

Critical Capabilities for Robotic Process Automation

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Initiatives: [Software Engineering Technologies](#)

As software engineering leaders seek to improve efficiency and integrate enterprise systems, RPA continues to expand its footprint. This research evaluates 18 RPA products based on their ability to support five common use cases.

This Critical Capabilities is related to other research:

[Magic Quadrant for Robotic Process Automation](#)

[View All Magic Quadrants and Critical Capabilities](#)

Overview

Key Findings

- The robotic process automation (RPA) software market remains the fastest-growing enterprise software segment that Gartner tracks, growing at a rate of 38.9% in 2020.
- Most RPA vendors are expanding their products to augment their automation features with elements such as embedded process discovery, intelligent document processing, artificial intelligence (AI), machine learning (ML), low-code development and complex workflow orchestration.
- RPA vendors are evolving their RPA cloud offerings to include integration platform as a service (iPaaS), software as a service (SaaS), managed services and business process as a service (BPaaS).

Recommendations

Software engineering leaders responsible for evaluating automation technologies should:

- Shortlist RPA products by prioritizing offerings that meet the short-term, tactical needs as well as the longer-term strategic needs of their RPA developer community.

- Support complex automations by evaluating RPA products based on their complementary capabilities, including process discovery, process mining, workflow orchestration and ML.
- Accelerate RPA adoption by subscribing to cloud versions of RPA platforms, which reduces the total cost of ownership and infrastructure barriers to RPA scalability.

Strategic Planning Assumption(s)

What You Need to Know

The RPA market is rapidly growing, as incumbent vendors jockey for market position and evolve their offerings and as megavendors enter the market. With increasing competition and investment, RPA solutions have improved dramatically in the past year. Through 2024, we expect the market to mature and consolidate. The RPA market is still fragmented, and vendors in adjacent markets are starting to offer RPA capabilities.

We identified five common use cases for RPA:

- **Automate via user interface (UI) integration.** Automate unattended processes or tasks involving data transcription between applications where no back-end integration or API is available.
- **Augment knowledge workers.** Enhance the ability of knowledge workers to get work done, typically saving them effort by extracting needed information to better serve customers.
- **Accelerate citizen automation.** Empower citizen developers to build automation scripts using low-code intuitive interfaces, guided navigations and easy generation of workflow design.
- **Automate document processing.** Automate the ingestion of unstructured or semistructured data to prepare for bot consumption by extracting document contents into standardized and structured formats.
- **Create headless bots.** Create composable, reusable and serverless orchestration of automation workflow components that are exposed via APIs (or other methods) and consumed by other orchestration engines, bots or applications.

We also identified 14 critical capabilities that RPA platforms leverage to address these use cases. We scored RPA vendors based on their level of support for these capabilities.

