

Magic Quadrant for Robotic Process Automation

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Robotic process automation continues to grow as a tactical solution to improve operational efficiency via noninvasive integration. Here, we examine the market and the leading enterprise vendors for such software.

Market Definition/Description

Gartner defines robotic process automation as a licensed software tool to integrate any application via user interface to automate routine, predictable tasks using structured digital data.

Robotic process automation (RPA) typically uses a combination of user interface (UI) interactions and APIs to integrate and perform data transcription work between different enterprise and productivity applications. RPA automates repetitive human tasks by emulating the same human transaction steps, mainly via orchestrated UI interactions. An RPA tool operates by deploying software script that emulates a human process/task within a workflow. This runtime executable of the RPA script is commonly referred to as “robot” or “bot.” All RPA tools consist of a control dashboard/orchestrator, which can be used to manage these robots or bots.

At a minimum, RPA software tools must include the following core capabilities:

- Low-code capabilities to build automation scripts
- Integration with enterprise applications
- Orchestration and administration including configuration, monitoring and security

The RPA market is rapidly growing as incumbent vendors jockey for market position and evolve their offerings. Over the next two to three years, the market will continue to mature and consolidate. There is still a great deal of fragmentation of vendor offerings and interest from vendors in adjacent markets (software and cloud). Gartner finds that the 10 largest RPA software vendors account for over 70% of market share in the RPA market.

For this year, there are three new entrants to the Magic Quadrant (Microsoft, SAP and Samsung SDS). These large vendors show the upcoming changes and the dynamic nature of the market. In the second year of this Magic Quadrant, the bar has been raised for market viability, relevance,

growth, revenue and how vendors set the vision for their RPA offerings in a fluid market. This has resulted in shifts in year-over-year positions for many vendors and even exclusion for some of the vendors who appeared in the previous year's Magic Quadrant.

This Magic Quadrant also focuses on the software providers of RPA products and not service providers that leverage RPA capabilities licensed from another vendor. Although the vendors may offer cloud-based services, the vendors included must also offer solutions that are deployable on-premises.

Magic Quadrant

Figure 1. Magic Quadrant for Robotic Process Automation



Source: Gartner (July 2020)

Vendor Strengths and Cautions

AntWorks

AntWorks is a Niche Player in this Magic Quadrant; in the last iteration of this research, it was a Niche Player. Its RPA product, QueenBOT, is part of the ANTstein SQUARE platform. ANTstein is an

integrated automation platform that provides core RPA capabilities complemented by intelligent document processing and process discovery features using “fractal science”-led pattern-based artificial intelligence (AI) and machine learning (ML). Headquartered in Singapore, AntWorks has a strong presence in Asia/Pacific, along with enterprise and small and midsize business (SMB) customers in the U.S. and the U.K. AntWorks focuses on data capabilities and ML to enable end-to-end digitization with intelligent document processing coupled with RPA at scale.

Strengths

- **Innovation with AI and machine learning:** AntWorks takes a proprietary approach with its own ML engine, natural language modeling, data capture engine and Cognitive Machine Reading (CMR) to support its vision of RPA. At the core of this is CMR, which is used to support image recognition and pattern recognition. Its recognition techniques need less data than traditional ML models to detect patterns and deliver faster and more accurate results than existing optical character recognition (OCR) technologies.
- **Product offering:** A strength of AntWorks’ RPA offering is its orchestrator for real-time monitoring, advanced analytics, failover recovery, enhanced security and compliance from a centrally managed dashboard. AntWorks’ RPA product manages complex end-to-end processes through the use of technology it calls Intelligent Digital Workforce Management by using ML extensively, along with core RPA capabilities.
- **Marketing strategy:** AntWorks stresses that enterprisewide orchestration of structured and unstructured document process automation (including email, forms, contracts) requires ML and accurate image recognition beyond RPA and OCR. AntWorks’ focus on adding cognitive capabilities to its broader automation tools will resonate well with prospective customers who have more than tactical RPA use cases.

Cautions

- **Overall viability:** AntWorks is a relatively small company with a need to further invest in organizational growth and brand recognition in order to compete against much larger vendors. Its marketing focuses on “data curation” rather than the more usual RPA use cases. Customers looking at AntWorks only for their RPA needs should evaluate its market viability, core RPA use-case priorities and long-term value proposition.
- **Geographic presence:** Although AntWorks has good presence in Asia/Pacific, it is little known elsewhere and therefore often omitted from shortlists shown to Gartner. Despite its innovative product positioning, it needs to show it can support a growing customer base in all regions globally.
- **Integration:** Surveyed reference customers for AntWorks mentioned that its product has a restricted set of underlying integration capabilities, including insufficient preconfigured product connectors to link to other tools. AntWorks says it is developing a roadmap to address some of these gaps.

Automation Anywhere

Automation Anywhere is a Leader in this Magic Quadrant; in the last iteration of this research, it was a Leader. Its RPA product platform is Automation Anywhere Enterprise (version A2019), which is usually bundled with AI-enabling IQ Bots, Bot Insight for analytics, Bot Store, Discovery Bots and a native mobile app. Automation Anywhere, based in San Jose, California, U.S., has operations in every major world region, with a focus on large-enterprise customers. Its 2020 roadmap includes an RPA-as-a-service offering, conversational AI, enhanced developers' portal, improved Bot Store, and extended capabilities to support bot agents in Linux and macOS.

Strengths

- **Product portfolio:** Automation Anywhere almost completely rebuilt its product for the A2019 version and has significantly enhanced the user experience and other features. This version offers an intuitive multipersona user experience, guided navigation, reusable ML libraries, strong native security and an intuitive analytics dashboard. It enables robust cloud delivery with thin clients that reduces maintenance overheads for customers.
- **Pricing:** Automation Anywhere introduced transparent and competitive pricing for its A2019 product line, with three major bundled solutions. This is a major improvement from earlier versions in which IQ Bots and analytics components were incrementally priced. Automation Anywhere now includes IQ Bots, Bot Insight and other major components all within its enterprise package.
- **Innovation:** Automation Anywhere has a strong innovation profile and has demonstrated innovation through the growth of its partner ecosystem. It uses this ecosystem to offer broader functionality for its customers, with extended benefits for partners and customers delivered through its Bot Store. There are also internally funded innovations, such as the IQ Bot, process discovery capabilities, analytics and native security vaults.

Cautions

- **Upgrade experience:** Customers choosing to upgrade to the latest version of the product (A2019) from a previous version may face some challenges. Automation Anywhere indicated that it has a formal migration process that is scheduled to release in the second half of 2020. Customers planning to upgrade to its latest version are advised to wait for the release.
- **Customer service:** Some customers using an earlier version of the product reported a lower level of satisfaction with their deployment experience. Automation Anywhere has addressed these issues in its latest version of the product (A2019).
- **Attended bot deployment:** Although Automation Anywhere's product has strong unattended features, its attended capabilities require some improvement. Reference customers who deployed its attended bots indicated that deployment requires a lot of manual work. Customers choosing Automation Anywhere's latest product should evaluate its attended capabilities if they require it.

