Magic Quadrant for Robotic Process Automation

7 August 2024 - ID G00800237 - 45 min read

By Arthur Villa, Saikat Ray, **and 3 more**

Robotic process automation continues to be a core software market for improving operational efficiency with tactical automation. This Magic Quadrant evaluates 13 enterprise RPA vendors to help you make the best choice for your enterprise's task automation needs.

Strategic Planning Assumption

By 2025, 90% of RPA vendors will offer generative-AI-assisted automation.

Market Definition/Description

*This document was revised on 12 August 2024. The document you are viewing is the corrected version. For more information, see the **Corrections** page on gartner.com.*

Gartner defines robotic process automation (RPA) as the software to automate tasks within business and IT processes via software scripts that emulate human interaction with the application UI. RPA enables a manual task to be recorded or programmed into a software script, which users can develop by programming, or by using the RPA platform's low-code and no-code GUIs. This script can then be deployed and executed into different runtimes. The runtime executable of the deployed script is referred to as a bot, or robot.

RPA is used across numerous business functions for tactical task automation. Business and IT users can leverage RPA to:

- **Move data in or out of application systems without human interaction (unattended automation).** Scripts are designed to replicate the actions of a human interacting with those systems or documents, which usually do not have available APIs. The goal is to automate and complete a task successfully without human intervention. Typically, unattended automation is triggered by a system and bots executed on a server.

- **Automate tasks with a human in the loop (attended automation).** RPA can extract information from systems and related documents, shaping it and preparing it for consumption by a human at the point of need. Typically, attended automation is triggered by a human and bots executed on a local device.

Must-Have Capabilities

The must-have capabilities for this market include:

- Screen scraping, with at least five of the following UI connectors: Selenium IDE, Microsoft Active Accessibility (MSAA), Microsoft UI Automation, Java Application Connector, SAP WinGUI, Windows GUI or mainframe emulators.

- Ability to record a task and convert it into a script that can be deployed.

- Support for both attended and unattended automation.

- Ability to orchestrate and administer users, scripts and the runtime, including configuration, monitoring and security.

- Support for multiple bot runtimes, such as a desktop, an on-premises server, public or private cloud, and virtual machines.

Standard Capabilities

The standard capabilities for this market include:

- Support for script development with standard programming languages or vendor-specific, low-code representations (including GUIs for citizen development).

- Native optical character recognition (OCR) and/or integration with a third-party OCR tool to capture semistructured or unstructured data.

- Intelligent document processing (IDP) features such as image capture, classifications and model training.

- Computer vision with AI-/ML-driven UI resilience models to track application UI element changes and update a bot to respond accordingly.

Optional Capabilities

The optional capabilities for this market include:

- Workflows via task mining.

- API-first automation via connectors, including HTTP/REST, SOAP and open APIs.

- A low-code user experience for building GUI front ends for automation.

- Built-in, AI-driven smart workflow development with guided navigation or chatbot-assisted features.

- Ability to help an automation center of excellence (COE) manage operations and track and report benefits.

Magic Quadrant

Figure 1: Magic Quadrant for Robotic Process Automation

CHALLENGERS / LEADERS / NICHE PLAYERS / VISIONARIES

UiPath
Automation Anywhere
Microsoft
SS&C Blue Prism
SAP
Pegasystems
Salesforce
Appian
ServiceNow
Samsung SDS
Nintex
Laiye
IBM

ABILITY TO EXECUTE

COMPLETENESS OF VISION

As of April 2024

© Gartner, Inc

Gartner

Vendor Strengths and Cautions

Appian

Appian is a Visionary in this Magic Quadrant. Its robotic process automation (RPA) product, Appian RPA, is part of the Appian Platform, which also includes business process automation (BPA), a low-code application platform (LCAP), multiexperience capabilities, intelligent document processing (IDP), process mining and decision automation.

Appian has global operations. Its customers tend to be large enterprises in the financial services, government and life sciences sectors.

Appian's RPA roadmap includes expanding low-code actions for existing drag-and-drop components in RPA Designer and improving its AI to detect changes in the UI and launch remediation actions.

Strengths

- **Pricing:** Appian offers simple per-user product bundles that include access to more RPA bots and complementary automation capabilities like LCAP, process mining and IDP. Appian's Premium package includes unlimited RPA bots, which can be a great value for customers running a high number of bots. Appian has also launched a free, multitenant Appian Community Edition to expand access to more users.

- **Vertical strategy:** Appian has released an on-premises bot orchestrator. This feature is a key requirement for customers in verticals with high data security requirements such as government, financial services and manufacturing.

- **Innovation:** Appian has a dedicated engineering innovation hub that focuses on RPA. The innovation hub has developed RPA migration tools and AutoScale for process orchestration, which adjusts processing capacity in real time to match workload demands.

Cautions

- **Composability:** Appian bundles RPA into its larger platform and does not offer out-of-the-box connectors for third-party BPA, low-code or IDP tools. Appian Cloud operates exclusively on Amazon Web Services (AWS), while only offering general web service connectors to other cloud platforms. Due to this, Appian provides limited flexibility to customers that wish to integrate Appian with their existing BPA, low-code or IDP tools.

- **Visibility:** Appian has relatively low engagement on social channels, and a low volume of searches on gartner.com compared to other vendors in this Magic Quadrant. Despite its investment in marketing and education to attract new customers, Gartner rarely receives inquiries about Appian RPA, unless the client is already using the Appian Platform.

- **Automation design and development:** Appian's multideveloper environment is not as conducive to collaboration when compared to its competitors. Appian's bundling of RPA inside the larger platform can drive developers to use Appian's native DevOps tools or store different parts of a robotic process as subtasks. Developers might find this different from their existing DevOps processes, requiring additional training and adjustments on how multiple developers work together to build in Appian.

