Harness RPA To Optimize Customer Outcomes

Enterprise RPA Improves Employee Engagement And Boosts Your Bottom Line

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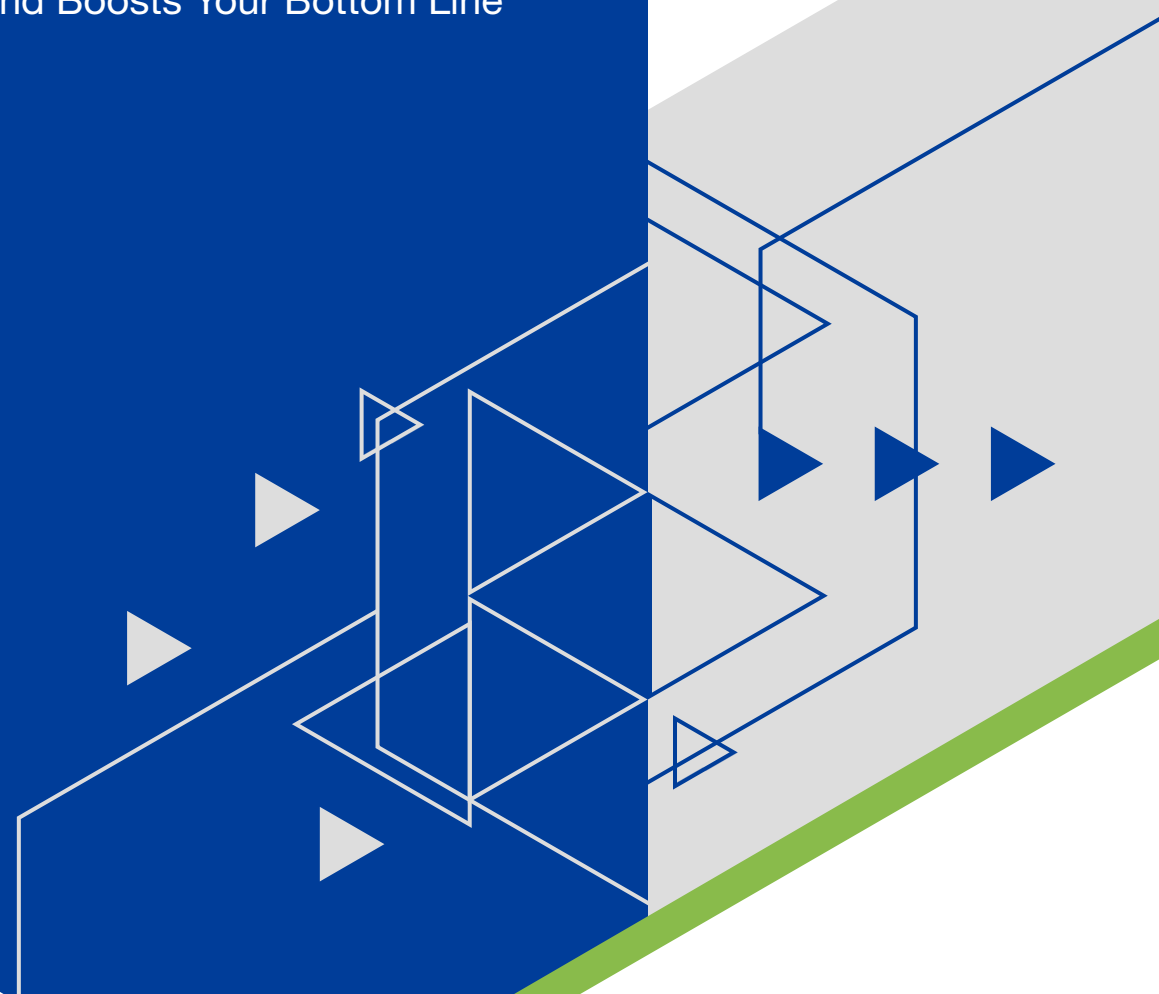
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Executive Summary

Robotic process automation (RPA) has grown into a prominent current in the forces of automation that pervade enterprises today. Forrester estimates that the adoption of RPA software will grow to $2.9 billion by 2021.[1]

As they seek the advantages offered by RPA, firms grapple with finding relevant use cases and selecting the right platforms. Additionally, concern and confusion about the impact on the workforce continue to spread, and challenges around implementing across diverse processes, systems, and operating models hinder progress.

In September 2018, UiPath commissioned Forrester Consulting to evaluate the maturity of the robotic process automation market. To explore this topic, Forrester conducted an online survey with 100 respondents at the manager level and above who make decisions about RPA. We found that RPA has the potential to transform jobs positively, improve employee experience, and boost customer outcomes. However, a number of operating model challenges limit progress and hold back adoption. These challenges are ultimately worth overcoming, as RPA has proven to have measurable impact on the bottom line. Our study yielded three key findings:

KEY FINDINGS

› **RPA improves employee experience and elevates customer outcomes.** RPA drives greater employee engagement by removing repetitive manual tasks. Seventy percent of firms say that employees have saved time and focused their attention on more strategic tasks because of RPA. Removing mundane tasks has unlocked employees' creative capacities, which has improved job satisfaction and fulfillment, in turn leading to improved customer service (57%).

