Robotic Process Automation

Your catalyst for intelligent automation

Executive Summary

More than nine out of ten global IT decision-makers agree that automation is a key to addressing the emerging requirements of digital businesses, according to recent Avanade research.

Robotic Process Automation (RPA), the first automation technology to enter the marketplace, enjoys increasingly widespread adoption as more businesses recognize the value that RPA – and a virtual workforce – brings to the digital table.

Avanade research found that 19% of global IT decision-makers presently use RPA, while another 56% expect to adopt it within three years.[1] Little wonder, since RPA continues to evolve with increasingly intelligent capabilities.

This Point of View from Avanade and Blue Prism explains the benefits and challenges of RPA adoption. It describes considerations and choices in implementing RPA – and how enterprise RPA is an important enabler for intelligent automation systems that also include artificial intelligence, cognitive services and more. The result is a complete automation solution for extended and end-to-end business processes.

RPA: An integral part of the journey to intelligent automation

For many companies, robotic process automation is a crucial enabler of intelligent automation (IA) and a smarter virtual workforce.

Avanade research finds that 92% of global IT decision-makers believe that automation technologies such as RPA, along with technologies such as machine learning, cognitive services and predictive analytics, are key to addressing the emerging needs of digital businesses. Moreover, we believe that AI technologies are themselves factors in the continuing evolution of RPA.

With IA, global enterprises can create systems that automate highly repetitive business processes at scale, and then learn and evolve to support subjective decision-making about those processes. With these systems, global IT decision-makers intend to meet business objectives such as increasing productivity (73%) and reducing costs (65%).

Challenge
A global bank spent too much time and money responding to third-party audit-letter requests.

Solution
Blue Prism/Avanade RPA solution reviews applications, retrieves data, applies logic, creates responses and identifies exceptions for manual handling.

Results
- 60% of FTEs reallocated to higher-level tasks
- 40% reduction in handling time
- 100% accuracy achieved

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The benefits of RPA

RPA uses software to mimic the actions a worker would perform—but at scale.

With RPA, businesses can create virtual workforces that execute complex, high-volume processes faster, more accurately and more cost-effectively than traditional workers can. Those virtual workers interact with systems in the same ways that traditional workers do, so RPA can be implemented without the need for intricate systems integration.

RPA also integrates with AI to do much more for today's businesses. AI-aware RPA goes beyond structured data to work with unstructured data and beyond rule-based, deterministic decision-making to enable probabilistic decisions. It delivers more value to the organization by managing more sophisticated processes.

RPA also has important applications in security, compliance and data governance. For example, true enterprise-class RPA solutions offer an absolute audit trail of every step that occurs in every process. And, because robotic transactions can occur in a fraction of the time that it would take a human to do the same process, there's reduced risk for financial transactions such as credit card cancellations.

In the credit card example, the risk associated with an un-cancelled card is reduced by leaving the un-cancelled card in play for a shorter period of time.

Businesses can scale RPA as they grow and solve the challenge of rightsizing staffing levels. They can adopt RPA for a narrow set of functions and expand its use over time by integrating intelligent technologies that allow people to be re-deployed to focus on higher-value, strategic functions.

A virtual workforce can be deployed to the cloud instantly and then redeployed or scaled back in a very dynamic way when companies don't need it. Companies can also address sudden changes in demand more smoothly and flexibly, and with less risk. Businesses can use RPA as they would their outsourcing resources, but RPA—unlike outsourcers—ensures that company-specific expertise is always available when needed.