Blue Prism

Blue Prism is a Leader in this year's Magic Quadrant; in the last iteration of this research, it was a Leader. Its RPA product is Blue Prism version 6.8. In 2019, Blue Prism acquired Thoughtonomy, now rebranded as Blue Prism Cloud. Blue Prism, based in Warrington, U.K., serves 170 countries, with a focus on large-enterprise customers. It offers an enterprisewide RPA product with governance tooling and security. Blue Prism's 2020 roadmap includes on-demand scaling capabilities for RPA, self-correction of process automation, resilience against application UI changes with computer vision and a "process capture" capability to automatically create the process wireframes that enable single-click automation deployment.

Strengths

- **Product portfolio:** Blue Prism facilitates secured orchestration and management of RPA via its use of preconfigured objects to identify the correct integration interfaces for each application in a workflow. Blue Prism uses a graphical, Visio-based development environment along with technical developer-friendly editors. Blue Prism Cloud is priced differently and includes a set of preintegrated tools, including OCR with ML, and natural language processing (NLP).
- **Partner ecosystem:** Blue Prism has more than 200 partners in a well-developed implementation, technology and consulting partner ecosystem. Blue Prism invites partners to create applications that extend and augment its core platform with capabilities such as decision management, advanced analytics, unstructured data support and process mining.
- **Industry strategy:** Blue Prism has a strong vertical market strategy with industry-focused experts, campaigns, website navigation and partners. This has resulted in 42 industry solutions, with a large number of customers across almost all industries.

Cautions

- **Ease of use:** Unlike many other RPA tools, Blue Prism's still does not offer a process recorder. Although Blue Prism asserts the redundancy of a process recorder in automation development, many reference customers for other vendors in this Magic Quadrant find it a useful feature when combined with process discovery and guided navigation. Given the democratization of RPA outside IT departments, the complete lack of such a feature will inhibit citizen developers' productivity.
- **Pricing and packaging:** Reference customers for Blue Prism gave it below-average scores for value for money. Additionally, some prospective customers of Blue Prism have told Gartner that they were offered only the more expensive Blue Prism Cloud instead of its on-premises offering. Blue Prism's cloud and on-premises offerings have different functionality and prices.
- **Customer experience and innovation:** Reference customers' survey responses, together with other Gartner inquiries, indicate that Blue Prism provides inadequate support for product upgrades. and that there is a lack of innovation in citizen development and the rich analytics pursued by some of its competitors. Many customers have also indicated that they would like to see lower entry prices and some additional features included in the base package.

EdgeVerve Systems

EdgeVerve Systems is a Challenger in this year's Magic Quadrant; in the last iteration of this research, it was a Challenger. Its RPA products are AssistEdge RPA (version 18.0), AssistEdge Engage (version 1.0), AssistEdge Cloud RPA and the AssistEdge RPA Community (version 18.0), which together provide a single automation platform that uses process automation combined with process discovery (AssistEdge Discover), and native AI. EdgeVerve, based in Bengaluru, India, is a wholly owned subsidiary of Infosys. EdgeVerve targets clients in more than 140 countries with an expanded focus on large-enterprise customers. EdgeVerve's roadmap includes expanding APIs, management of complex workflows, Internet of Things (IoT) integration, message-based bot communication and increasing scalability.

Strengths

- **Product portfolio:** EdgeVerve has transformed AssistEdge RPA into a multifunction automation platform, including process discovery, test automation, and specific industry and horizontal business process templates. Reference customers praised its orchestration/dashboard feature, which provides web-based monitoring of multiple bot deployments.
- **Customer service and support:** EdgeVerve offers end-to-end implementation, including governance of its automation solution, using a wide array of accelerators. Reference customers praised it for stable, secure and scalable automation. They also gave high scores for its expertise in native AI capabilities and client partnerships, along with its responsive support for establishing an automation center of excellence.
- **Business model:** EdgeVerve offers verticalized automation as a service with flexible pricing models, including pay-per-use, gain-sharing and outcome-driven models. In line with its parent company's philosophy of targeting the needs of major corporations, EdgeVerve's engagement model leverages existing system integration (SI) and outsourcing relationships of Infosys, while also developing third-party consulting and SI partners.

Cautions

- **Sales strategy:** Relative to products from other major RPA vendors, EdgeVerve's offering has little visibility outside core Infosys engagements. Although EdgeVerve has a relatively innovative product and end-to-end services, many customers who do not engage with Infosys may not shortlist EdgeVerve for RPA.
- **Product experience:** Reference customers gave EdgeVerve relatively low scores for its bot deployment and integration capabilities. They reported a need for rigorous manual effort and especially encountered challenges when not using EdgeVerve's professional services and support.
- **Product strategy:** EdgeVerve's RPA product has many accelerators that are available via AssistEdge Marketplace and AssistEdge Discover and are offered to customers and partners. Customers may not find them easily accessible while using the core RPA product. Some of these, such as a discovery framework, microbots and bot calculators, could become great

value-added differentiators for many end customers if they were offered as integrated components of the RPA platform.

HelpSystems

HelpSystems is a Niche Player in this year's Magic Quadrant; in the last iteration of this research, it was a Niche Player. Its RPA product consists of Automate Enterprise version 11.3.10 and Insite Operations Console version 3.02. With three major packages – Automate Desktop, Automate Plus and Automate Ultimate – HelpSystems provides RPA along with IT security, file transfer, IBM i automation and other infrastructure management tools. Based in Eden Prairie, Minnesota, U.S., it also has operations in Asia/Pacific, Latin America and EMEA, and caters to midmarket and enterprise customers. HelpSystems' 2020 roadmap includes an increased focus on the banking and lending sector, cross-recruitment of partners with other brands, and embedding of process mining/discovery within RPA.

Strengths

- **Pricing:** HelpSystems' pricing model remains affordable to customers who cannot justify investing in more expensive enterprise-level RPA solutions. This has enabled customers to find better price for value in its RPA product than those of larger RPA competitors.
- **Customer experience:** Reference customers for HelpSystems again gave it above-average scores for overall customer experience. Most of them praised it for its ease of installation, deployment, upgrade experience and value for money.
- **Product usability:** HelpSystems' product consistently supports the basic functions of RPA, such as task automation, UI interaction and administration. Reference customers for this vendor praised the product's user-friendliness, simplicity and support for citizen developers.