› **Operating model challenges and skill shortages limit RPA application.** Ninety-three percent of firms face issues with understanding their RPA architecture and deployment options — an indication that firms struggle to scale their RPA solutions. A further 92% say a lack of governance will have a detrimental impact on current operating models, and 90% report that they lack trained resources to design, implement, support, and upgrade RPA technology. Technical issues and information security concerns also hold firms back from exploiting the full potential of RPA.

› **RPA has a measurable impact on the bottom line.** Challenges to RPA adoption are worth overcoming, given the clear business impact already seen by firms. Reduced costs and errors, increased efficiency through reduced human hours, and improved employee engagement are just the start. RPA also brings with it a wealth of new jobs and creates the space for employees to contribute strategically and creatively to enterprise goals.

RPA adoption will grow to $2.9 billion by 2021.

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Robotic Process Automation Picks Up Steam — And Grows In Maturity

"Robots will take over your jobs because everything you can do, they can do better and faster."

"Are you concerned about your job security? You should be."

Circulating headlines like these drive fear about the emerging robot economy. The adoption of robotic process automation — software robots that execute processes in the same way a worker does — will grow to $2.9 billion by 2021.[2] Forty-one percent of organizations we surveyed report that RPA continues to be a strategic priority for them (see Figure 1).

But headcount reduction is not the primary focus for RPA. For most surveyed, it's driving employee engagement. That's because RPA:

› **Releases employees from mundane tasks and unlocks creativity.** Because RPA picks up the mundane, repetitive tasks, employees can focus their attention and efforts on more strategic tasks (70%) (See Figure 2). Employees know precisely where bottlenecks occur. Focusing on strategic tasks can rekindle their creative capacities, which can easily be stifled by performing repetitive tasks consistently.

› **Improves employee satisfaction and retention.** When implementing RPA solutions, organizations create a chain effect. Employees use more intellectual reasoning and provide better customer service (57%), are more fulfilled and satisfied with their jobs and become more engaged (57%), and end up staying at the company longer (25%) (see Figure 3).

› **Creates contingent work.** Even though *some* jobs will be lost to automation, RPA will create new jobs. Lower-skilled workers can gain technical and vocational skills to work as robot maintenance technicians. Higher-skilled workers can refine their programming skills to participate in extended software ecosystems for both physical and software robots.[3]

› **Improves customer service delivery and experience.** Ultimately, happy employees lead to happy customers. When employees feel as if they can get their work done with the right tools, while having a strong personal connection to their work, they serve customers faster, more effectively, and with a better attitude.[4] Close to 70% of companies agree that RPA has removed some or all mundane tasks from employees' workloads, allowing them to better focus on customers.

Figure 1

Chief Drivers Of RPA Initiatives
(Select one)

- ■ It is a strategic priority for the enterprise, i.e., driven by an automation center or COE
- ■ It is part of an IT initiative
- ■ It is driven by a line of business, e.g., insurance claims or manufacturing
- ■ It is driven by a corporate function, e.g., finance and accounting or HR
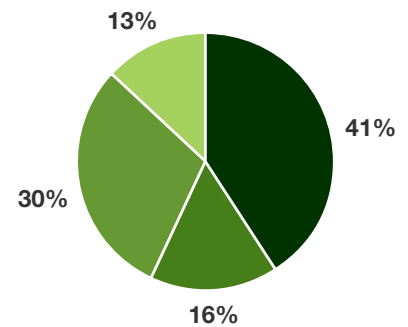
13%

41%

30%

16%

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

Figure 2

"What part of the overall employee engagement has RPA improved?"
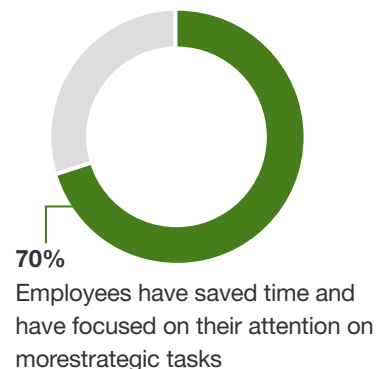
70%
Employees have saved time and have focused on their attention on morestrategic tasks

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

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Figure 3

"When your organization implemented RPA, what benefits did the technology actually have on your employees?"

71% Reduction in manual efforts

57% Better customer service

57% Better employee engagement

25% Reduced churn

"Has RPA removed significant mundane work/tasks from employees, allowing for better engagement with their work and customers?"

16%
Yes, it has removed all mundane tasks and enabled employees to focus better on their work/customers

34%
Yes, it has removed mundane tasks, but it hasn't enabled employees to focus better on their work/customers

50%
Yes, it has removed some mundane tasks and enabled employees to focus better on their work/customers