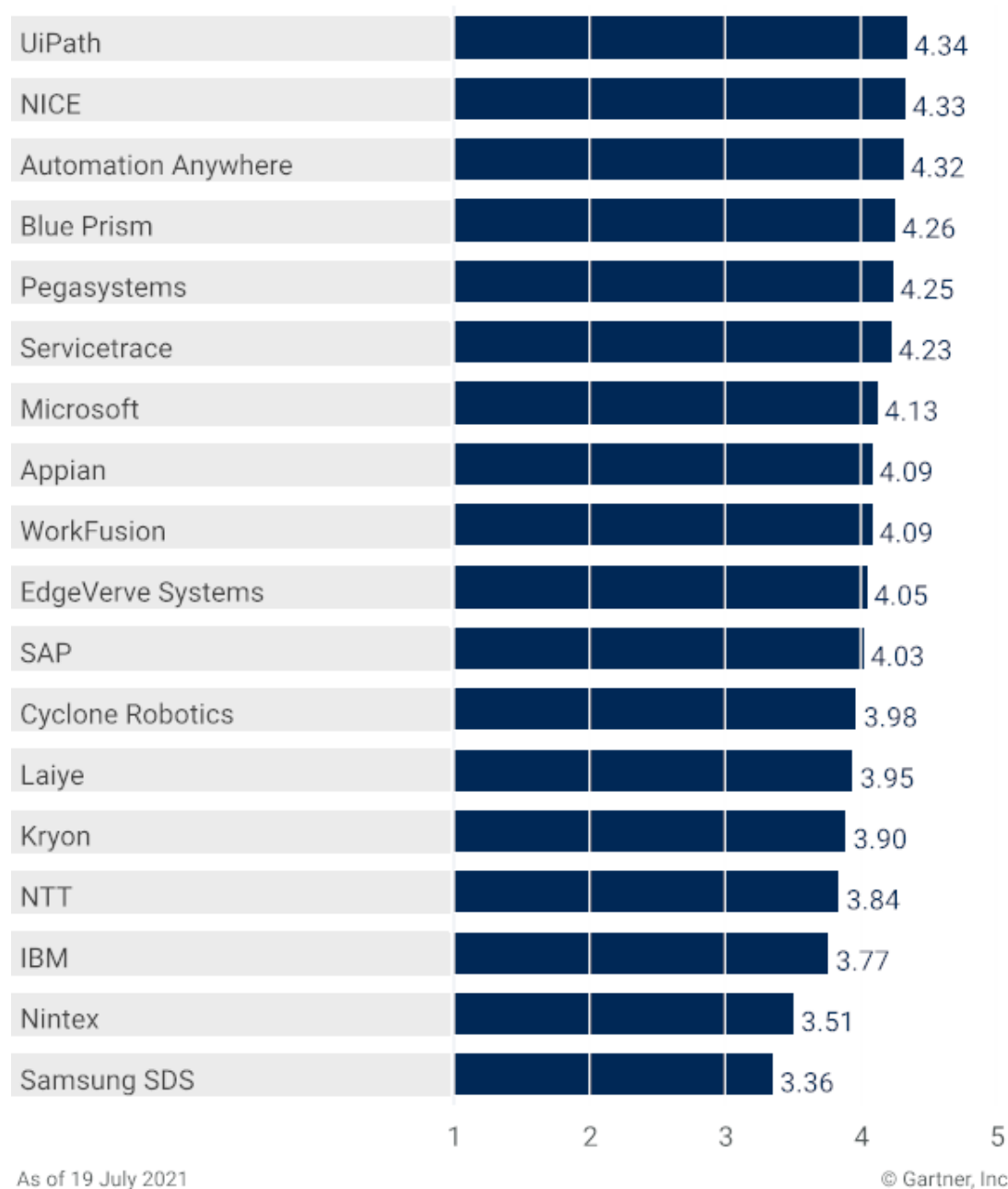
Organizations should seek out RPA solutions that combine UI interactions and APIs to automate processes and to integrate and perform data transcription work between applications. Although we provide five use cases for consideration, organizations can adjust capability weightings to create a more tightly customized analysis based on their unique needs.