Cautions

- **Sales strategy:** Although HelpSystems' affordable pricing represents a strong value proposition; users must continually monitor HelpSystems' ability to sustain innovation and pricing competitiveness.
- **Market understanding and innovation:** HelpSystems needs to include advanced features such as process mining/discovery or it risks not attracting customers looking for more than a basic RPA product to meet broad end-to-end process automation goals.
- **Product upgrade:** Although reference customers for HelpSystems gave it good scores for simplicity and ease of use, they highlighted challenges with upgrades to newer version of the product. Most also complained about inadequate support responses.

Jacada

Jacada is a Niche Player in this Magic Quadrant; in the last iteration of this research, it was a Niche Player. Its RPA products are Jacada Integration and Automation (version 4.2) and Interact

(version 12), which focus on customer service automation. Jacada, based in Alpharetta, Georgia U.S. and in Herzliya, Israel, has operations in North America, EMEA and Asia/Pacific. It focuses on large and midsize customers who are targeting customer service automation initiatives. Jacada is in the second year of a two-year roadmap that calls for more global partners within Asia/Pacific and EMEA.

Strengths

- **Product strategy:** Jacada supports both attended and unattended scenarios, but its strength lies in attended use cases to support agent-assisted solutions. Its RPA tool is easily deployed in a contact center environment to augment human resources. Jacada differentiates its offering through native capabilities for end-to-end customer service process orchestration, decision management and agent-assisted solutions.
- **Pricing:** Jacada has an aggressive pricing strategy that is highly competitive. Customers appreciate its RPA-as-a-service offering with a clearly defined, usage-based pricing model providing options to implement RPA without taking on long-term commitments.
- **Marketing strategy:** Jacada's focus on "human in the loop" attended RPA is very much relevant for automation use cases in customer service supporting both digital self-service and agent-assisted solutions. Jacada's dedicated professional services team provides support for the focused use cases and helps deliver successful automation.

Cautions

- **Market focus:** Jacada focuses on the niche area of customer service operations and has a defined strategy to stick with the same. Customers looking for RPA solely for contact center and customer service operations should consider Jacada; but for complex back-office processing, look to another vendor.
- **Product experience:** Jacada received below-average scores from its reference customers for overall designer experience, relative to other RPA vendors in this Magic Quadrant. Some customers commented on challenges when used with a virtual desktop environment, although Gartner cannot confirm if this is a generic issue. Customers also cited limited out-of-the-box reporting capabilities, and flexibility of integration with legacy back-office applications.
- **Viability:** Jacada faces stiff competition in a rapidly changing RPA market in which customers are demanding new features such as process mining, intelligent document processing and other back-office-specific capabilities. Jacada may face some challenges to scale its RPA offering in unattended automation in back-office environments, but it is well positioned within the attended-RPA-in-customer-service space.

Kofax

Kofax is a Challenger in this year's Magic Quadrant; in the last iteration of this research, it was a Niche Player. Its RPA product is Kofax RPA (version 11.0), which supports digital workforce tools

and includes embedded AI, delivering on the promise of intelligent automation for digital workflow transformation. Kofax, based in Irvine, California, U.S., has most of its operations in North America, EMEA and Asia/Pacific, with a focus on large enterprise customers. Kofax's future roadmap includes simplified user experience, an updated management console that supports responsive UI design, and expanding features to support for governance and security.

Strengths

- **Product portfolio:** Kofax targets the automation needs of large organizations with a portfolio of capabilities including RPA, intelligent document ingestion, ML, process discovery, an intelligent business process management suite (iBPMS) and analytics. When bundled together, these capabilities can deliver greater end-to-end automation than most of Kofax's competitors that require application partners or third-party solutions to deliver similar functionality.
- **Document processing:** Kofax bundles its OCR and document processing capabilities with its RPA solution. Each bot can process 10,000 pages per year. Customers focusing on intelligent document processing may find Kofax's native OCR capabilities, along with its RPA, compelling.
- **Innovation:** Kofax takes a fundamentally different approach to virtual desktop integration. Its RPA platform ingests the UI into a centrally managed container that emulates an application without needing to run a remote desktop on an agent desktop. This lowers the cost of the associated infrastructure.

Cautions

- **Product experience:** Although Kofax has a compelling end-to-end automation strategy, the current version of its management console does not yet support a responsive UI design. Kofax plans to address this in version 11.1 later in 2020. Its design studio also lacks a modern, responsive web UI. Customers who consider citizen development an important feature for their RPA needs are recommended to evaluate its latest release.
- **Product upgrade:** In customer surveys conducted for this Magic Quadrant, Kofax received a below-average score for upgrade experience among all participating vendors. Customers said that upgrades were difficult or cumbersome. Additionally, the lack of a cloud offering places the burden of product upgrades on the customer.
- **Operations:** Reference customers identified a disconnect between Kofax's software division and professional services team, which results in a disjointed customer experience and delivery problems. Customers considering Kofax should check that it can support their implementation needs effectively.

Microsoft

Microsoft is a Visionary in this Magic Quadrant. Its RPA product, Power Automate, is an upgraded version of Microsoft Flow with general RPA capabilities. Microsoft, based in Redmond, Washington, U.S., has operations in all areas of the world and customers of all sizes. Microsoft

acquired Softomotive to expand its RPA offering. Softomotive was a Niche Player in the previous iteration of this Magic Quadrant. Softomotive had three major offerings – WinAutomation, ProcessRobot and Robin – which will be rebranded under Microsoft's Power Automate product umbrella.

Strengths

- **Product portfolio:** Microsoft's vision is to offer RPA as a feature within a broad set of technology capabilities, such as workflow orchestration, and a low-code application platform (LCAP) that includes more than 600 prebuilt templates for Office 365 applications. This vision is complemented by WinAutomation and ProcessRobot, which fill gaps in its desktop automation and other basic RPA capabilities, such as support for Citrix platforms and legacy green screen emulators. Customers with both a strong Microsoft application ecosystem and a desire to enable end-to-end process automation with an all-in-one platform may select Microsoft's product.
- **Pricing:** Microsoft's pricing for its RPA product is based on per-user and per-flow consumption. Compared with most RPA vendors, Microsoft has introduced significantly lower price points for unattended automation, orchestration and development. This may disrupt the broader RPA market by compelling many vendors to offer similarly competitive pricing. Microsoft's pricing model is influencing a new wave of SaaS-based pricing in the RPA market.
- **Innovation:** Unlike many RPA vendors, Microsoft can offer RPA along with native functionality for OCR, document ingestion, analytics, a wide range of in-built connectors/APIs and a strong set of AI/ML capabilities, all linked to its Azure cloud backbone. Microsoft has acquired Softomotive's Robin, an open-source language specifically built for RPA. Although Microsoft's intentions for Robin are unclear, it has great potential to form an open-source RPA standard on the Azure Marketplace.