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018
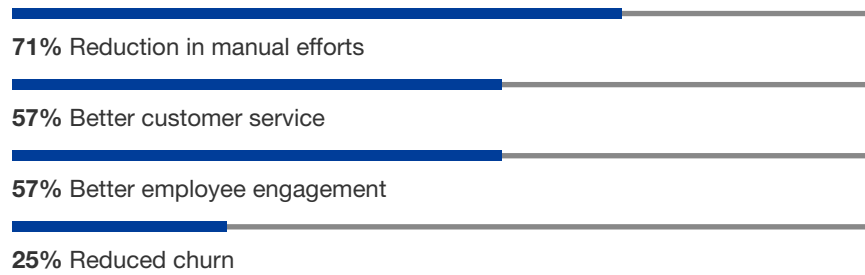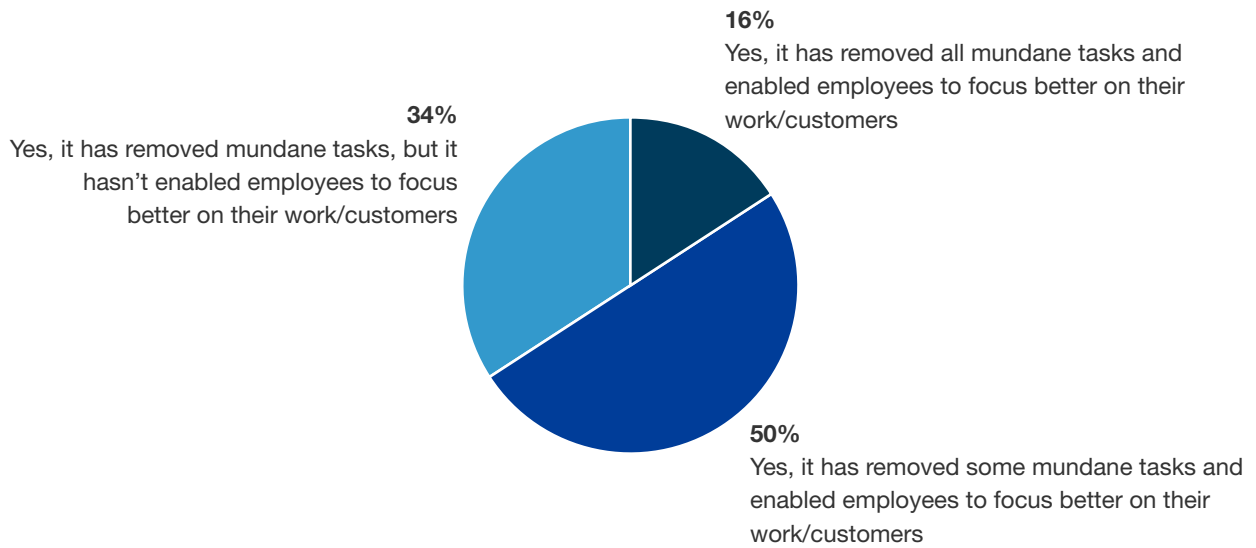
Operating Model Issues: Scalability, Security, And Governance

One goal of RPA is to help organizations transition to an automation-enabled operating model, one that incorporates growing intelligence. But organizations must overcome several challenges first. Efficiency of robot deployment, security, ability to scale, and proper governance will be critical.
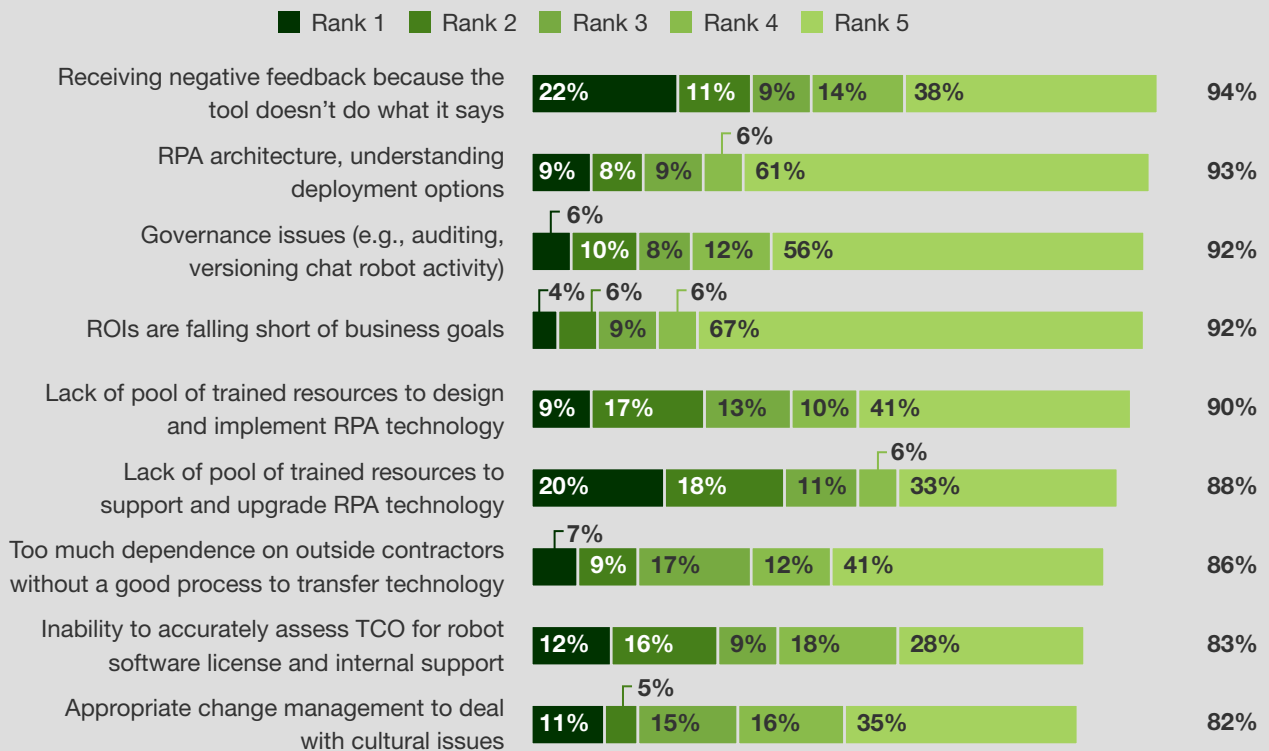
The survey revealed that firms are struggling to operationalize RPA because of the following areas (see Figure 4):