Analysis

Critical Capabilities Use-Case Graphics

Vendors' Product Scores for Automate via UI Integration Use Case

Product or Service Scores for Automate via UI Integration

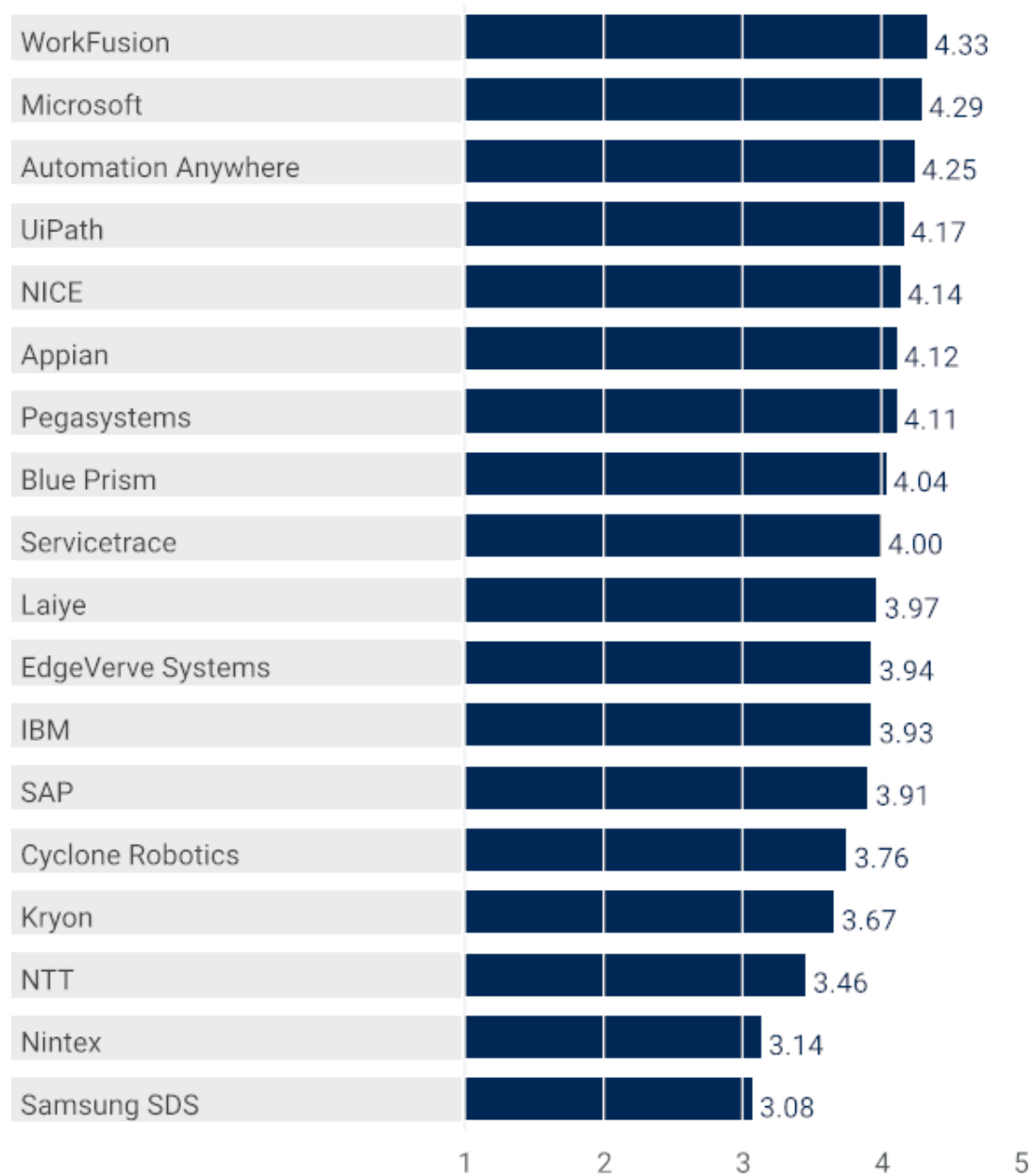


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Source: Gartner (August 2021)