Cautions

- **Product maturity:** Microsoft's RPA product is still in its infancy, with its unattended RPA feature having become generally available only recently. Prior to its general availability, only attended capabilities were available, through a beta launch. Given that the product was released recently, limited information exists about client usage and sophisticated, scaled automation use cases. Customers who choose Microsoft Power Automate soon will be among the first to discover any unknown limitations of the platform.
- **Product integration:** Although Microsoft has plugged some of its RPA product gaps by adding WinAutomation to its product portfolio, the experience for both Microsoft and Softomotive customers will be fragmented for some time. Microsoft plans to rebrand all of Softomotive's products, as part of its portfolio, in the near future, and to offer an integrated experience. Customers may be able to use WinAutomation and Power Automate as separate products for some time but should expect for a transition to a single integrated platform that will offer a more cohesive user experience.

- **Licensing:** As per feedback from Microsoft's reference customers and users of Gartner's client inquiry service, there is confusion among customers about what they get for free as part of their Office 365 entitlement. Microsoft states that existing customers get Power Automate capabilities within their Office 365 and Power Apps licenses if they are only using connectors relevant to the Power Apps applications. However, customers using the full attended and unattended RPA capabilities such as UI flows do require additional paid licenses with the per-user or per-flow model.

NICE

NICE is Challenger in this Magic Quadrant; in the last iteration of this research, it was a Challenger. Its RPA product is NICE Advanced Process Automation (version 7.2) suite, which includes Robotic Automation, Desktop Automation, and Desktop Analytics. Based in Hoboken, New Jersey, U.S., NICE has operations in 150 countries, with a heavy presence in EMEA focused on large-enterprise customers. Its roadmap includes new architecture optimized for the cloud, with a direct click-to-automate feature and AI-driven guided navigation.

Strengths

- **Product portfolio:** NICE is known for its strength in attended RPA capabilities. However, it also has unattended RPA capabilities and a citizen-developer-friendly UX. Its RPA product also includes a conversational agent that delivers process/task discovery and predictive analytics via NICE Employee Virtual Attendant (NEVA). NEVA is a separate product that comes with additional built-in capabilities, including real-time speech guidance, NLP-based text analytics and unsupervised ML.
- **Pricing:** NICE's new and aggressive pricing strategy gives customers a compelling offer: those who buy a bundle of 200 NEVA agents get an unlimited number of unattended "bots." The NEVA license includes an orchestrator, an automation finder for process discovery and automation prioritization, and ABBYY FineReader for OCR.
- **Business model:** NICE's go-to-market strategy targets large-enterprise customers — organizations with more than 1,000 employees and more than \$1 billion in revenue. It capitalizes on a strong global footprint and direct support in 25 countries. Additionally, NICE's offering includes specialized attended bots to augment its workforce management functionality across a range of industries, including finance, banking, telecom and manufacturing.

Cautions

- **Sales strategy:** NICE's sales focus on, and pricing aimed at, large enterprises makes it less suitable than some other RPA vendors for SMB or midmarket organizations who may not have more than 200 people working in call center operations.
- **Ease of use:** Almost all of NICE's reference customers highlighted the inflexibility and lack of intuitiveness in its development environment. They mentioned the lack of a multipersona

experience to complement a citizen developer with a technical developer. Some also noted inadequate training programs for developers, which result in a steeper initial learning curve.

- **Customer experience:** Reference customers scored NICE below the average for vendors in this Magic Quadrant for product experience, customer support and overall satisfaction. Several highlighted challenges with inadequate reporting dashboards, error handling and the overall bot deployment experience.

NTT

NTT is a Niche Player in this Magic Quadrant; in the last iteration of this research, it was a Niche Player. Its RPA products are a personal-client-based RPA tool, WinActor (version 7), along with the related WinActor Manager on Cloud (version 3), WinDirector (version 2.2), and WinActor Cast on Call (version 1). NTT Group, based in Tokyo, Japan, has operations in Japan and more than 190 countries and regions worldwide. NTT serves customers of all sizes including a large number of Fortune 100 companies. NTT's roadmap includes an upgraded version of WinActor with a script editor, enhanced document ingestion/OCR and a process recommendation engine based on process discovery.

Strengths

- **Customer satisfaction:** NTT received good scores from its reference customers for all aspects of customer satisfaction. Customers praised WinActor's ease of use, value for money and stable product deployment experience.
- **Product portfolio:** NTT's WinActor supports a sophisticated UI, with a drag-and-drop graphical modeling tool and recorders. Although the tool can incorporate enterprise applications and interaction with websites, it is best-suited to the automation of stand-alone, PC-based tools. WinActor Cast on Call is a SaaS RPA service that customers can use for a variety of repetitive automation scenarios supported by NTT.
- **Overall viability:** NTT has a fairly large software business with strong financial backing and a commanding presence in Japan and other global regions. NTT is well placed to survive any slowing or uncertainty in this market caused by the COVID-19 pandemic. Customers looking to select NTT's RPA product can expect stability from the vendor even during uncertain times.

Cautions

- **Product capability:** NTT's RPA tool focuses on supporting individuals and their desktop tasks. A few surveyed reference customers for NTT remarked that WinActor's UI is not completely citizen-developer-friendly. They also cited some challenges with OCR integration and ML with the existing version of the product. NTT has indicated that it is strengthening its RPA tool's adaptability to the centralized governance, upgrading its OCR, NLP and ML, and further enhancing its citizen developer capabilities.

- **Marketing and sales focus:** NTT has just established a global sales structure with other NTT companies or partners around the world. However, NTT has some difficulties in reaching many global RPA customers outside Japan and the Asia/Pacific region. NTT is ramping up its efforts to expand its offers to many customers outside Japan.
- **Global support:** Most clients of NTT are based in Japan and the Asia/Pacific region. For prospective customers elsewhere and for local implementation partners, NTT currently offers RPA products in Japanese, Chinese and English; its manuals and support services are provided in multiple languages. Customers outside the broader Asia/Pacific region are advised to check availability of NTT's product support, language support and its future expansion plan.

Pegasystems

Pegasystems is a Visionary in this Magic Quadrant; in the last iteration of this research, it was a Visionary. Pegasystems includes its RPA product within the Pega Infinity platform (version 8.4), which offers RPA along with complementary iBPMS, multiexperience development platform (MXDP), CRM and LCAP capabilities. Pegasystems, based in Cambridge, Massachusetts, U.S., has operations across the world and a focus on large-enterprise customers. Its roadmap includes a complete UI upgrade and a desktop application focused on business users. Additionally, Pegasystems has announced Pega Process Fabric – a completely serverless and distributed process management solution.