› **Deployment.** RPA architecture and improper deployment are a concern for organizations. Rapid deployments have led to issues of robot maintenance, high infrastructure costs, lack of control, and idle digital workers. Ninety-three percent face issues with understanding their RPA architecture and deployment options — an indication that firms cannot scale their RPA solutions.

RPA success will be determined by the efficiency of robot deployment, security, ability to scale, and proper governance. However, firms are struggling across these areas.

Figure 4

"What are the top risks or challenges you perceive [with RPA]?" (Rank top five)

■ Rank 1　■ Rank 2　■ Rank 3　■ Rank 4　■ Rank 5

Challenge	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total
Receiving negative feedback because the tool doesn't do what it says	22%	11%	9%	14%	38%	94%
RPA architecture, understanding deployment options	9%	8%	9%	6%	61%	93%
Governance issues (e.g., auditing, versioning chat robot activity)	6%	10%	8%	12%	56%	92%
ROIs are falling short of business goals	4%	6%	6%	9%	67%	92%
Lack of pool of trained resources to design and implement RPA technology	9%	17%	13%	10%	41%	90%
Lack of pool of trained resources to support and upgrade RPA technology	20%	18%	11%	6%	33%	88%
Too much dependence on outside contractors without a good process to transfer technology	7%	9%	17%	12%	41%	86%
Inability to accurately assess TCO for robot software license and internal support	12%	16%	9%	18%	28%	83%
Appropriate change management to deal with cultural issues	11%	5%	15%	16%	35%	82%

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines

Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

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› **Governance.** Many robot environments do not have clearly defined roles and responsibilities. An upgrade to a core system, for example, may disrupt robot performance, meaning critical systems development life cycle (SDLC) processes are not linked to the automation operating model. Critical process data may be lost post automation, or there may be an inability to explain what a robot is doing to legal and compliance. Ninety-two percent of respondents indicate that a lack of governance will have a detrimental impact on current operating models.

› **Expertise.** Ninety percent of survey respondents report that they lack trained resources to design, implement, support, and upgrade RPA technology. Employees with RPA experience are in high demand among businesses. The service partner community is overwhelmed by demand in the market.

DESIGN, SECURITY, AND REGULATORY COMPLIANCE HINDER IMPLEMENTATION OF RPA SOLUTIONS
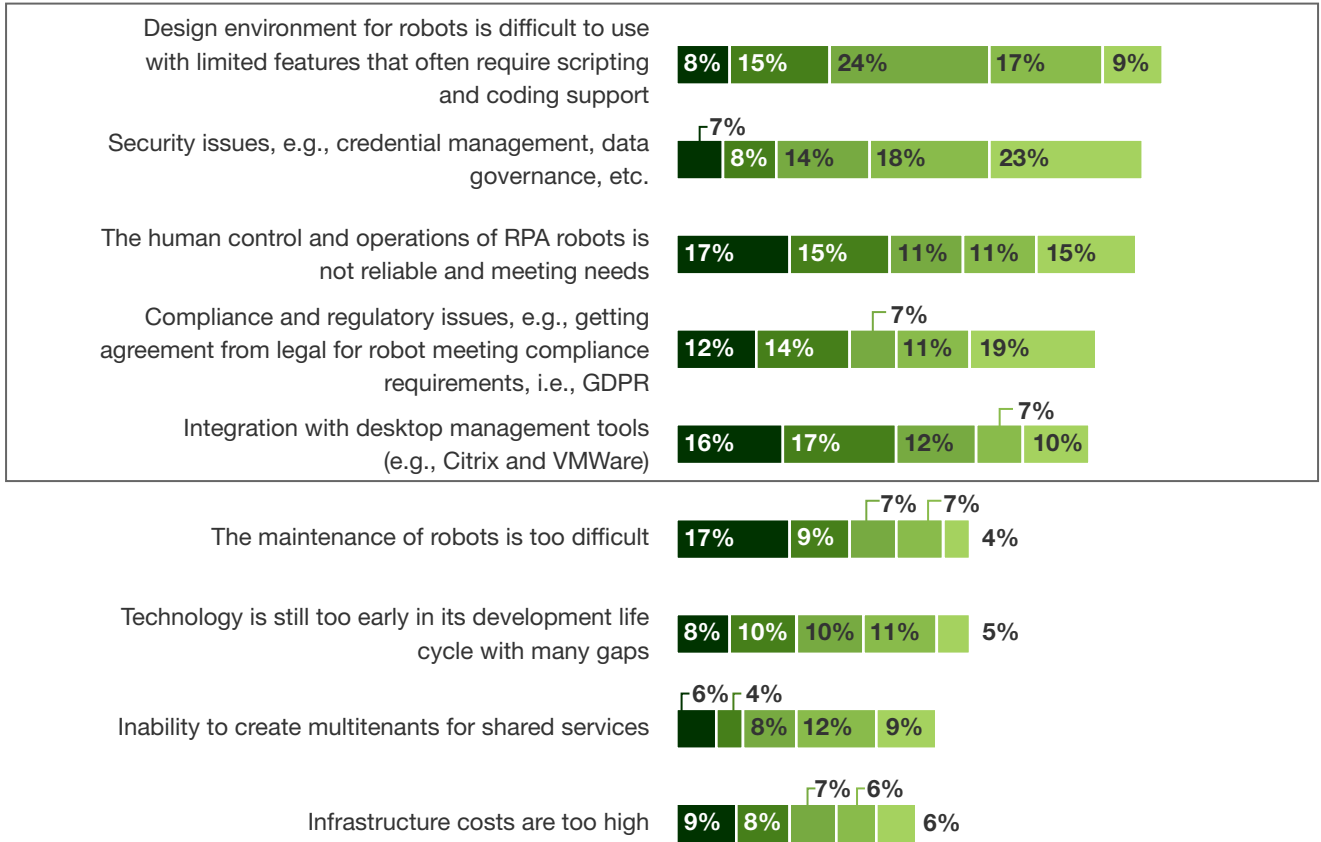
The biggest selling points of RPA are that it's easy to implement and does not require core system changes or API-level integration. However, businesses face numerous deployment and technical issues like (see Figure 5):