Vendors' Product Scores for Augment Knowledge Workers Use Case

Product or Service Scores for Augment Knowledge Workers



As of 19 July 2021

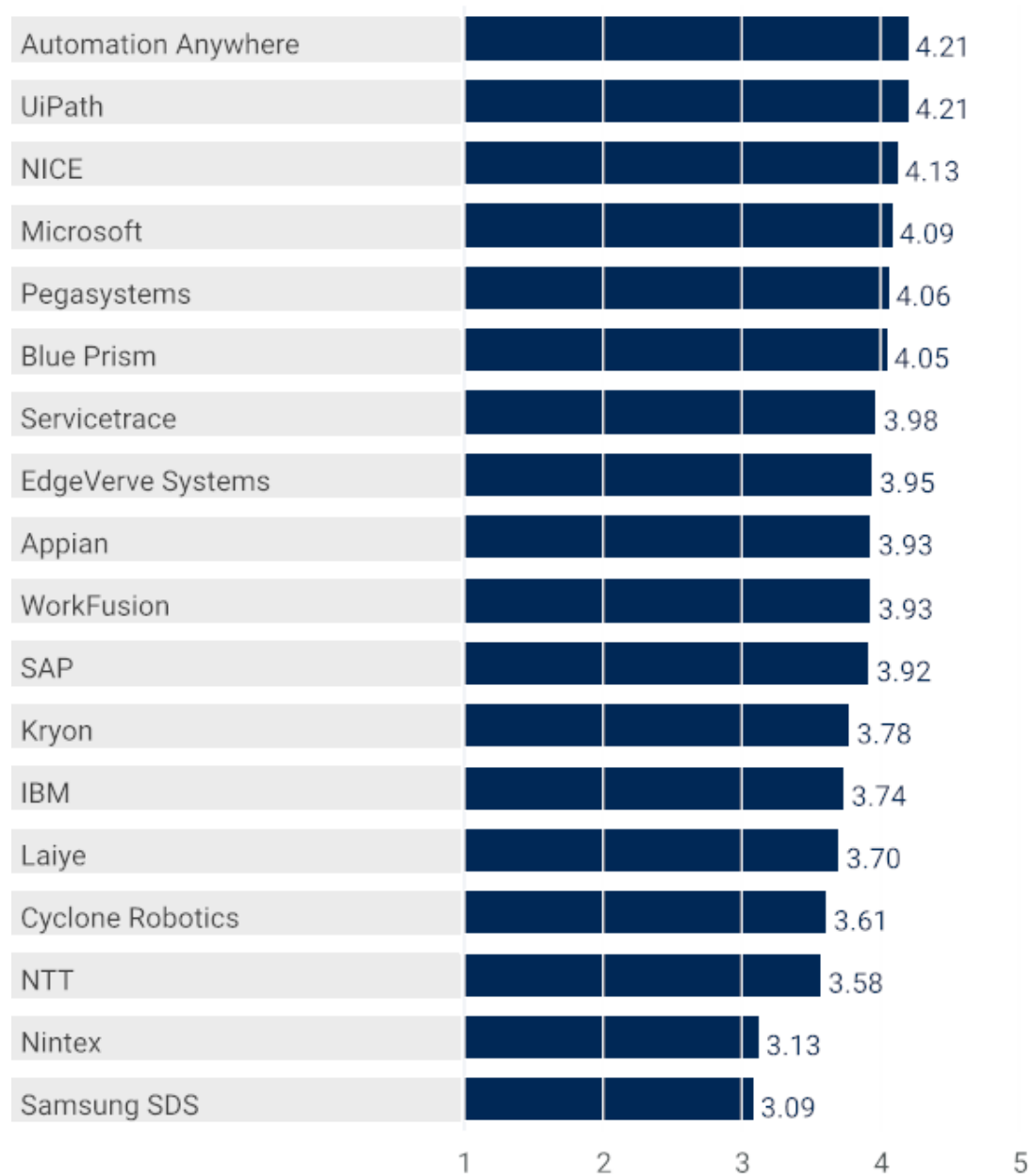
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Vendors' Product Scores for Accelerate Citizen Automation Use Case