Automation Anywhere

Automation Anywhere is a Leader in this Magic Quadrant. Its RPA product, the Automation Success Platform, includes RPA, API capabilities, process orchestration, a digital assistant (Automation Co-Pilot), AI and machine learning (ML) tools and analytics. Automation Anywhere also offers add-ons such as task mining, a center of excellence (COE) manager, document automation and marketplace integration (in the form of Bot Store).

Automation Anywhere has global operations. Its customer base includes large enterprises and small and midsize businesses (SMBs).

Automation Anywhere's RPA roadmap includes expanding the use of AI in IDP and enhancing generative AI (GenAI) capabilities, such as translating results from process discovery to generating logical actions and API calls.

Strengths

- **Innovation:** Automation Anywhere has a reputation for developing innovative features, including strengthening governance with enforcement of code analysis, API tasks for full cloud-based integration and Automation Copilot for Automators, which provides natural language development of automations.

- **AI strategy:** Automation Anywhere is clearly focused on driving an AI-enabled RPA future. It is investing heavily in GenAI to enhance its IDP and prompt-based automation development capabilities, and is building partnerships with leading AI vendors like Amazon, Google and Microsoft. Automation Anywhere also plans to hire more AI experts and release an AI development studio.

- **Customer success:** Automation Anywhere excels at gathering feedback from its customers and helping them to solve complex automation challenges. Automation Anywhere has created programs like Voice of Customer, Customer Advisory Boards, Key Account Program, Automation Anywhere University and the Pathfinder Program to help customers get more value from its platform.

Cautions

- **Pricing:** Automation Anywhere offers a base package and an enterprise package, the latter is at a higher price compared to competing offerings. Automation Anywhere claims this package is for customers with greater scale or maturity. Both packages include the

products that customers need to get started with RPA, but some features — such as COE Manager — are not included in either package.

- **Geographic strategy:** Automation Anywhere's global footprint has decreased over the last few years in Asia/Pacific and parts of Europe, and the organization has no near-term plans to expand into new regions. Automation Anywhere has pivoted toward a partner-first business model in certain regions, and potential customers may prefer vendors with greater local presence.

- **Visibility:** Some of the software industry's largest providers have entered the RPA market in the last several years. The reach, spend and customer engagement from these newer competitors, combined with those from tenured RPA providers, have overshadowed Automation Anywhere's market awareness efforts. If this trend continues, it may affect Automation Anywhere's customer adoption and partner support.

IBM

IBM is a Niche Player in this Magic Quadrant. Its RPA product, IBM Robotic Process Automation, is part of its broader Cloud Pak for Automation. It offers RPA along with process mining, API orchestration, digital assistants, IDP and AI capabilities to help customers discover, build and apply automation solutions.

IBM has geographically distributed operations. Its customers range from small to large enterprises.

IBM did not respond to requests for supplemental information. Gartner's analysis is therefore based on other credible sources.

Strengths

- **Global presence:** IBM is a globally recognized company with offices and partners in every region. Its vast geographic reach provides customers with access to local resources for sales, support and implementation. IBM has demonstrated the ability to deliver its solutions on a global scale via its sales channels.

- **Product execution:** IBM's RPA product provides good screen-scraping capabilities, which serve as the product's foundation. Its task-mining capabilities are especially strong and serve as a valuable add-on to its RPA platform. The RPA product's integration with IBM Watson provides AI-augmented capabilities for end users.

- **Customer support:** IBM's experienced global support team provides a positive customer experience. It has created a joint team of business development executives and technical leaders to guide customers through all stages of their automation journeys.

Cautions

- **Visibility:** Gartner clients rarely mention IBM in inquiries about RPA. Despite IBM's attempts to attract new customers with a low-cost pricing strategy for its RPA product, it is still not well-known. IBM RPA primarily appeals to organizations that extensively use IBM products and want to add automation and integration capabilities via IBM Cloud Paks.

- **RPA features:** IBM RPA lacks several features that are commonly offered by its competitors. While it supports Citrix and other VMs via its vision drivers, it does not offer connectors to automate applications running on Citrix or machines based on Remote Desktop Protocol (RDP). IBM RPA does not enable remote developers to work on the same script in parallel, nor does it offer a web- or mobile-based development studio for RPA script development.

- **Marketing strategy:** IBM's RPA division targets large enterprises with its marketing. Before IBM acquired its RPA capabilities, the acquired vendor (WDG Automation) focused on selling RPA to SMBs. Existing IBM customers may need to verify if its RPA offering still fits into their long-term roadmap for automation development.

Laiye

Laiye is a Niche Player in this Magic Quadrant. Its RPA product, Laiye RPA, includes Automation Creator as the core module for RPA development. The product is well-suited for use with diverse OSs, as it can automate in Windows, Linux and macOS environments.

Laiye's operations are mainly in China and Southeast Asia. Its customers are mostly midsize and large enterprises.

Laiye's RPA product roadmap includes automatic bot disruption healing with better self-healing for changes in UI, combining process data conversation into the control panel, and intelligent forms with enhanced capabilities to streamline data management in automation workflows.

Strengths

- **Market understanding:** Laiye introduced a new multimodal, multichannel conversational interface that provides users with numerous automation capabilities in a unified low-code platform. Within that platform, Laiye Automation Creator offers user-friendly interfaces for RPA development to both citizen developers and IT professionals. Laiye caters to its users by releasing all new products in Simplified Chinese and English.

- **Offering strategy:** Laiye's product team regularly interviews customers, and Laiye has an active community of more than 800,000 developers. Its RPA product is compatible with Linux-based OSs such as Ubuntu, Kylin and Unity Operating System, which enables Laiye to serve a broader range of customers.

- **Business model:** Laiye's Work Execution System (WES) is an integrated platform that combines automation technologies such as RPA, IDP and chatbots. Customers can purchase Laiye's RPA capabilities as stand-alone products or as part of WES. Laiye is working with partners to jointly develop utility-based and revenue-sharing pricing models.