› **Complex design processes.** Designing a robot is easier than redesigning a process with a complex process tool like business process management (BPM). However, robot deign can and must be improved to allow design and development to occur in the business, the preferred operating model long term.

› **Technical ambiguity.** Implementers and supporters of RPA must answer upfront questions around the implementation of the software like, how will the network of applications be supported, and who will control and monitor the robots — business or technical leaders? Not answering these questions in the planning phase is the likely cause of many hurdles faced by firms once they begin implementation. RPA is not and should not be considered a magic bullet.

› **Growing complexity of security.** RPA builds robots that use human credentials. These robots operate with core systems and with the most trusted applications a company has. Not surprisingly, when it comes to the platform, 70% of firms say that security is a top challenge, which is why it's critical to meet credential management and data privacy requirements.

Figure 5

"Which technical and deployment issues in implementing RPA is your organization struggling with?" (Rank top five)

■ Rank 1   ■ Rank 2   ■ Rank 3   ■ Rank 4   ■ Rank 5

Design environment for robots is difficult to use with limited features that often require scripting and coding support
8% | 15% | 24% | 17% | 9%

Security issues, e.g., credential management, data governance, etc.
7% | 8% | 14% | 18% | 23%

The human control and operations of RPA robots is not reliable and meeting needs
17% | 15% | 11% | 11% | 15%

Compliance and regulatory issues, e.g., getting agreement from legal for robot meeting compliance requirements, i.e., GDPR
12% | 14% | 7% | 11% | 19%

Integration with desktop management tools (e.g., Citrix and VMWare)
16% | 17% | 12% | 7% | 10%

The maintenance of robots is too difficult
17% | 9% | 7% | 7% | 4%

Technology is still too early in its development life cycle with many gaps
8% | 10% | 10% | 11% | 5%

Inability to create multitenants for shared services
6% | 4% | 8% | 12% | 9%

Infrastructure costs are too high
9% | 8% | 7% | 6% | 6%

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018
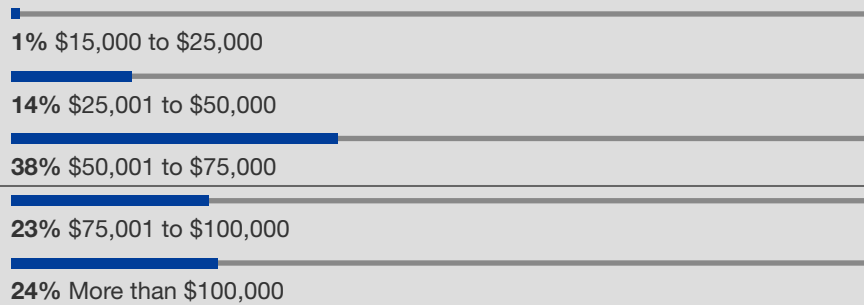
Ultimately, RPA Boosts The Bottom Line

A bot-led digital workforce can work 24 hours a day, seven days week, and requires very limited oversight. Investments in RPA are also growing. Over the next 12 to 24 months, companies plan to implement or upgrade their implementation of robots to drive efficiency, improve desktop analytics, support chat robots for internal or external purposes, and make sense of unstructured data. From a bottom-line perspective, the economics favor automation (see Figure 6):

› **Building costs.** Forrester estimates that, by 2021, there will be over 4 million robots doing office, administrative, sales, and related tasks.[5] So how much does it cost to build a bot? Forty-seven percent of decision makers say it costs them at least $75,000 to build a bot, and 38% say it costs between $50,000 and $75,000.