Strengths

- **Partner ecosystem and geographic presence:** Pegasystems has a large ecosystem that includes a broad array of implementation partners with strong business and industry capabilities across the world. Pegasystems has a strong North American presence and a rapidly increasing customer base in Europe and Asia/Pacific. The Pega Infinity platform is a capable all-in-one platform for globally diversified companies.
- **Innovation:** Pegasystems' "object-level injection" technology enables attended automations to execute without locking the desktop mouse and keyboard. Combined with Pegasystems' iBPMS capabilities, intelligent document processing and chatbot-assisted, unattended RPA, it delivers high-value end-to-end automation capabilities.
- **Product portfolio:** Pegasystems has bundled RPA, LCAP and iBPMS capabilities into a single solution, Pega Infinity. This combination of complementary technologies is attractive to large enterprises that want end-to-end intelligent and event-driven process automation. As of this writing, Pega introduced Process Fabric, which is a serverless orchestration component that can sit on any applications and orchestrate any RPA bots from other vendors.

Cautions

- **Customer satisfaction:** Pegasystems' reference customers scored it below average in several categories, including product experience, customer support and product upgrades when compared to other vendors in this Magic Quadrant. Customers said that its bot development is

complex and requires developer training and support. A few customers also said that expert resources were hard to find.

- **Product strategy:** Pegasystems is attempting to add more to its RPA offering by bundling with its feature-rich Infinity platform. Yet its core product focus and strength remain its iBPMS and CRM capabilities. Reference customers use Pega Infinity mainly for end-to-end automation, along with sophisticated iBPMS and CRM needs. Organizations interested in only RPA may find Pega Infinity complex and offering much more than they need.
- **Value for money:** Pegasystems' reference customers also scored it below average for its value for money. Customers cited an unpredictable utility pricing model, and additional budget required for significant professional services to ensure a successful deployment.

Samsung SDS

Samsung SDS is a Niche Player in this Magic Quadrant. Its RPA product is Brity RPA (version 1.6), which also may include a conversational AI platform with native ML. Samsung SDS, based in Seoul, South Korea, has operations in Asia/Pacific countries including China, South Korea, India and Vietnam, and it plans to expand into North America and EMEA. It focuses on large-enterprise and small and midsize customers. Samsung's 2020 roadmap includes UI change detection and enhancement of process discovery and attended capabilities.

Strengths

- **Product portfolio:** Samsung SDS offers an integrated RPA platform that includes process discovery, chatbot, integrated OCR, intelligent document ingestion and native AI. It offers an intuitive experience for citizen developers and supports both web and mobile applications.
- **Innovation:** Samsung SDS's focus on innovation is demonstrated by its "headless bots" that can operate as industrialized microbot components deployed on any application. Customers running a large-scale RPA operation can benefit from its "headless bot architecture," which is used by multiple bots running in parallel. In addition, Samsung offers mobile-app-based monitoring of automation, process discovery and chatbots.
- **Customer experience:** Reference customers gave Samsung SDS's product excellent scores in all categories. They praised the product experience, the ability to scale, the ease of deployment and the citizen developer experience.

Cautions

- **Sales strategy and pricing:** Samsung SDS lacks a simple packaged pricing strategy for its RPA offering. Customers may be charged incrementally for its tangential components, such as chatbots, analytics and process discovery in addition to the core RPA product bundle.
- **Marketing strategy:** Although Samsung SDS has demonstrated impressive growth of 700% year over year, it is not as visible in this RPA market as other vendors. Gartner rarely sees Samsung

SDS's RPA product in customers' shortlists for RPA. Samsung SDS is ramping up its effort in this area, with broader outreach via social media and direct/indirect partner channels.

- **Geographic presence:** Samsung SDS, a relatively new RPA vendor, prioritizes the Asia/Pacific market, although it plans to expand into North America and Europe. Enterprise customers in major markets outside Asia/Pacific who otherwise might have selected Samsung SDS's product for its innovative features will be deterred by its lack of broader geographic presence.

SAP

SAP is a Niche Player in this Magic Quadrant. Its product is SAP Intelligent Robotic Process Automation (version 1.0.7), which is a new feature of SAP's Intelligent Enterprise stack and extends SAP's ability to integrate disparate applications in a customer environment. SAP, based in Walldorf, Germany, has operations across the world and a focus on large-enterprise customers. SAP's roadmap includes a new set of SAP Cloud Applications Studio features to enable full automation of the development process in the cloud, with a strong focus on citizen developer enablement and reuse.

Strengths

- **Market understanding:** SAP has a strong vision for ERP-focused automation, with end-to-end capabilities covering a wide range of technologies, such as process discovery, iBPMS, ML and cloud delivery.
- **Product portfolio:** The majority of RPA implementations touch ERP systems, such as SAP's, which are closely tied to the customer's core business processes. SAP offers its RPA product embedded with core iBPMS capabilities and built-in connectors for SAP S/4HANA, ABAP and UI5, and for non-SAP applications such as any Windows-based application. Customers with SAP-heavy ecosystems may benefit from this, especially if they plan to migrate to S/4HANA.
- **Viability:** With a huge customer base and large-scale ERP ecosystem, SAP has grown steadily as a public company for many years. Its RPA product is used by large enterprises that also use other SAP software products, and prospective customers should feel confident about SAP's overall viability.

Cautions

- **Pricing:** SAP's transaction-based pricing model calls for additional governance and upfront consumption estimation to avoid higher costs, which may result from real-time, frequent execution of automations common to other RPA solutions. While transaction-based pricing does create lower barriers to entry, customers should build tight governance to limit total cost of ownership of SAP's RPA product.
- **Product experience:** SAP's script-heavy and technical-developer-friendly RPA environment does not yet enable citizen developers to build automations. SAP says this is on the roadmap.

Moreover, customers who are heavily invested in SAP's ERP may benefit more from its RPA as compared to non-ERP customers.

- **Customer experience:** Gartner received a relatively smaller number of responses from SAP's customer references due to COVID-19 challenges. Those who did answer gave SAP below-average scores at the time of the survey, for nearly all categories. Customers highlighted unpredictable and higher-than-expected costs for SAP's RPA platform, due to unexpected surges in transactions. SAP is investing more in customer service and product support as customer adoption increases.

Servicetrace

Servicetrace is a Visionary in this Magic Quadrant; in the last iteration of this research, it was a Niche Player. Servicetrace demonstrates strong vision with its RPA platform, XceleratorOne (X1; version 2020.2), which focuses on delivering a secure end-to-end environment and allowing customers to manage "alien" bots from other providers. Servicetrace, based in Darmstadt, Germany, has operations in Asia/Pacific and parts of EMEA, with a focus on large-enterprise and midmarket customers. Its roadmap includes improvements to its enterprise process automation platform and self-building bots.