Cautions

- **UI connectors:** Laiye does not provide UI connectors for business process automation (BPA) or low-code workflow orchestration engines such as Appian, BonitaSoft, Camunda, Flowable and Pega. It has a few direct UI connectors for commonly used applications like Microsoft 365, Oracle, Salesforce and SAP, but it lacks other UI connectors that customers may need.

- **Product features:** Laiye does not support some regulatory compliance protocols for its bots. It only supports the General Data Protection Regulation (GDPR), SOC 1/2/3, and ISO-27001, which limits its appeal for some organizations. Laiye does not integrate with third-party IDP tools, and it does not natively offer any tools for planning automation projects.

- **Geographic strategy:** Laiye has a limited global footprint compared to other vendors in this Magic Quadrant. Laiye mainly focuses on China and Southeast Asia and has a limited presence outside of China, as indicated by its small number of RPA-related staff, net new customers, reseller partners and delivery partners in other regions. Customers outside of China and Southeast Asia may find their coverage limiting.

Microsoft

Microsoft is a Leader in this Magic Quadrant. Its RPA product, Power Automate, is built on Azure and enables cloud-first, API-first and desktop-based automation. Power Automate

provides RPA with API integration and orchestration, IDP, task and process mining, optical character recognition (OCR), and AI.

Microsoft's operations are geographically distributed. Its customer base includes large enterprises and SMBs.

Microsoft's RPA roadmap includes creating reusable UI element collectors as components in the Power Automate designer studio, adding more cloud connectors in the desktop flow designer, and introducing picture-in-picture execution for attended automation as a digital assistant on a user's desktop.

Strengths

- **Visibility:** Microsoft is the second-most frequently discussed RPA vendor in Gartner client inquiries, and the fastest-growing vendor in terms of RPA revenues from Gartner's market share research. Customer interest and adoption of Power Automate continues to rapidly grow, and Microsoft continues to expand its network of partners that support Power Automate.

- **Pricing:** For smaller deployments of Power Automate, Microsoft's prices are often 30% to 50% lower than its RPA competitors. Many customers are drawn to using Power Automate due to its low starting price and its widespread availability (a limited version is preinstalled with Windows 11). Many large organizations use Power Automate as a complementary RPA tool to deliver automation within Microsoft applications.

- **Microsoft product integration:** Power Automate excels at automating and integrating across Microsoft's expansive product portfolio, including Microsoft 365, Dynamics, Power Apps, Power BI and Edge. Organizations that use Microsoft products extensively, especially those that use Microsoft Azure and Copilot, will benefit most from Power Automate.

Cautions

- **Product capabilities:** Customers that have migrated from other platforms to Power Automate have voiced concerns in Gartner interactions about its relatively limited capabilities, especially its Citrix/RDP bot execution, queue management and real-time monitoring of bot execution. Also, customers and partners said that Microsoft Copilot's prompt-based RPA development capabilities were limited and sometimes generated inaccurate RPA script objects.

- **Licensing:** As customers expand their use of Power Automate, they have reported additional costs that add up over time. Customers may end up paying for Azure, premium connectors, Dataverse, Azure DevOps and additional licenses for Microsoft products. Customers have also said that they struggle to discern Power Automate access levels provided by E3 and E5 enterprise licenses.

- **Product usage:** Large organizations rarely use Power Automate as their primary RPA tool, instead reserving it for use cases focused on Microsoft applications or citizen development. Large organizations that are evaluating Power Automate should compare their needs against this market adoption trend.

Nintex

Nintex is a Niche Player in this Magic Quadrant. Its RPA product, Nintex RPA, is part of the Nintex Process Platform, which includes workflow automation, digital forms, IDP, document generation, e-signature, task mining, process mapping (Nintex Process Manager) and BPA capabilities.

Nintex's operations are mainly in North America, EMEA, Australia and New Zealand. Its RPA customers are generally midsize enterprises in numerous sectors, with a concentration in banking and financial services.

Nintex's RPA roadmap includes AI-generated script development from documented processes, AI-generated process maps from RPA scripts, copilot RPA script creation and a multitenant cloud offering.

Strengths

- **Market understanding:** Nintex differentiates itself by strategically targeting midsize enterprises (those with revenues between $50 million and $1 billion). Customers from midsize enterprises may benefit from Nintex's low barriers to entry, especially in terms of pricing and ease of use.

- **Workflow ecosystem:** Nintex RPA includes a web-based interface with strong security controls and specific features to automate processes in SAP ERP. It supports bidirectional, end-to-end process orchestration between RPA bots and workflow capabilities via Nintex Gateway. This application connects Nintex Automation Cloud to on-premises RPA and other third-party systems.

- **Customer ecosystem:** Nintex has more than 10,000 automation customers, including more than 1,000 RPA customers. Nintex has built hundreds of prebuilt automation templates and connectors for RPA and workflow automation that are tailored to the personalized needs of its customer base.

Cautions

- **Product features:** Nintex RPA lacks several of the developer-centric features found in most competing products, such as a developer marketplace and support for continuous integration/continuous delivery (CI/CD). It has limited collaboration features for developers and limited native IDP capabilities, although integrations with third-party IDP products are available. Nintex RPA is only available in English, but support for German, French and Spanish are on its roadmap.

- **Visibility:** Nintex RPA has yet to gain much visibility outside of its existing customer base. Gartner client inquiries about Nintex mainly come from customers of its other automation solutions, although Nintex claims the majority of its RPA customers are net new clients. Nintex's RPA product also has few publicly available customer reviews to inform potential customers.

- **AI capabilities:** Unlike most RPA vendors, Nintex did not accelerate its specialized or generative AI capabilities. Most of its generative AI features are on its 2024/2045 product roadmap or present in other components of its Process Platform. Customers should evaluate if Nintex's AI capabilities can meet their requirements.