› **Maintenance costs.** Eighty-four percent of firms say they use one developer to create eight to nine robots. That's a lot of robots running around, especially if a firm needs to grow that number by double, triple, or even ten times. Costs can be substantial for robot maintenance. Thirty-one percent of firms also say the cost of maintaining a single robot is at least $15,000 per annum.
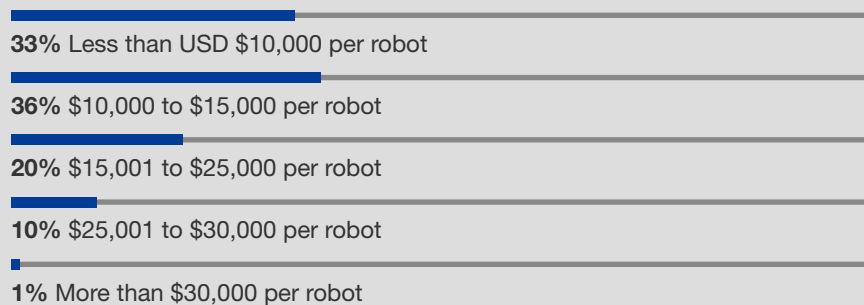
47% of organizations say it costs at least $75,000 dollars to build a bot, including design, coding, licensing and implementation costs.

Figure 6

"Using your best estimate, how much does it cost your organization to build a robot? This includes process design, coding of bot, license cost and implementation costs."

1% $15,000 to $25,000

14% $25,001 to $50,000

38% $50,001 to $75,000

23% $75,001 to $100,000

24% More than $100,000

"What is your overall annual TCO per bot, i.e., the cost of maintaining a bot once built, ongoing license costs, infrastructure costs, and operations support (control tower monitoring and control)?"

33% Less than USD $10,000 per robot

36% $10,000 to $15,000 per robot

20% $15,001 to $25,000 per robot

10% $25,001 to $30,000 per robot
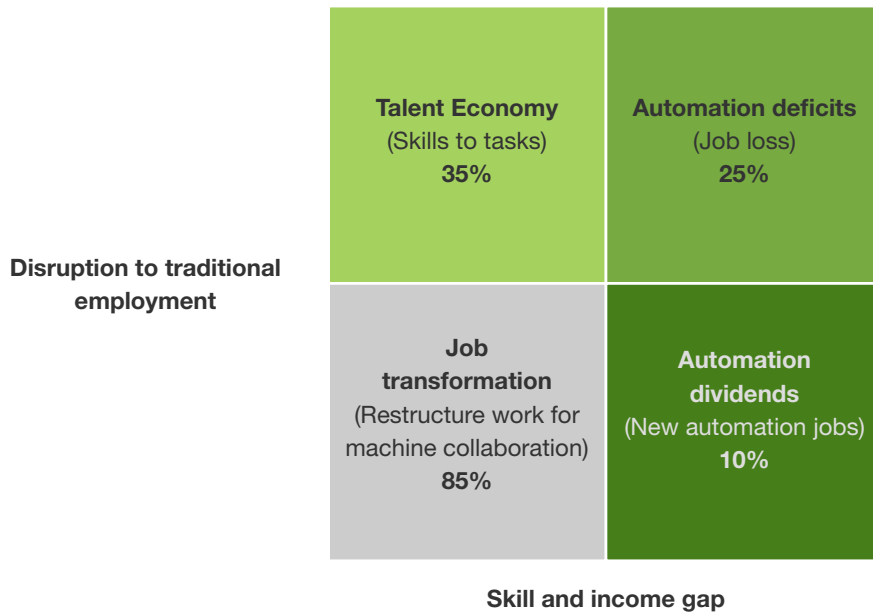
1% More than $30,000 per robot

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

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› **Offsetting human hours.** Back-office robots translate into a high number of hours saved. Sixty-one percent of firms say that one robot can offset 2.5 to 3 human hours.

  • Under pressure from automation, the traditional work environment will push today's workers into one of four categories (see Figure 7). In fact, Forrester forecasts that 14.9 million new jobs will be created in the US by 2027 ranging from engineering, design, maintenance, support, and training.

Figure 7: Enterprises Must Reimagine The Workforce

Talent Economy (Skills to tasks) **35%**	**Automation deficits** (Job loss) **25%**
Job transformation (Restructure work for machine collaboration) **85%**	**Automation dividends** (New automation jobs) **10%**

Disruption to traditional employment

Skill and income gap
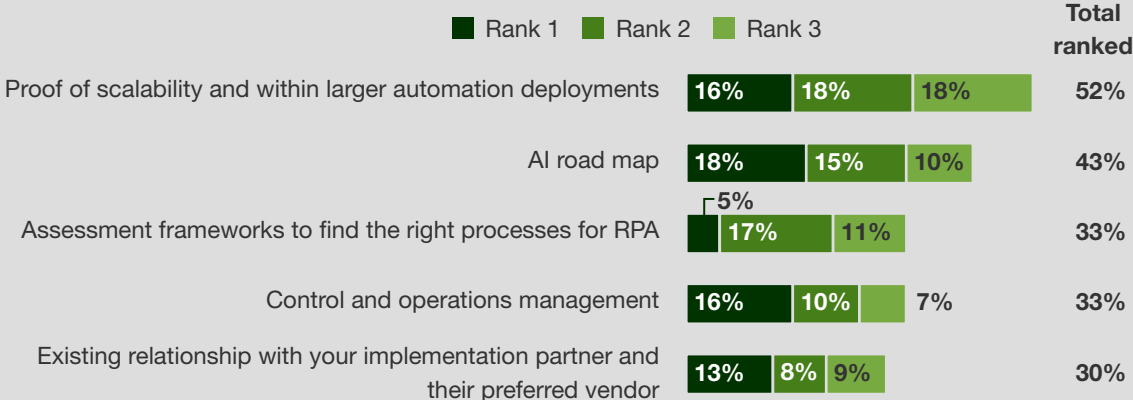
Source: Forrester Research, Inc.