Strengths

- **Process modeling:** To facilitate long-running processes, Servicetrace embeds a BPM engine (based on Camunda). This enables customers to take a flexible approach to managing long-running business processes, along with short-term tasks. This engine also imports standard Business Process Model and Notation (BPMN) 2.0 XML process definitions. This BPM environment enables Servicetrace to manage the overall collaboration and deployment life cycle; it also facilitates direct process-mining capabilities delivered by another vendor in the ecosystem.
- **Customer experience:** Servicetrace's reference customers praised it for ease of development, ease of installation and attentive customer service. Servicetrace offers a flexible pricing model, which they scored very highly. They also considered that the X1 Server part of the X1 platform represents good value for money as it supports dynamic provisioning of parallel X1 Bots running as a service, whereas some other tools limit bots to single workflows at any one point in time.
- **Security:** Servicetrace's product delivers a secure environment within which to run automations. Services execute either on a user's desktop or hidden in the background. The entire environment – from a clustered server all the way to target machines on which automations are executed – is secured by strong encryption. For customers focused on operating highly secure, scalable environments, this a key differentiator.

Cautions

- **Integration:** Several reference customers for Servicetrace identified challenges to integrate with SAP and other applications. Servicetrace offers its users preconfigured REST modules for special SAP content and has plans to expand the integration capabilities.
- **Viability:** Although Servicetrace has an innovative product and a strong vision for the process automation market, its overall market presence and visibility is relatively small compared to larger vendors in a broader RPA market. Servicetrace states that it is well positioned to scale up to its growing customer base. Customers who are looking to choose Servicetrace for their RPA needs are advised to evaluate its long-term viability.
- **Operations:** Servicetrace has presence in Germany, Austria, Switzerland, the U.K., United Arab Emirates and Singapore. Elsewhere, it has no direct office presence or operates through its partners. Compared with the market's larger and more established competitors, Servicetrace has limited ability to serve customers outside the regions where it operates.

UiPath

UiPath is a Leader in this Magic Quadrant; in the last iteration of this research, it was a Leader. Its RPA product is also called UiPath (version 2019.10.3), enabling citizen development, multitenant SaaS with acquired process-mining capabilities. UiPath, based in New York, New York, U.S., has operations equally in Asia/Pacific, EMEA and North America, and a focus on large-enterprise customers. Subsequent to the evaluation cutoff for this Magic Quadrant, in April 2020 UiPath released role-based licensing, SaaS-based RPA, conversational AI and test automation. UiPath's near-term roadmap includes low-code business apps, expanding its Automation Cloud with robots as a service, native support for SAP Fiori and evolving attended automation.

Strengths

- **Integration and partner ecosystem:** UiPath's strength remains with its robust partner ecosystem, which includes more than 250 technology partners and strong support for integrations with almost all major enterprise products and applications. UiPath has a vibrant marketplace, with more than 1.5 million downloads. Its community of more than 750,000 developers can share automation and AI libraries in its marketplace, from which they are available as prebuilt, reusable components.
- **Operations:** UiPath has devoted significant resources to helping customers build and scale up RPA programs. With free community versions and a continuous focus on learning resources, online training, and an active developer community, UiPath supports its customers with frequent updates and crowdsourced knowledge sharing.
- **Product portfolio:** UiPath's RPA product portfolio is augmented by newly acquired process discovery, Task Capture recorder, analytics via UiPath Insights, and improved AI fabric components. UiPath's orchestration engine is enhanced to handle complex, long-running processes, which are typically beyond the scope of RPA. UiPath's RPA platform also provides persona-specific developer experiences for technical and citizen developers. UiPath increased its offering with five new accelerator packages.

Cautions

- **Pricing:** With the recent enhancements in UiPath's product offering, its pricing evolved from a collection of products to a platform model and role-based pricing. This expansion and change added additional complexity to UiPath's pricing. Additionally, reference customers for UiPath gave it a lower score for value for money than did those of other major RPA vendors.
- **Customer support:** As a cautionary note to UiPath's otherwise excellent operations and product experience, certain aspects related to customer satisfaction with UiPath have deteriorated from previous years. Reference customers of UiPath observed that UiPath's rapid growth has resulted in it losing some of its customer touch as demonstrated by its disconnected operations and lack of coordination between software and service departments.
- **Product upgrades and deployment:** Reference customers for UiPath using product versions 2018.4 or older identified difficulties with upgrading its product, as well as with deployment. Many said that UiPath was focusing on advanced features such as ML and process mining, rather than strengthening basic RPA features. Some also said that, in relation to product updates, UiPath prioritized speed of delivery over product quality.

WorkFusion

WorkFusion is a Leader in this Magic Quadrant; in the last iteration of this research, it was a Visionary. Its RPA product is WorkFusion Intelligent Automation Cloud (version 10.1), which focuses on delivering an integrated end-to-end automation platform with native AI and best-in-class native automated machine learning and NLP capabilities. WorkFusion, based in New York, New York, U.S., has a large presence in North America, and some operations in Asia/Pacific and EMEA. It focuses on large-enterprise customers. WorkFusion's roadmap features the addition of OEM technologies that offer advanced handwriting capabilities, advanced structured form extraction and support for complex documents such as contracts.

Strengths

- **Product portfolio and AI focus:** WorkFusion offers a sophisticated ML capability in support of RPA objectives. In comparison with the other products we reviewed, WorkFusion showed superior capabilities and vision by augmenting RPA with prepackaged, pretrained ML models designed for specific use cases, such as anti-money-laundering, loan processing and claims intake. Reference customers for WorkFusion recognized this focus and gave high scores for its ability to understand their needs.
- **Product strategy:** WorkFusion's product includes an integrated BPM canvas that enables developers to coordinate automations, with clear looping and ML elements. Powerful analytics technology can drill down into individual cases and identify the causes of errors that are affecting ML and process execution.
- **Innovation:** WorkFusion is a good choice for customers looking for RPA, strong AI features and end-to-end automation with complex workflows. It has a history of innovation as the first RPA provider to offer free trials, develop automated ML capabilities and launch cloud-based RPA,

and it offers multiple analytics dashboards configured for ROI tracking, capacity planning and SLAs.

Cautions

- **Partner ecosystem:** WorkFusion has a much smaller ecosystem of system integration partners than some of the other major RPA vendors in this Magic Quadrant, and many of its SI partners also support competing RPA products. Customers seeking third-party support for implementing, developing and maintaining WorkFusion's RPA platform may struggle to find competitively priced SIs that can do the work effectively.
- **Geographic presence:** Prospective customers of WorkFusion outside North America and Europe need to check the availability of effective local guidance and support. Although WorkFusion has a strong product, its limited sales and marketing resources, compared with its bigger rivals, limit its ability to serve customers worldwide.
- **Sales strategy:** WorkFusion's focus on large organizations in the banking, finance and insurance sectors may deter customers in other major industries, such as healthcare and manufacturing. Additionally, WorkFusion's average selling price is high, at a time when there are more affordable alternatives. Its pricing is based on business outcome, which typically results in a strong association to value, but reference customers' responses did not reveal a consistent association.