Pegasystems

Pegasystems is a Visionary in this Magic Quadrant. Its RPA product, Pega Robotic Automation (a combination of Pega Robot Studio and Pega Robot Runtime), is part of the Pega Infinity platform. Pega Robotic Automation complements the vendor's broader BPA, LCAP, CRM, multiexperience and business rules capabilities.

Pegasystems' operations are geographically distributed. Its customers tend to be large enterprises.

Pegasystems' RPA roadmap includes the release of Pega GenAI Blueprint, a collaborative application design workspace that creates automations with a GenAI assistant. Pegasystems also plans to enhance its Robot Studio with an event explorer that assists with finding, understanding and debugging event automation logic.

Strengths

- **Automation capabilities:** Pegasystems' RPA product goes beyond tactical automation with process fabric, intelligent decisioning, low-code capabilities and workflow automation. Pega Robotic Automation has especially strong attended automation capabilities. It enables users to run automations in the background using any desktop accessibility UI configuration while also detecting and resolving common UI changes in applications at run time.

- **Platform ecosystem:** Pegasystems has built a strong customer community and marketplace. The Pega Community platform offers training, support resources and career advancement tools, and has more than 300,000 active members. Pega Marketplace provides customers with applications, add-on components and utilities from Pegasystems, its partners and community contributors.

- **Market execution:** Pegasystems has succeeded in cross-selling its RPA product to its existing customers with flexible licensing for the Pega Infinity Platform. Pegasystems has also attracted new users through tools like Blueprint, which facilitate collaborative automation development. Pegasystems has further expanded its market presence through Pega Launchpad, where other software vendors can sell products built on top of the Pega Infinity platform.

Cautions

- **Sales strategy:** Several current Pegasystems customers have received renewal proposals with a minimum contract value that is typically higher than most of its competitors. Given these higher-priced proposals, Pega may not be ideal for net new RPA customers unless they are existing Pegasystems customers.

- **Business model:** Pegasystems primarily targets large enterprises and mostly sells RPA as a complement to the other features of its Pega Infinity Platform. Customers seeking an RPA solution for tactical uses may find other solutions provide simpler capabilities at a lower price.

- **RPA migration:** Pegasystems does not offer any services or tools to help customers migrate RPA deployments to its platform. While Pegasystems can manually encapsulate externally coded script libraries, source code and other projects, migrating to Pega Robotic Automation from a different platform may be difficult.

Salesforce

Salesforce is a Visionary in this Magic Quadrant. Its RPA product is part of Salesforce Flow and includes RPA Manager (a cloud-based control panel integrated with Mulesoft Anypoint Platform under Salesforce's product portfolio), RPA Recorder (a business process recorder that can be triggered from RPA Manager), RPA Builder (a Windows-based desktop development environment) and RPA Bot (the runtime).

Salesforce's operations are geographically distributed. Its RPA customers tend to be midsize and large enterprises.

Salesforce's RPA roadmap includes unifying its RPA capabilities with Flow Builder, enhancing its use of AI to simplify configuration within the UI, natively integrating large language models (LLMs) into IDP, and enabling native connections and the ability to share/reuse to third-party systems.

Strengths

- **Market understanding:** Salesforce is democratizing automation development by investing in its GenAI technology, Einstein GPT, including a range of security and privacy guardrails known as Einstein Trust Layer. It plans to embed automation within its Einstein Copilot digital assistant so that Salesforce Einstein customers benefit from automation actions across CRM and Salesforce Industry Cloud.

- **Product:** Salesforce claims the ability to orchestrate across multiple RPA platforms and provide aggregated analytics. This multiplatform orchestration will simplify the transition and management of bot operations for customers that want to migrate to Salesforce from another vendor or use a multivendor strategy.

- **Product portfolio:** Salesforce Flow extends beyond RPA capabilities, which can enable customers to deliver automation across their organization. Salesforce continues to be a Leader in Magic Quadrants for adjacent technology markets that complement RPA, including integration platform as a service (iPaaS), API management and enterprise LCAPs.

Cautions

- **Product strategy:** Salesforce does not install components to run in virtual desktop infrastructure (VDI) and relies on computer vision to automate UI interactions in those environments. Customers may find that this approach produces more brittle automations

with a limited ability to capture application metadata. Salesforce's RPA products also support fewer industry regulatory compliance standards than many of its competitors.

- **Ecosystem:** Salesforce's RPA systems integrator partners are largely small or midsize providers that focus on Salesforce. Customers that want deep industry experience to support multiple RPA platforms may struggle to find a systems integrator that meets their needs.

- **Sales execution/pricing:** Prices for Salesforce's entry-point offering tend to be higher than some of its competitors. Although Salesforce's entry-point solution is consumption-based, with metric ratios associated with its wide range of automation capabilities, its price may still deter some organizations. Also, Salesforce still does not offer a free trial, although this feature is expected by 2025 and customers can request proofs of concept.

Samsung SDS

Samsung SDS is a Niche Player in this Magic Quadrant. Its RPA product, the Brity Automation Platform, includes separate design studios for technical developers and citizen developers. It integrates with Samsung SDS's internal AI Contact Center and visual capabilities.

Samsung SDS's operations are mainly in South Korea, and its customer base is mostly midsize and large enterprises in Asia/Pacific.

Samsung SDS's RPA roadmap includes releasing a multimodal-based digital assistant (Brity Automation Copilot), designing and executing natural language processing (NLP)-based automation processes through its AI orchestrator, and supporting customer-specific training of its GUI detector model.

Strengths

- **Market understanding:** Samsung SDS has a unique strategy for targeting different customer segments. It offers small-scale, tactical automation capabilities for smaller organizations while also providing larger enterprises with the ability to use on-premises LLMs that enable complex automation. To further differentiate its offerings, Samsung SDS has built partnerships to integrate advanced GenAI capabilities into its RPA product, including GPT on Azure and Gemini for Google Cloud.