Connect With Partners To Revolutionize Your Workforce With RPA

Even though automation, specifically RPA, has accelerated profoundly over the past few years, there's still a dearth of talent and expertise within organizations — and decision makers have a lot to think about. Building, designing, maintenance, and scaling are just some of the factors to consider when implementing robots. Sourcing to external partners can alleviate the pressure and improve planning and readiness. When seeking out RPA vendors, firms tell us they look for (see Figure 8):

› **Vendors with specific use cases.** Every organization will have different needs, which is why 52% of firms say they seek out vendors with proof of scalability.

› **An RPA platform that can be used for more advanced analytics.** Firms have ambitious growth projections for RPA because new artificial intelligence (AI) building blocks are driving even greater value. Forty-three percent of firms say they seek out vendors that have an AI road map.

› **Operations and control management.** RPA needs to be owned and managed to make full use of its capabilities, which requires a long-term strategic view. One in three firms say they seek out vendors that have this capability. Picking a solution provider that is right for the organization has never been more crucial.

Figure 8

"When selecting an RPA vendor, what are the primary criteria your organization looks for?" (Rank top three)

	Rank 1	Rank 2	Rank 3	Total ranked
Proof of scalability and within larger automation deployments	16%	18%	18%	52%
AI road map	18%	15%	10%	43%
Assessment frameworks to find the right processes for RPA	5%	17%	11%	33%
Control and operations management	16%	10%	7%	33%
Existing relationship with your implementation partner and their preferred vendor	13%	8%	9%	30%

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines

Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

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Key Recommendations

As RPA continues to rise in prominence, it has the potential to transform jobs positively, improve employee experience, and boost customer outcomes. However, a number of operating model challenges limit progress and hold back adoption. These challenges are ultimately worth overcoming, as RPA has proven to have measurable impact on the bottom line.

Forrester's in-depth survey of 100 RPA decision makers about the application, challenges with implementation, and impact of RPA yielded several important recommendations:

Consolidate or coordinate BPM and RPA centers of excellence (CoEs). Enterprises are rapidly building automation centers that start with RPA. The objective? Reduce risk, chaos, and proliferation of RPA tools. Many of these firms already have BPM centers of excellence. These have expertise in process assessment, critical to applying RPA in the right spot. These should not create an either/or approach but should provide a cohesive view to help businesses align a use case with the right automation.

Start centrally, but plan to federate responsibility to the business. Formalize the operating model early in the RPA journey. It's OK to tune operations in a small centralized team, but plan to spread out functions to individual business units. Develop a joint understanding between the overall business and the technology organization before automation projects get out of control. This will drive a quicker set of results and avoid a host of potential RPA issues.

Build the operating model around automation, not a specific RPA tool. The digital worker of the future will be provided with a range of technology. Forrester has identified 13 AI technology building blocks that can add intelligence to existing and new applications. In addition, you may end up with a couple of RPA tools that specialize in a process domain such as finance and accounting, contact center, or IT service management (ITSM). A few enterprises have built their CoEs too tightly around a specific RPA vendor's offering, hurting their long-term value.

Include customer experience (CX) and revenue in your hunt for operational efficiency. Cost reduction through integration of legacy apps on a processor's desktop is the typical RPA use case. All good — but RPA can both generate new revenue and improve CX. Debt collection and a reduced cycle time for an order-to-cash process are fertile improvement areas for higher revenue. CX, though, can be more dramatic. In one case, robots gathered information for an agent after receiving an account number and handled security questions, with the result of reducing an average hold time of 12 seconds that can be annoying to customers.
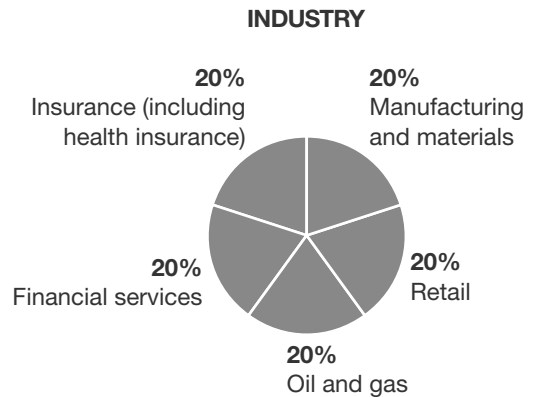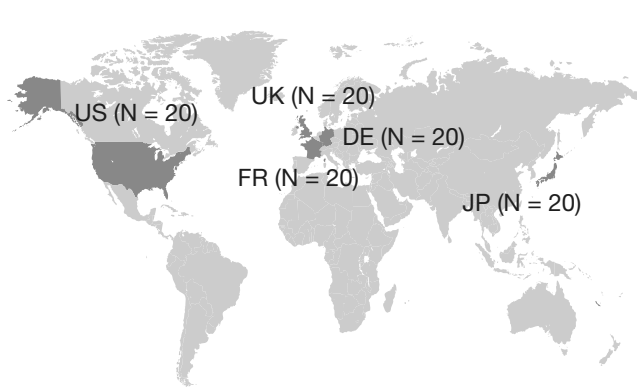
Partner with the right solution specialists. Solution providers must understand RPA and cognitive automation, and the importance of combining the two technologies, to fortify RPA tools with cognitive automation to provide an end-to-end automation solution.
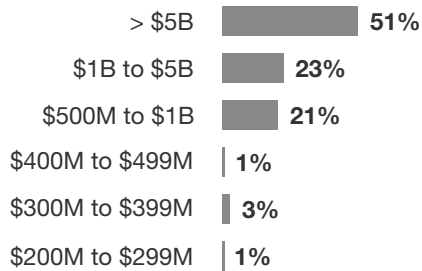
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Appendix A: Methodology

