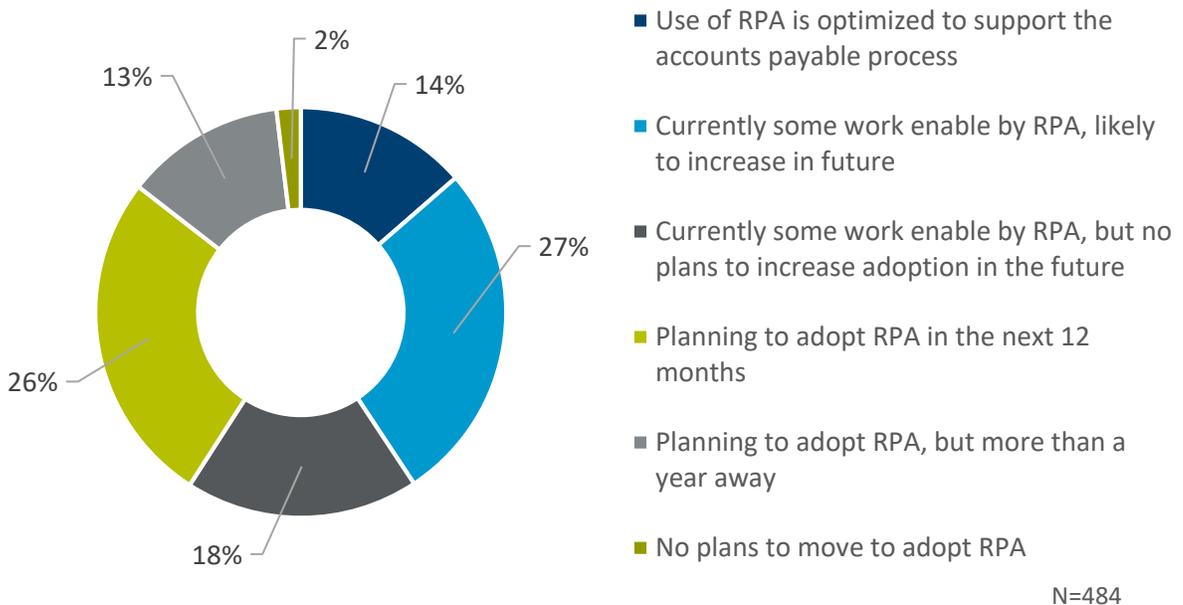


Figure 3

APQC's [Blueprint for Success: Accounts Payable](#) finds that organizations that use RPA for AP report significantly higher efficiency and productivity levels.

The marketplace for off-the-shelf AP RPA solutions is rapidly expanding, but organizations have also successfully implemented this technology with in-house resources. For example, logistics

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company [BDP](#) used online courses to train a member of the finance team on PEGA, a no-code automation platform the company already owned. This employee then used PEGA to tie cash to internal reports and automatically apply it to processes, which saved 6,000 employee hours annually. This project helped BDP's finance team make the case for additional investment in RPA and the establishment of a digital center of excellence to further scale its use of RPA.

## ACCOUNTS RECEIVABLE

Accounts receivable (AR) is another popular area for RPA. RPA can streamline and expedite many AR processes such as order data validation, invoice distribution, customer credit monitoring, processing payments, matching payments, and following up on aging receivables.

This can generate significant bottom-line benefits in a short time frame. For example, [a large commercial bank](#) implemented RPA for booking delinquent payments and invoice entry/tracking. The organization engaged a vendor for a ten-week pilot, after which an internal employee became the company's initial RPA team member. The project generated a 150 percent return on investment and also served as a launchpad to expand RPA to other processes.

## BENEFITS AND CHALLENGES

The most obvious, tangible benefit of RPA is cost savings. When APQC asked organizations about what drives their process automation efforts, [56 percent](#) said cost savings. Comparatively, all other benefits were cited by 35 percent of respondents or fewer. However, finance teams should also consider less-tangible benefits such as:

- ♦ improving quality by reducing manual entry and eliminating human error,
- ♦ securing competitive advantage through faster cycle times and improved customer centricity,
- ♦ centralizing and re-shoring processes,
- ♦ enhancing the employee experience by freeing up time for more interesting work and professional development, and
- ♦ scalability.

Over-focusing on cost savings may prevent organizations from seeing the full potential and downstream applications of RPA. "A lot of companies that are adopting RPA only think about it on the desktop," said [Clay Richardson](#) of Digital FastForward. "So, they buy a robotics platform that can do the desktop robotic automation, but the platform they purchased doesn't allow for things like case management and orchestration on the back end, so they have to go buy a separate tool for that."

The biggest challenge with RPA implementation—cited by 48 percent of respondents in APQC's [Exploring Process Automation](#) research—is the lack of a process foundation. Organizations that dive into automation without process pre-work will only automate pre-existing inefficiencies.

Finance teams should work with their organization's process management teams to ensure the organization has a solid process foundation and prepare processes for digital execution.

Change management is another important challenge for RPA. Employee often resist RPA because they think robots will "steal their jobs." Finance leaders must be direct and transparent about what RPA really means for individual employees. Take time to understand employees' concerns about RPA and reassure them that headcount reduction is not a project goal. The aim of RPA should not be to eliminate jobs, but rather to eliminate non-value-added tasks so employees can focus on more strategic and creative work.

Finance teams should partner with HR to create proactive plans for displaced employees and/or to reallocate FTE hours. HR can help pinpoint current and future competency needs and upskill/reskill employees accordingly. APQC's [research](#) suggests that partnering with HR can be a competitive advantage: Only 10 percent of organizations currently include HR on their RPA implementation teams, but HR has the largest impact on RPA project satisfaction compared to all other stakeholders (including process management, IT, and the executive team).

*The moment you start automating processes, the question arises: How are you changing your service catalog, and how are you upskilling your people so they can provide high-value services?*

—Tilak Banerjee  
Director, Dell-EMC

## IMPLICATIONS AND KEY TAKEAWAYS

RPA is an especially promising technology for finance functions. RPA can be implemented quickly and without many alterations to the underlying technology infrastructure, and it has a track record of quickly delivering significant ROI. Most organizations are already using RPA in the finance function, and those that do not plan to adopt this technology risk losing competitive advantage.

However, RPA is not a silver bullet. Finance teams that implement RPA without understanding their processes may end up automating inefficiencies. Implementing RPA without careful change management is another common misstep that often leads to frustrations for leaders and line employees alike. For RPA implementation best practices, see [Make Success Automatic: Best Practices in Robotic Process Automation](#).

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