- **Partner ecosystem:** Samsung SDS's RPA operations team partners with service providers to offer a broad range of services for its RPA customers. For example, Samsung SDS

works with its consulting partners to offer a paid service that diagnoses and recommends AI-based automation across business functions.

- **Customer experience:** Samsung SDS has established key support groups such as a dedicated customer success organization, Brity Automation COE, global contact center and product development teams. Samsung SDS customers can use its portal to measure the ROI of their RPA deployments. It also allows customers to upgrade their orchestrator without interruptions.

Cautions

- **Visibility:** Samsung SDS has a limited geographic presence outside of Asia/Pacific, which may deter customers in other regions. Gartner clients do not typically shortlist Samsung SDS when evaluating RPA products, and Gartner receives relatively few inquiries about its RPA products.

- **Connectors:** Samsung SDS does not offer prebuilt integrations or UI connectors for certain enterprise systems such as Oracle and Salesforce. However, through API connectors, Brity Automation supports customers in establishing connections as needed. It does not offer prepackaged adapters for large-scale data migration to ERP platforms like those from Oracle or SAP.

- **Product upgrade focus:** Samsung SDS provides infrequent product upgrades compared to its competitors, which may limit access to new capabilities in a fast-changing market. It offers minor upgrades to Brity Automation twice per year and a major upgrade every two years. Samsung claims this release schedule is intentional to minimize the burden of on-premises updates. It implements functional improvements and corrections through hotfixes.

SAP

SAP is a Challenger in this Magic Quadrant. Its RPA product, SAP Build Process Automation, is a unified solution that also offers workflow and business rules management. It is integrated into the SAP Business Technology Platform (BTP) stack.

SAP's operations are geographically distributed. Its customers tend to be midsize to large enterprises.

SAP's RPA roadmap includes a GenAI-based builder, cloud runtimes, deeper integration of SAP Build Process Automation with SAP Build Apps, AI copilot Joule, SAP Signavio (for

process insights) and SAP Integration Suite (system integration).

Strengths

- **Sales execution/pricing:** SAP Build is included with SAP S4/HANA, SAP SuccessFactors and SAP BTP. It does not incur additional digital or indirect access fees, which is a significant benefit for existing SAP customers. Customers can also purchase additional capacity and capabilities on a pay-per-use or subscription basis.

- **Customer experience:** SAP engages with customers extensively including through user and developer communities, a strategic customer program, a customer executive advisory board, and co-innovation and early-adopter programs. SAP continues to invest in a global postsales organization that provides customer support for the entire SAP BTP portfolio.

- **Product execution:** SAP Build Process Automation offers strong automation, integration and collaboration. It enables users to create end-to-end process automation from natural language inputs, provides a governance model for citizen and professional developers, and includes industry-specific packages with SAP Business Accelerator Hub. It also integrates with SAP Integration Suite, Signavio, Business AI Services and Build Apps.

Cautions

- **Product strategy:** SAP Build Process Automation has some limitations. It does not provide on-premises RPA orchestration. SAP only supports public RPA cloud platforms. SAP does not support UI connectors for most BPA platforms and LCAPs or third-party IDP tools. Also, SAP does not allow customers to control which cloud orchestration version they use.

- **Market understanding:** SAP's product roadmap and stated differentiators emphasize SAP's focus on building a broader automation platform. While this strategy may appeal to large and midsize enterprises that use SAP's other solutions (ERP, for example), this approach may not appeal to buyers that only want RPA for tactical automation needs that don't involve SAP solutions.

- **Customer experience:** In Gartner inquiries and Gartner Peer Insights, customers have reported complexities in SAP's RPA product deployment. Some customers have also reported frequent product updates (particularly through its cloud offering) that can create issues with the stability of automation workflows.

ServiceNow

ServiceNow is a Visionary in this Magic Quadrant. ServiceNow's RPA product is part of Automation Engine, a solution that consolidates its RPA, integration, IDP, BPA, process mining and task mining. ServiceNow's RPA product is built on the Now Platform, which includes custom application development and IT service management (ITSM).

ServiceNow's operations are geographically distributed. Its customers tend to be midsize to large enterprises.

ServiceNow's RPA roadmap includes adding native text-to-RPA-bot capabilities, improving its GenAI with more advanced algorithms and models, and expanding its low-code automation and AI tools to support hyperautomation.

Strengths

- **Now ecosystem and AI:** ServiceNow Automation Engine is augmented by numerous Now Platform capabilities such as AI, low-code and orchestration. ServiceNow's RPA uses GenAI to optimize automation processes and outcomes. It can recommend the most appropriate next action to complete a flow. GenAI can also provide users with insights and analytics on the performance and impact of an automation and identify areas for improvement.

- **Viability:** ServiceNow is a well-established vendor with a strong presence across multiple technology markets. ServiceNow claims that 85% of Fortune 500 companies are its customers. ServiceNow has a high renewal rate of 99%, and it targets existing customers of its low-code automation, AI and integration solutions.

- **RPA Product:** ServiceNow's RPA product offers robust unattended and attended bot capabilities coupled with strong security features. ServiceNow's RPA effectively supports key capabilities such as queue management, retry mechanism, schedule configuration and debugging, testing, versioning and governance features. ServiceNow RPA integrates with various systems using its Universal App Connector and other connectors.

Cautions

- **Visibility:** ServiceNow entered the RPA market in 2021 by acquiring Intellibot. As a relatively new player in this market, ServiceNow has not yet established the same level of visibility for its RPA product as the Leaders included here. Gartner receives few inquiries

about ServiceNow's RPA, especially compared to its workflow, ITSM and low-code products.

- **RPA focus:** ServiceNow does not offer its RPA product as a stand-alone offering. Instead, it only sells Automation Engine to existing ServiceNow customers by bundling it with Integration Hub. Also, the RPA product is not prominently featured on ServiceNow's website.