In this study, Forrester conducted an online survey of 100 financial services, insurance, retail, manufacturing, and oil and gas organizations in the US, the UK, France, Germany, and Japan to evaluate RPA adoption, challenges, and benefits. Survey participants included decision makers in operations, finance, human resources, and shared services. Questions provided to the participants asked about challenges and benefits of RPA. Respondents were offered incentives as a thank you for time spent on the survey. The study began and was completed in September 2018.
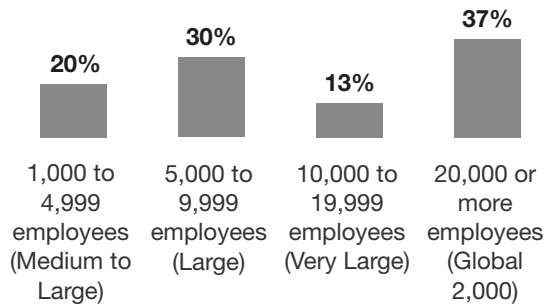
Appendix B: Demographics/Data

US (N = 20)
UK (N = 20)
DE (N = 20)
FR (N = 20)
JP (N = 20)

INDUSTRY

20%
Insurance (including health insurance)

20%
Manufacturing and materials

20%
Financial services

20%
Retail

20%
Oil and gas

COMPANY REVENUE

> $5B	**51%**
$1B to $5B	**23%**
$500M to $1B	**21%**
$400M to $499M	**1%**
$300M to $399M	**3%**
$200M to $299M	**1%**

COMPANY SIZE

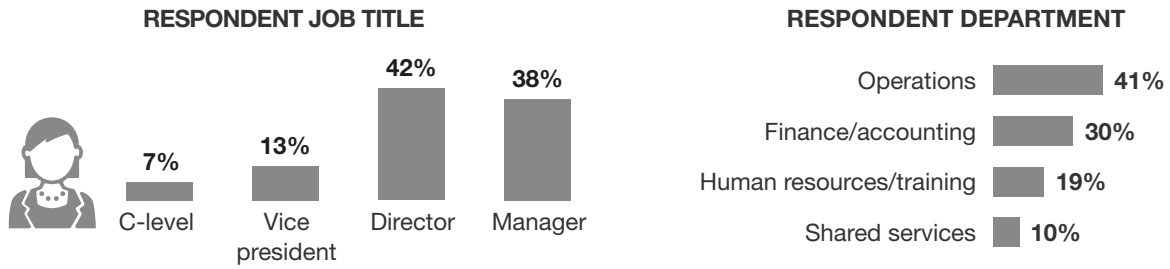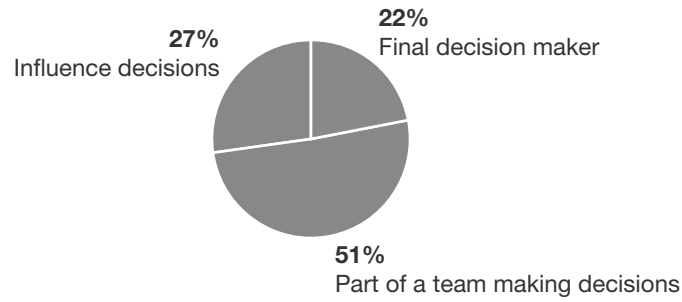| **20%**	**30%**	**13%**	**37%**
1,000 to 4,999 employees (Medium to Large)	5,000 to 9,999 employees (Large)	10,000 to 19,999 employees (Very Large)	20,000 or more employees (Global 2,000)

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines
Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

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RESPONDENT JOB TITLE

7% C-level

13% Vice president

42% Director

38% Manager

RESPONDENT DEPARTMENT

Operations 41%

Finance/accounting 30%

Human resources/training 19%

Shared services 10%

LEVEL OF RESPONSIBILITY AROUND PROCESS AUTOMATION

27% Influence decisions

22% Final decision maker

51% Part of a team making decisions

Base: 100 decision makers at the manager level and above from operations groups, shared services, finance and accounting, and other core business lines

Source: A commissioned study conducted by Forrester Consulting on behalf of UiPath, September 2018

Appendix C: Endnotes

[1] Source: "The RPA Market Will Reach $2.9 Billion By 2021", Forrester Research, Inc., February 13, 2017

[2] Ibid.

[3] Source: "The Future Of Jobs, 2027: Working Side By Side With Robots," Forrester Research, Inc., April 3, 2017.

[4] Ibid.

[5] Source: "The RPA Market Will Reach $2.9 Billion By 2021," Forrester Research, Inc., February 13, 2017.

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