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 reflect a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

- Microsoft
- Samsung SDS
- SAP

Dropped

- Another Monday
- AutomationEdge
- Datamatics
- Kryon

- Softomotive (acquired by Microsoft in 2020)

Inclusion and Exclusion Criteria*

To qualify for inclusion, vendors must meet the following criteria:

- **Offering:** Offer a licensed RPA product that meets the Gartner's RPA definition in this research. This product must be the vendor's own proprietary RPA licensed software (not repackaging or integrating with any third-party RPA product).
- **Go-to-Market:** Demonstrate a go-to-market strategy for its RPA licensed software for the cross-industry process automation market, and not limited by specific vertical markets.
- **Customer Survey Data:** Permit Gartner to acquire survey data from 10 customers who had at least 10 runtime bots on their production environments. These customers should represent production deployments of the product version shown in the vendor briefings, have paid for the RPA software license, and have the product in customer production for at least three months (i.e., excluding all proofs of concept or pilots, or customers trying RPA products in free trial).
- **Product Availability Date:** Similarly, the product version on which both the questionnaire response and use-case demos are based must have been available to all customers since 31 January 2020. Such users/customers must be able to verify that the RPA tool vendor meets our inclusion criteria.
- **Geographic Presence:** Must have at least five distinct paying enterprises of RPA licensed software each in a minimum of two of the below geographies:
 - North America (U.S. and Canada)
 - South America (includes all Central American and South American countries)
 - EMEA (includes Europe, the Middle East and Africa)
 - APAC (Asian countries, Australia and New Zealand)
- **Market Relevance:** Must qualify in both of the following categories:
 - Have at least 150 unique paying enterprises (logos) who purchased the vendor's RPA licensed product
 - Have 20 unique enterprise (logos) in 2019 who have installed and are running RPA runtime scripts/bots in production for at least three months.
 - (An enterprise is defined as a unique customer organization and not individual users or departments.)

- **Performance and Growth:** Must qualify in one of the following categories:
 - Category 1: RPA licensed software revenue was more than \$15 million for 2019
 - Category 2: RPA licensed software revenue was more than \$12 million for 2019, and there was an 80% year-over-year growth in RPA license revenue in 2019 when compared to 2018.
 - Category 3: Enterprise software vendors (as defined by 15,000 direct and distinct paying customer organizations) offering their own proprietary RPA licensed software.
- (For the purposes of this criterion, revenue refers to RPA licensed software revenue annualized for 2019, recognized as per generally accepted accounting principles [GAAP] standards. Gartner will not consider bookings or projected unrealized revenue as a qualified revenue number. The revenue declaration must be submitted with the signed authorization of the CFO of the organization. Professional services and other software [such as OCR, process mining/discovery] revenue is distinct and separate from RPA licensed software revenue and must not be included. If the vendor's licensed RPA software subscription revenue is booked under Accounting Standards Codification [ASC] 606, vendors were asked to provide the current annualized number for 2019 only [i.e., not multiyear subscription bookings, and calculated for realized revenue for 2019 only]).

We excluded vendors that:

- Require a specific third-party component or product to support core RPA capabilities that is *not* already repackaged into the vendor's platform(s) (i.e., branded, sold and supported directly by vendor)
- Only sell their RPA licensed software along with development/professional services, where the tool is used exclusively by the vendor's consultants/service providers.
- Require the purchase and/or installation of other unrelated products or platforms offered by the same vendor (e.g., a CRM application or content management system).
- Do not offer a commercial enterprise offering for RPA (that is, only offer a platform as open-source software).

Evaluation Criteria

Vendors in Magic Quadrants are evaluated on two axes: Ability to Execute and Completeness of Vision. These relate to their performance in 2019 and their vision for the subsequent years. Vendors are scored according to the Gartner methodology for Magic Quadrants, and these scores define each vendor's position. Vendors are invited to provide the data for the evaluation criteria via questionnaires and briefings; however, evaluations also include the results of Gartner customer surveys and analyst information from client inquiries.

Ability to Execute

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods or procedures that enable performance that is competitive, efficient and effective, positively affecting revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision.

Table 1: 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	Medium
Customer Experience	High
Operations	Medium

Source: Gartner (July 2020)

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to the Gartner position. Ultimately, technology providers are rated on their understanding of how to exploit market forces to create opportunities for the provider.

Table 2: Completeness of Vision Evaluation Criteria

Evaluation Criteria ↓	Weighting ↓
Market Understanding	High
Marketing Strategy	High

Evaluation Criteria ↓	Weighting ↓
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Low

Source: Gartner (July 2020)

Quadrant Descriptions

Leaders

Leaders in a market combine an insightful understanding of the realities of the market, a reliable record, the ability to influence the market's direction, and the capability to attract and keep a following. In the RPA market, leadership implies an understanding of the demands of the enterprise and the opportunities of adding additional functionality, products and services to the core RPA offerings. A Leader must have demonstrated a market-leading vision and the ability to deliver on that vision.

At this point, four vendors have demonstrated excellence in both execution and vision to show effective leadership. With continued growth from vendors in the Challengers and Visionaries quadrants, we expect additional vendors to advance in this direction during the next two years.

Customers should note that a Leader is not always the best choice. A focused, smaller vendor can provide excellent support and commitment to suit individual needs. Other vendors may provide a certain capability – such as enhanced security, and a commitment to specific features or functions – that is important to your organization. These market segments include call center or individual desktop use cases today. This also applies to scenarios when deployed by a service partner in your specific industry market or geography. This more focused type of vendor would not appear as a Leader in the overall RPA market; but, within a specific segment, it may well be treated as such.

Challengers

Challengers in a market excel in their ability to attract a large user following, but this ability is limited to a subset or a segment of the market. For example, in the RPA market, a Challenger may have a strong proven presence or following in attended RPA, but lacks traction, commitment or

sophistication in the broader unattended RPA market. A Challenger must demonstrate a sustained excellence in execution and must have amassed a significant following, which is hard to achieve in this new and still-evolving market.

Three vendors are rated as Challengers in the RPA market this year. These players were not as aggressive in targeting clients as the Leaders were during the past five years, when the RPA market evolved into the mainstream force it is today.

A Challenger can evolve into a Leader if it adopts aggressive, innovative strategies to expand to the full breadth of the target market. It needs to demonstrate exceptional insight in understanding the market direction and retain the capability to deliver on this vision. It may also evolve into a Visionary by sacrificing growth for new features and capabilities that are ahead of the market.

Visionaries

Visionaries in a market are innovators that drive the market forward by responding to emerging, leading-edge customer demands and by offering new opportunities to excel. Typically, these vendors appeal to leading-edge customers and may even have minimal mainstream presence or name recognition. Their ability to deliver sustained and dependable execution in the mainstream enterprise market is not sufficiently tested. Note that the vision of a vendor is not expressed in only its technological innovation. The vendor must also show insightful understanding of market trends as well as visionary marketing, sales, and related product and business management strategies.