- **Pricing:** Gartner clients report that ServiceNow's SKU price levels are complex and lack flexibility. ServiceNow bundles its RPA capability with Integration Hub. This means that only customers who have existing ServiceNow subscriptions can use its RPA product. ServiceNow states that this packaging is intentional to guide customers toward an automation solution that includes IDP, process mining and integrations.

SS&C Blue Prism

SS&C Blue Prism is a Leader in this Magic Quadrant. Its RPA product, Blue Prism Enterprise, integrates with SS&C Blue Prism's Chorus BPA, IDP and process mining capabilities, among others. SS&C Blue Prism has also launched Blue Prism Next Generation Platform (Next Gen), a cloud-native platform with a range of capabilities and deployment options for enterprise customers.

SS&C Blue Prism has geographically distributed operations. Its customers include large enterprises and SMBs.

SS&C Blue Prism's RPA roadmap includes establishing a unified user experience across the business automation life cycle, an API automation capability, and a centralized control center in Next Gen, which will be able to control all digital workers.

Strengths

- **Product portfolio:** SS&C Blue Prism has extended its capabilities beyond its core RPA product by launching Next Gen. This cloud-native platform supports a range of features, including Smart Vision, which enables digital workers to recognize application elements based on visual cues; Process Repository, which stores processes and objects to support automation development; and Enhanced Application Modeler, which offers improved user interfaces and new capabilities for automation design.

- **Business model:** SS&C Blue Prism delivers value to customers via a strong core RPA product that integrates with its full product portfolio. SS&C's "one platform" strategy

brings together AI, orchestration and automation capabilities to help customers solve end-to-end process problems.

- **Value bundles:** SS&C Blue Prism has packaged its product into multiple value bundles that provide different levels of infrastructure and functionality. Customers can select the bundle that best fits their organization's needs, which simplifies the purchasing process. SS&C Blue Prism also plans to introduce consumption-based pricing models later in 2024.

Cautions

- **RPA user interface:** In Gartner inquiries and Gartner Peer Insights, multiple customers have stated that they found the user interface to be outdated, slow and cumbersome to navigate. Other customers mentioned the lack of version control and some bugs in the design studio.

- Citizen development: SS&C Blue Prism lacks a development environment dedicated for citizen developers, unlike some of its primary competitors. Some customers have reported difficulties when attempting to use untrained citizen developers for developing processes using the SS&C Blue Prism Studio. SS&C Blue Prism does offer free online training, community support and partner-led training classes to support managed customer citizen development programs.

- **Visibility:** Among Gartner clients, SS&C Blue Prism does not currently seem to generate the same level of interest when compared to its peak in 2020. Since the last Magic Quadrant was published, Gartner received a significantly lower number of requests for SS&C Blue Prism contract reviews. When the vendor is mentioned in inquiries, it is typically brought up by existing customers.

UiPath

UiPath is a Leader in this Magic Quadrant. Its RPA platform, UiPath Business Automation, includes RPA, AI, NLP, API automation, process orchestration, low-code app development, process and task mining, IDP, and application testing. Its core RPA product is a cloud-native offering with design studios tailored to both technical and business developers.

UiPath has global operations and serves every buyer segment.

UiPath's roadmap includes deepened support for generative AI, retrieval-augmented generation, process orchestration and Business Process Model and Notation BPMN

modeling, API integration, and prompt engineering. It is currently developing proprietary large action models (LAMs).

Strengths

- **Product strategy:** UiPath is uniquely focused on using GenAI specifically to enhance its RPA product. Its proprietary UiPath Autopilot uses specialized LLMs that are designed to support RPA development, operations and integration across its portfolio. UiPath provides its customers with a strong platform for AI-augmented automation development, making it a compelling option for customers with both tactical and strategic automation use cases.

- **Customer ecosystem:** UiPath provides its customers with the largest RPA-specific ecosystem of any vendor, with more than 10,000 enterprise customers and 6,000 systems integrator partners. UiPath also offers robust training and community programs, claiming to have more than 1.1 million UiPath Academy users and over 2.7 million UiPath Community members.

- **Viability:** UiPath is by far the largest vendor in terms of RPA-specific revenue and continues to increase its dominant market share each year. With global customer demand and a large partner ecosystem, UiPath offers an enterprise-grade RPA solution.

Cautions

- **Pricing:** UiPath is one of the most expensive RPA solutions. Customers have voiced concerns about substantial price increases since 2022 due to UiPath's strategy of selling preconfigured bundles of products. UiPath claims that customers can achieve greater business value by leveraging the complementary technologies in its automation bundles.

- **Partner services:** In Gartner inquiries, several customers of UiPath partners have expressed frustration with excessive process assessment times, poor automation development and high prices for managed RPA services, while other customers have reported positive feedback. UiPath is revising its partner program to place more emphasis on quality than quantity.

- **Customer feedback:** UiPath's RPA product has received critical feedback from multiple customers in Gartner inquiries and Gartner Peer insights data. Some common challenges that customers report are the difficulty of migrating solutions across tenants, lack of best practices and guidance, inefficient customer support, and limited Linux support. UiPath is

investing in operating model support, customer success programs and platform administration capabilities to address this.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

- ServiceNow

Dropped

- **Cyclone Robotics** was dropped from this research as it shifts focus to its AI-agent-based products, but it will continue to support RPA as a product in its portfolio.

- **EdgeVerve Systems** was dropped from this research as it did not meet the inclusion criteria for customer interest.

- **Hyland** was dropped from this research as it did not meet the inclusion criteria for customer interest and revenue.

- **NICE** was dropped from this research as it no longer considers itself an RPA vendor and does not actively market or sell an RPA product to its customers.

Inclusion and Exclusion Criteria

To qualify for inclusion in this Magic Quadrant, vendors had to:

- Demonstrate a clear and active go-to-market and sales strategy, primarily for RPA software, as demonstrated by their website, reviews on Gartner's Peer Insights forum, social media communications, and direct or indirect marketing materials that explicitly mention RPA.