For example, in the case of a multinational insurance company, RPA can work in partnership with human experts to help quickly process insurance claims. The insurer can use RPA to pick up the claim via email and then hand it over to Microsoft Azure Cognitive Services for natural language processing, which interprets the claim and recommends how it should be handled. Once the analysis is done, the result can go back to RPA (the virtual worker), which automatically creates a new case in the existing support management tool. The customer can then receive a response with the case ID, completing the process.
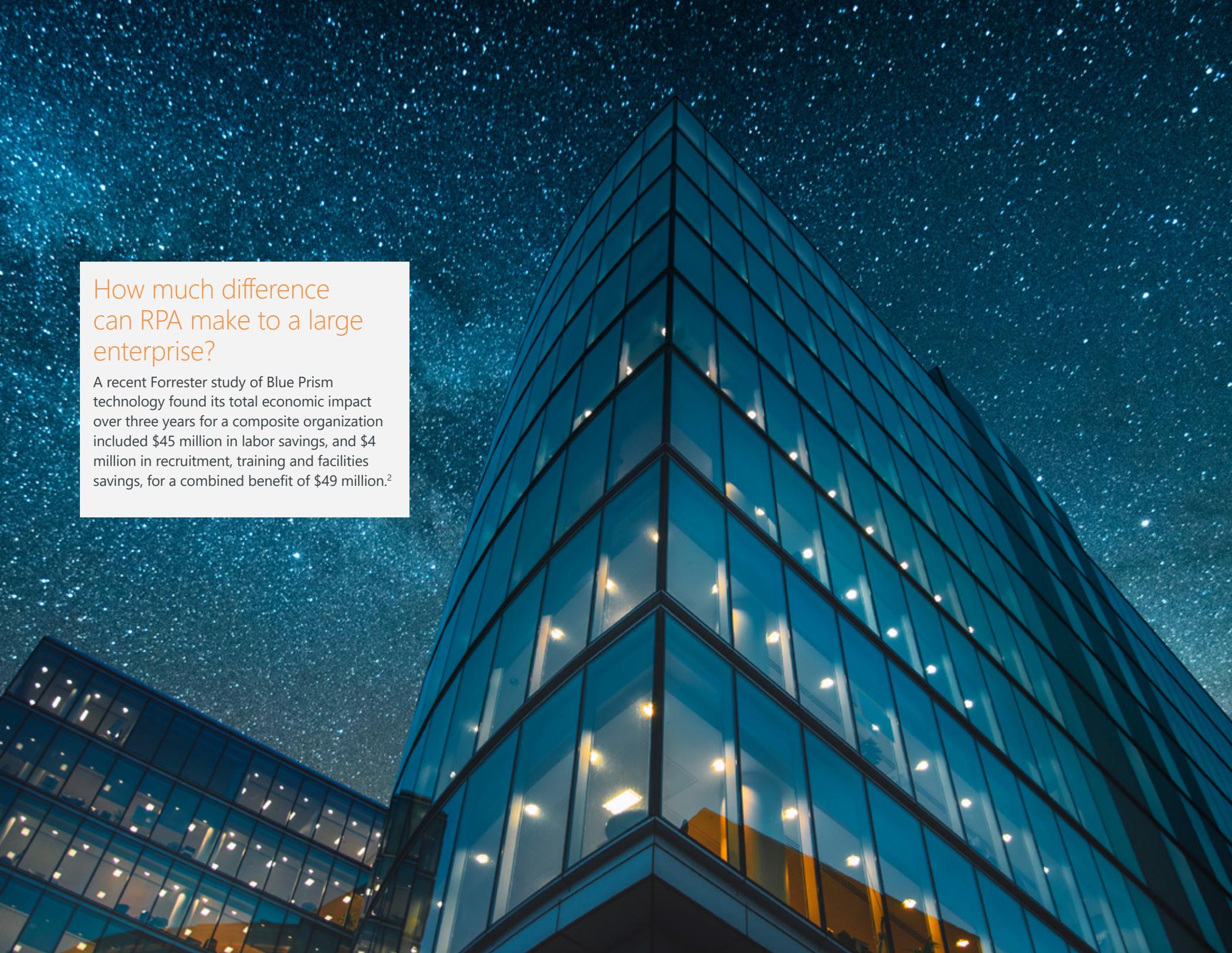
Challenge

Agents at a global telecom had to manually index more than 150 orders per day across multiple applications.