This year, there are three Visionary vendors, including a startup and two large vendors. Generally, Visionaries invest in leading-edge RPA offerings that are not yet readily adopted by mainstream enterprise customers. They support capabilities in their other related tools, such as AI and chatbot capabilities, as well as process management. Visionaries excel in understanding the demands of enterprises that are looking for fully inclusive automation support.

Visionaries should eventually grow to become Leaders. Alternatively, they may decide to limit their target markets to focus on their core competencies, core technologies or existing customers and become Niche Players. They could also develop their specialties to advance in execution and become Challengers.

Niche Players

Niche Players in a market typically specialize in a vertical or functional area. Alternatively, they might have a strong product that is limited to a specific area or subset of the market. The six Niche Players in this market either:

- Have focused their attention on related tools – such as process discovery or machine learning – rather than RPA capabilities per se.

- Lack the execution capabilities needed or have limited geographic reach.

- Exhibit a vision that is not market-leading or focus on a subset of use cases.

Represent startups making initial forays into the market that have yet to demonstrate success.

Several of these vendors are in transition from other markets. Generally, to progress in this market, they need to focus fully on RPA.

Because of their relatively smaller size, Niche Players can often represent the best choice for a specific category of buyer, or for a particular use case. They typically offer specialized expertise, focused support practices, flexible terms and conditions, lower costs, and greater dedication to a particular market segment and its customers.

Some Niche Players are poised to improve their Ability to Execute and enterprise features, allowing them to evolve into Challengers. Others will discover innovative solutions that attract interest beyond their niche segments, emerging as Visionaries. Some will look to strengthen and broaden their businesses to challenge the Leaders. In this fast-evolving and consolidating market, opportunities exist for all comers.

Context

RPA automates repetitive human tasks by emulating the same human transaction steps mainly via orchestrated UI interactions. Robotic process automation has democratized integration and automation, leading to widespread business adoption. Unlike traditional screen scraping, RPA tools offer orchestrated UI interaction with access provisioning, security management, document ingestion and many other capabilities.

The core value of RPA still remains within its ability to enable citizen developers to rapidly build and orchestrate UI scripts that can emulate human workflow to transcribe data across multiple systems.

As a result, the tools are very similar in basic capabilities, which decreases the range of the depth of vision dimension between vendors when compared with many other Magic Quadrants.

The reference customer survey for this Magic Quadrant found that:

- 94% of reference customers responded that task automation via UI interaction was the most important use case for applying RPA in their organization.
- 83% of reference customers have adopted an unattended form of RPA, with 46% implementing both and only 17% implementing pure attended RPA only.

The need for an RPA will be consistent as organizations still have tremendous demands to automate legacy paper-based processes and to perform data transcription work between several

enterprise systems. Based on Gartner's analysis of customers with successful RPA implementations, application leaders must evaluate their RPA investment and strategy based on these six factors:

- Ensure the functional depth of capabilities of the platform to meet your task automation via UI integration in the near term (12 to 18 months).
- Assess the vendor's vision and roadmap for its short-term RPA breadth and align with your organization's longer-term end-to-end automation needs beyond the next 24 months. This may include how to support nonroutine processes, orchestration of long-running processes, and AI-augmented complex decision management processes.
- Evaluate the price-per-process cost of your vendor's solution so that your automation initiative has an optimal ROI over the longer term.
- Evaluate how well the tangential capabilities and services are integrated within the platform, and with external complementary or supplementary tools and services, to support the long-term automation goals.
- Develop a fuller picture of the overall vendor solution by scrutinizing the ecosystem of partner, customer and developer communities to influence the product roadmap, strategy and support.
- Avoid prioritizing your automation needs based on RPA only; there could be other alternatives that could complement your investment in RPA.

Market Overview

The RPA software market is one of the fastest-growing segments in the enterprise software market, with a rising competitive bar and many new entrants. It grew 63.1% in 2018 and 62.9% in 2019, compared with the 13.5% and 11.5% growth, respectively, of the overall enterprise software market (see "[Market Share: All Software Markets, Worldwide, 2019](#)"). The RPA software market includes more than 45 vendors as of mid-2020.

The reference customer survey showed that decision makers (typically CIOs, enterprise architects, CFOs and IT leaders) purchased an RPA for these top three reasons:

- **Optimize operational efficiency** – 90%, with 57% considering that as the No. 1 priority.
- **Accelerate an existing process** – 46%, with 8% considering that as the No. 1 priority.
- **Optimize cost** – 43%, with 13% considering that as the No. 1 priority.

This is the second year of the RPA Magic Quadrant. The reference customer survey showed that 52% of respondents have been live with their RPA implementation for more than one year, and 27% for more than three years.

Of the respondents, 65% are organizations with more than \$1 billion in revenue, 37% have less than \$1 billion revenue, and 8% are from the government and public sector.

Hyperautomation

Customers are striving toward an orchestrated, end-to-end, intelligent, event-driven form of automation, delivered with an effective combination of automation tools with multiple machine learning applications and packaged software. Gartner calls this “hyperautomation.” RPA is just one subset of the key technologies used to support hyperautomation (see [“Move Beyond RPA to Deliver Hyperautomation”](#)).

Alongside RPA are intelligent business process management suites, integration platform as a service (iPaaS) platforms and decision management systems. Combined, they provide a robust toolbox of technologies that enable hyperautomation ambitions. Gartner sees the interest in RPA technologies as part of the bigger trend of hyperautomation, which is first, and one of the most pervasive trends, in [“Top 10 Strategic Technology Trends for 2020.”](#) (For specific information on hyperautomation, see [“Top 10 Strategic Technology Trends for 2020: Hyperautomation.”](#))

Following are some key trends in the RPA market:

- **Almost no RPA providers sell only RPA:** Most of the RPA software companies have acquired or built capabilities in related software tools, notably process mining and discovery, OCR with machine learning, and BPMS rule engines. Gartner expects to see this investment in related software tools continue.
- **Four strong Leaders in this Magic Quadrant, but powerful, large vendors are “attacking”:** Today’s Leaders outspend the rest of the market, but the entry of large and other new vendors (such as Microsoft, SAP, Samsung SDS, Appian and IBM) with deep spending capability will dramatically change the competitive landscape.
- **Smaller vendors have yet to achieve strong market impact:** The RPA Magic Quadrant shows a range of Niche Players who are limited by lack of global sales coverage and/or lack of significant revenue or are new to the RPA market. These smaller vendors can become the targets of acquisitive vendors looking to enter the RPA market.
- **COVID-19 and a global recession could drive further adoption:** The business disruption and new normal of remote working induced by COVID-19 are prompting customers to have a deeper look into RPA as a tactical automation option, to digitize paper-based, routine human processes.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether

offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

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