- Sell RPA software directly to paying customers without engaging professional services. Vendors had to provide at least first-line support for their RPA capabilities. They must not sell their RPA product solely to, and for the use of, its professional services and consultants.

- Offer a commercially supported enterprise offering — in other words, vendors must not offer their platforms as open-source software.

All vendors also had to demonstrate presence in multiple regions, with at least 30 paying RPA customers (unique logos) each in at least two of the following regions as of 31 January 2024:

- North America

- Latin America

- Europe, the Middle East and Africa

- Asia/Pacific, including Japan and China

They also had to have:

- A minimum consolidated customer interest (CCI) score greater than 15 (see Note 1).

In addition, vendors had to satisfy one of the following three criteria:

- At least $50 million in revenue in the financial year 2023 (FY23) from sales of RPA software licenses, excluding revenue from professional services, consulting and any systems integrator support (see Note 2).

- At least $30 million in revenue in FY23 from sales of RPA software licenses, excluding revenue from professional services, consulting and any systems integrator support (see Note 2), year-over-year revenue growth of at least 20% in FY23 from sales of RPA software licenses, and a minimum CCI score greater than 22.

- A minimum CCI score greater than 68.

Vendors also had to offer the following capabilities natively within their RPA platform or product as of 31 January 2024:

- Screen-scraping capabilities, with at least five UI connectors from the following list:

- Selenium IDE

- Microsoft Active Accessibility

- Microsoft UI Automation

- Java application connector

- SAP WinGUI

- Windows GUI

- Mainframe emulator

- Enterprise IT capabilities, including disaster recovery environments, high-availability support, CI/CD, software development life cycle management and multipersona collaboration within the RPA software.

- Support for RPA script development with standard programming languages or vendor-specific low-code representations, including graphical development.

- Ability to record tasks and convert them into scripts that can be deployed.

- Support for both attended and unattended automation.

- Ability to orchestrate and administer users, scripts and the runtime, including configuration, monitoring and security (a central orchestrator or control panel/administrative component is essential).

- Ability to deploy bots in all of the following environments:

  - Desktops

  - Virtual machines

  - Public and private clouds

We excluded vendors that:

- Did not offer integration via screen scraping.

- Offered only platform as a service (PaaS) or back-end services without a desktop runtime component, an orchestration component, and a front-end development tool/integrated development environment to build the scripts/automation.

- Required a specific third-party component or product, or a white-labeled product, to support core RPA capabilities.

- Only sold their RPA product as licensed software along with development/professional services, where the product was used exclusively by the vendor's consultants/service providers.

- Did not offer a commercial enterprise RPA offering (that is, they offered a platform only as open-source software).

- Would retire their platform by the end of 2023.

Evaluation Criteria

Ability to Execute

Gartner evaluates how well vendors' processes, systems, methods and procedures enable them to be competitive, efficient and effective.

Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	High
Market Responsiveness/Record	Low
Marketing Execution	High
Customer Experience	High

Evaluation Criteria	Weighting
Operations	Medium

Source: Gartner (August 2024)

Completeness of Vision

Gartner also evaluates how well vendors demonstrate understanding of the RPA market's current and future direction — including in relation to innovations, customer needs and competition — and the degree to which their vision aligns with Gartner's. This includes vendors' ability to anticipate market forces and create new market opportunities.

Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Medium
Innovation	High
Geographic Strategy	Medium

Source: Gartner (August 2024)

Quadrant Descriptions

Leaders

Leaders have an insightful understanding of the RPA market, a reliable track record, the power to influence the market's direction, and an ability to attract and retain customers.

In the RPA market, Leaders demonstrate understanding of enterprise customers' needs and of opportunities to expand functionality, and add new products and services to their core RPA offerings. Simply put, a Leader must have a market-leading vision and the ability to deliver on that vision.

A Leader may not always be the best choice for every customer. A focused, smaller vendor can sometimes provide superior support and commitment. Other vendors may provide a specialized capability that is essential for some organizations, such as enhanced security or specific features or functions (required, for example, by call centers and individual desktop use cases). A vendor that focuses on RPA for a specific vertical market or a limited geographic area may not be a Leader in the overall market, but it may be a competitive option within its chosen market or area.

Challengers

Challengers excel at attracting a large customer base, but are often limited to one part of the market.

A Challenger must demonstrate sustained excellence in execution and a significant following — a combination that few vendors have achieved in this dynamic, nascent market.

A Challenger may become a Leader if it adopts an aggressive, innovative strategy to expand its focus to encompass the entire market. It would also need to demonstrate exceptional insight into the market's direction and continue to execute excellently.

A Challenger may alternatively become a Visionary by sacrificing growth and instead focusing on developing innovative, differentiating features and capabilities.

Visionaries

Visionaries are a market's innovators. They propel a market forward by responding to emerging customer demands and offering customers new opportunities to excel.

Visionaries must also show insightful understanding of market trends and innovative strategies for marketing and sales, as well as for product and business management. Typically, these vendors appeal to leading-edge customers. A Visionary's ability to deliver sustained, dependable execution in the mainstream enterprise market has yet to be tested sufficiently.

In the RPA market, Visionaries may invest in leading-edge hyperautomation offerings, including RPA, that are not yet readily adopted by mainstream enterprise customers. Visionaries excel in understanding the demands of enterprises that are looking for fully inclusive automation support, as they often provide related tools like AI, chatbots and process management.

A Visionary could eventually grow to become a Leader. Alternatively, a Visionary may become a Niche Player if it decides to limit its target market by focusing on its core competencies, technologies or existing customers. Equally, a Visionary could become a Challenger by developing its specialties in order to advance in terms of execution.

Niche Players

Niche Players typically specialize in a limited vertical or functional area, or have a strong product that is limited to fewer parts of the market or only one part.