Solution

An RPA solution that works across SharePoint, SAP and Excel with all business rules and exceptions handled automatically.

Results

- 95% reduction in order processing;
- 100% accuracy

How much difference can RPA make to a large enterprise?

A recent Forrester study of Blue Prism technology found its total economic impact over three years for a composite organization included $45 million in labor savings, and $4 million in recruitment, training and facilities savings, for a combined benefit of $49 million.[2]

Allocating resources more
efficiently at lower cost

Because of such labor-saving outcomes, some observers express concern that RPA will lead companies to reduce headcount, putting people out of work.

However, RPA isn't necessarily about reducing headcount. Rather, it's about allocating resources better and at lower cost – freeing people to do the higher-value strategizing and problem-solving that they do best.

Less often mentioned, but potentially more significant, is RPA's role in talent augmentation: the ability of companies to rescale or reallocate their talent to contribute to the enterprise in ways they previously couldn't. Examples include the development of new products and services, better customer service, and greater sales and marketing reach. Because talent augmentation increases the value of each employee, it also increases the return on recruitment and onboarding processes. Beyond that, it spurs the realization of the C-suite agenda, including faster time to market, enhanced customer experiences, operational efficiency, risk mitigation and more.

Challenge
A global pharmaceuticals company wanted to increase the productivity and efficiency of its plant operations.

Solution
An RPA solution that executes and validates global operations updates to the SAP system.

Results
- 50% reduction in time to execute test cases
- Faster deployment of SAP updates
- Savings equal to one-to-two offshore FTEs

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Key elements to consider:
RPA technology

Not all RPA technologies are the same. Some operating systems don't support the number of processes that large enterprises want to automate or don't integrate with legacy back-end systems and emerging AI technologies.

Nor is RPA standing still. Blue Prism sees RPA continuing to evolve with the addition of intelligent automation skills consisting of knowledge and insight, planning and sequencing, visual perception, problem solving, collaboration and learning. These intelligent automation skills are transforming the way organizations achieve operational agility.[3]

Companies seeking to adopt RPA should look for these capabilities:

Scalability

Some RPA technologies cap out at the maintenance and orchestration of 100 or so robots, whereas enterprises might need hundreds or thousands to fully optimize their processes. Similarly, an enterprise might need those robots to connect to several hundred systems, a qualification that many RPA technologies can't meet. RPA technology should support scalability to tens of thousands of objects in a relational database and provide mechanisms to orchestrate robots at scale.

Compliance and security

Compliance and security requirements are increasing worldwide. RPA technology should support these requirements, such as encryption, robot credentials and full audit trails of RPA activity that include robotic actions and user-initiated process changes.

Business object reuse

Business object reuse optimizes scale, increases development efficiency across the enterprise, and minimizes the need for rework. This makes RPA processes faster and easier to create and update, and more reliable to run. Business objects also enable the creation of highly visual Visio-like processes and the reuse of single objects in widely varied processes. In addition, as processes change, the single update of an applicable object can be universally applied to all related processes. RPA technology should support these aspects of business object reuse.

Integration with legacy and emerging technologies

The business processes that companies wish to automate with RPA generally rely on the platforms, applications and databases that those companies already use, including the web, Windows, mainframes, Linux ERP systems, data management systems, CRM and reporting systems. Therefore, RPA technology should be designed to integrate with them. Writing APIs is one way to create that integration—but it's time-consuming and expensive. A better way is the use of a single abstraction layer.

Cloud support

The cloud also facilitates RPA's ability to integrate new, intelligent technologies. An RPA solution should work with open cloud platforms such as Microsoft Azure, eliminating vendor lock-in and preserving an enterprise's options as new technologies are introduced.

Key elements to consider: RPA provider

Many global IT decision-makers have concerns about their ability to implement RPA. For example: do they have the necessary in-house skill sets?