Product or Service Scores for Accelerate Citizen Automation



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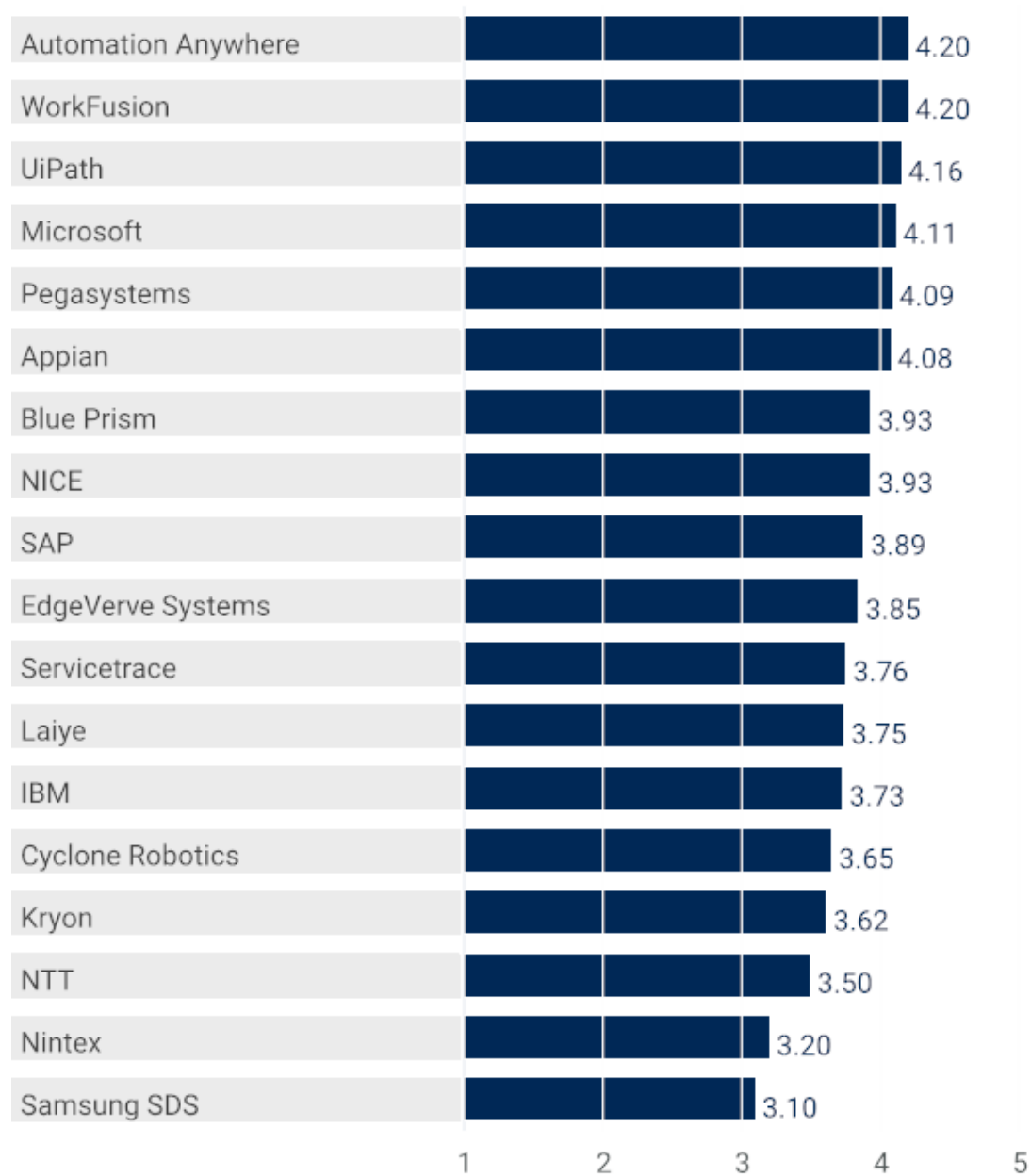
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Vendors' Product Scores for Automate Document Processing Use Case