In the RPA market, Niche Players also include vendors that focus on other software markets, but that are moving into the RPA market.

In the RPA market, Niche Players:

- Focus primarily on related tools, rather than RPA capabilities — for example, process discovery or machine learning tools.

- Have yet to demonstrate excellent execution and success in terms of visibility, market share and buyer interests.

- Have limited geographic reach.

- Exhibit an unclear vision.

- Focus only on a subset of use cases.

Niche Players often represent the best choice for a specific category of customer or a particular use case. They typically offer specialized expertise, focused support practices, flexible terms and conditions, lower costs, and greater commitment to a particular market segment and its customers.

In this fast-evolving market, opportunities exist in all directions. Some Niche Players are poised to improve their execution and evolve into Challengers. Others may become Visionaries by developing innovative solutions that attract interest beyond their niche segments. Still others may strengthen and broaden their businesses to become Leaders.

Context

The RPA market includes a diverse range of options including providers that primarily grew through RPA, megavendors that used acquisitions to enter the market and regional players that focus on specific geographies. New buyers of RPA solutions must ensure that their chosen provider can meet their immediate short-term needs for UI integration and intuitive design and development capabilities. Existing RPA users should ensure that their current RPA provider is continuing to innovate on core RPA capabilities while offering complementary automation and integration solutions that support a broader enterprise automation strategy.

Organizational needs for RPA often evolve over time. New RPA buyers frequently prioritize price, ease of development and quick ROI. More experienced buyers will value analytics, governance and stability. Use Optimize Automation Using the Hyperautomation Maturity Model to understand what similar organizations value today and what you should prioritize in the future.

Market Overview

The RPA software market continues to steadily grow, as more enterprise applications leaders adopt RPA to deliver task automation. The RPA market generated $3.2 billion in revenue in 2023, up from $2.6 billion in 2022 (see Market Share: All Software Markets, Worldwide, 2023). The RPA market's annual growth rate of 22% exceeded the average worldwide software market's growth rate of 11%.

As customers evaluate and select RPA offerings, they should monitor three key trends in the RPA market.

AI Is at the Core of RPA Vendor Strategy

In response to the hype surrounding AI and LLMs, RPA vendors are strategically positioning their platforms as essential tools in a more AI-centric future. Vendors are designing product roadmaps that focus on delivering AI trust, risk and security management (TRiSM), enhanced AI skills and studios, expanded access to general-purpose LLMs (from the likes of Amazon, Anthropic and OpenAI), and the development of proprietary specialized LLMs.

In the near term, customers should expect that AI development features in RPA platforms will yield improved self-healing capabilities, script remediation and IDP extraction accuracy.

RPA Vendors Are Investing Heavily in GenAI Automation Development

RPA vendors are investing heavily in GenAI to aid customers in developing automations. Most vendors have focused on creating prompt-based development features that translate natural language requests into automation workflows. This makes automation development less technical and more broadly accessible to citizen developers in an organization.

Prompt-based development is a useful tool for starting a larger automation effort or designing simple workflows, but prompt-based development currently has limited use in building end-to-end automations for complex workflows. Customers should experiment with prompt-based automation development if they can access these emerging capabilities for a reasonable price.

In the long term, customers should expect vendors to develop more advanced AI-augmented automation development features. In a major step toward autonomous business, GenAI may eventually ingest recordings from task-mining technology and autonomously build automations that mimic tasks that employees routinely perform.

RPA Vendors Deliver Broader Orchestration and Automation

Most RPA vendors now offer platforms that extend beyond RPA by supporting a mix of automation technologies, including IDP, BPA, conversational AI, LCAP, process mining, task mining, test automation and iPaaS. This convergence into a larger automation platform requires strong orchestration capabilities across natively integrated and third-party solutions.

Customers should expect RPA providers to become more creative in how they package and price offerings. Vendors understand that customers do not want to pay for technology they don't need, but vendors also know that customers might pilot new technologies if they are packaged in a low-cost, low-risk bundle. To harness the most value from bundled automation capabilities, customers should seek out platforms that offer robust process modeling and governance as well as a unified user experience.

Acronym Key and Glossary Terms

AI	artificial intelligence
API	application programming interface
BPA	business process automation
CI/CD	continuous integration/continuous delivery
CCI	consolidated customer interest
GDPR	General Data Protection Regulation
IDP	intelligent document processing
ITSM	IT service management
LAM	large action model
LLM	large language model
LCAP	low-code application platform
ML	machine learning

OCR	optical character recognition
NLP	natural language processing
OS	operating system
RDP	Remote Desktop Protocol
RPA	robotic process automation
SMB	small and midsize businesses
TRiSM	trust, risk and security management
UI	user interface
VDI	virtual desktop infrastructure
VM	virtual machine

Note 1: Consolidated Customer Interest (CCI) Score

When evaluating RPA vendors for inclusion in this Magic Quadrant, Gartner calculated a consolidated customer interest (CCI) score for each vendor on a scale of 1 (lowest) to 100 (highest), based on a combination of factors, such as:

- Gartner client inquiry presence and search volume

- Number of Peer Insights competitor mentions on gartner.com

- Social media presence

- Web traffic analysis

- Search trends on third-party search engines

⊕ Evaluation Criteria Definitions

Note 2: Annual Revenue and Customer Numbers

When evaluating vendors for inclusion in this Magic Quadrant, we examined their revenue and customer numbers in FY23 (or, failing that, the calendar year 2023) for RPA software licenses only (excluding professional services, maintenance, free trials and other non-RPA software licenses).

SaaS subscription revenue (including contract value for calendar year 2023, but excluded any services included in an annual contract).

For multiyear contracts, we included only the contract value for the first 12 months.

All revenue was converted to U.S. dollars on a constant-currency basis to neutralize the effect that foreign exchange rates can have on revenue.

The default accounting standard used was generally accepted accounting principles.