To address these issues, 51% plan to turn to service providers to assist with implementation, with 11% reporting they'll use managed service providers as much as possible. What should these businesses look for in an RPA provider? Here are the most important elements to consider:

In-depth experience with RPA technology

Enterprise RPA can be hard to do right—so a business contemplating RPA needs a sophisticated, experienced systems integrator that is well-versed in the technology and that can deliver a robust, secure solution that boosts productivity and reduces costs. Look for vendors that have completed thousands of automations for hundreds of clients and can share tangible, scalable returns.

RPA solutions that support a mix of technologies

Most enterprises run on a mix of platforms and technologies that include Microsoft and others, so it's important that the RPA provider is fluent with that mix. The provider should have a proven track record with agnostic platforms, for example Azure and Azure Stack, both of which can handle workloads based on other, third-party technology providers. A provider should also have richly diverse technology partnerships that bring the "plus" aspect of RPA-plus to the table—for example, RPA integration with Azure Cognitive Services capabilities such as emotion and sentiment detection, vision and speech recognition, knowledge, search and language understanding.

Integration experience with AI technologies

That "plus" aspect represents RPA's greatest potential: RPA is a first step toward IA solutions that also include artificial intelligence, machine learning, predictive analytics, cognitive services, and more. RPA technology providers need to help enterprises see what's possible and support these broader solutions, while also having the ability to securely integrate existing and emerging technologies.

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Final considerations

A Center of Excellence (COE) is integral to RPA implementation.

The COE is a central location from which to make RPA implementation resources available to the enterprise.

Alone or with your RPA systems integrator – and in conjunction with an overall Robotic Operating Model philosophy – the COE facilitates RPA implementation success and ensures team members are all on the same page. Also, a COE ensures consistent, effective, secure, and cost-effective implementation, consistent with governance requirements.

Think about the right proof-of-value.

Perform due diligence on where RPA could have the greatest impact in the enterprise. Identify processes that can quickly deliver great ROI and demonstrate the full capabilities of RPA. A simple, high-volume process, such as submitting and processing expenses or claims, is likely to show early success. Conduct a production proof-of-value to confirm ROI, educate team members and verify the architecture's performance, scalability and reusability.

Challenge
A multinational energy services company needed proven and timely execution of financial processes to manage cash flows.

Solution
An Avanade/Blue Prism RPA solution that performs robotic reconciliation of banking movement and VAT declaration.

Results
- 30% time-savings over manual process
- Productivity up for procure-to-pay and other processes
- Business operations are more robust

Want to learn more about how intelligent automation can help your business? Contact us at www.avanade.com/en/solutions/technology-services/intelligent-automation

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About Avanade
Avanade is the leading provider of innovative digital and cloud services, business solutions and design-led experiences delivered through the power of people and the Microsoft ecosystem. Our professionals bring bold, fresh thinking combined with technology, business and industry expertise to help fuel transformation and growth for our clients and their customers. Avanade has 30,000 digitally connected people across 24 countries, bringing clients the best thinking through a collaborative culture that honors diversity and reflects the communities in which we operate. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at www.avanade.com and follow the company on LinkedIn and Twitter.

About Blue Prism
Blue Prism Robotic Process Automation (RPA) software delivers the world's most successful virtual workforce, which operates within the most demanding administrative environments to automate high-risk, manual, rules-based and repetitive tasks, and radically improves agility, efficiency, accuracy and compliance. Blue Prism provides a scalable and robust execution platform for best of breed AI and cognitive technologies and has emerged as the trusted and secure RPA platform for the digital enterprise. Blue Prism's RPA software has executed more than one billion transactions for enterprises including Aegon, BNY Mellon, Commerzbank, Nordea, IBM, ING, Maersk, Nokia, Nordea, Procter & Gamble, Raiffeisen Bank, Siemens, Westpac and Zurich. For more information about Blue Prism (AIM:PRSM), visit www.blueprism.com, and follow the company on LinkedIn and Twitter.

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