Product or Service Scores for Automate Document Processing



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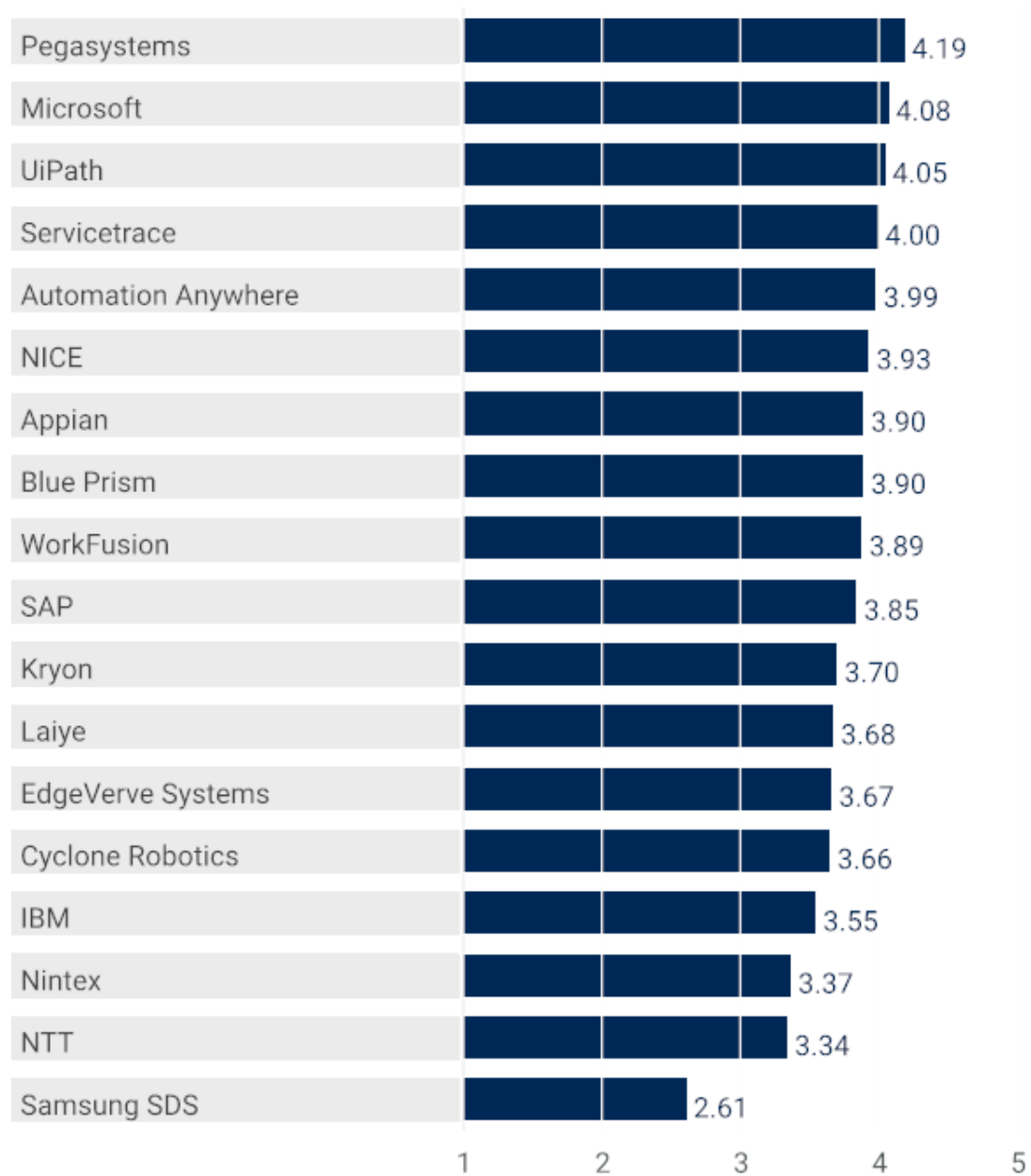
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Vendors' Product Scores for Create Headless Bots Use Case

Product or Service Scores for Create Headless Bots



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Source: Gartner (August 2021)

Vendors

Appian

Appian's RPA product, Appian RPA, is based on the acquisition of Jidoka RPA from Novayre Solutions SL in January 2020. Running as a cloud service, this component complements Appian's broader low-code, multiexperience, business process and decision automation functionality.

Appian's RPA tool is tightly integrated with its intelligent business process management suite (iBPMS) platform to deliver end-to-end full-service automations. Appian differentiates its RPA offering by providing full-stack automation capabilities such as automation planning, prebuilt integration with various AI/ML services (such as image recognition and AutoML) and workflow orchestration.

Appian RPA provides a web-based console with a low-code/no-code drag and drop workflow tool that allows citizen developers to create bots. It also provides a built-in, no-code workflow module called AI Computer Vision. With this functionality, a robotic process can extract text from an image, search for elements on the screen and take full or partial screenshots.

The primary user base of Appian RPA is its existing low-code application platform (LCAP) and iBPMS platform users. Appian RPA offers cloud-only orchestration and is not available as an on-premises service. It does not support the autogeneration of process design documents as well.

Appian's highest use-case score was for augment knowledge workers. It also received excellent scores for the automate via UI integration and automate document processing use cases. It received good scores for the accelerate citizen automation and create headless bot use cases.

Automation Anywhere

Automation Anywhere's RPA product is Automation 360, which includes its core RPA platform, Automation Anywhere Robotic Interface (AARI), along with IQ Bot for intelligent document processing (IDP), Bot Insight for analytics, Discovery Bot for process discovery, a public and private Bot Store, and a native mobile app.

Automation 360 can be installed locally or used as a service. Automation 360 uses a built-for-the-cloud, designed-for-the-web, microservices architecture that is packaged in docker containers and deployed over a Kubernetes cluster. The core platform (shared data pool, administrative functions), its individual capabilities (including AARI and Discovery Bot) and its dependent services (licensing, data/storage and interservice communications) are all broken out as individual components that communicate via APIs.

Automation 360 includes support for multiple operating systems and environments for citizen and professional developers, including web-based management and development environments. Automation Anywhere's AISense product leverages a neural network to automate applications simply based on the images of their front end using Computer-Vision-based automation.

Customers on Automation Anywhere's older product, V11, have expressed challenges with the work and effort of rewriting their existing scripts for Automation 360. AAI has extended the end-of-life date for AAI version 11 to March 2023 from the original date of September 2022, so existing customers will need to evaluate their migration plan in the near future.

Automation Anywhere received the highest score of all vendors for both the accelerate citizen automation and automate document processing use cases. It also received excellent scores for the augment knowledge workers and automate via UI integration use cases, and it received a good score for the create headless bots use case.

Blue Prism

Blue Prism's RPA product is Blue Prism (version 7.0). Blue Prism's RPA offering includes Blue Prism Cloud, Automation Lifecycle Management (ALM), Capture, Interact, Decipher IDP and Digital Exchange.

Blue Prism offers multiple layers of reusability and collaboration across automation development. Blue Prism Capture simplifies the creation of process definitions by combining task extraction and computer vision to autogenerate UI element specifications, step descriptions, process data and process flows.

Blue Prism RPA also offers enterprise-grade deployment and governance controls. It provides modular, systemwide, role-based access controls to allow for segregation of duties between process designers, testers, release managers and operators. It enables access control across 98 different features and 10 core capabilities, including Analytics, Control Room Operations, Automation Design, Alerts and Digital Workers.

Blue Prism does not support personal, attended desktop automations and, to date, has focused on enabling attended automation primarily through its Interact and Service Assist products. Its roadmap includes plans to support digital workers running on the user's desktop, yet connected to its centrally managed environment for auditability and governance.

Blue Prism received its highest use-case score for automate via UI integration. It also received excellent scores for the accelerate citizen automation and augment knowledge workers use cases, and it received good scores for the automate document processing and create headless bots use cases.

Cyclone Robotics

Cyclone Robotics' RPA product, Cyclone Robotic Process Automation, includes Cyclone Studio 2.4, Cyclone Robot 2.4 and Cyclone Controller 2.4. Cyclone Robotics' platform focuses on end-to-end automation.

It also includes supporting components, including Cyclone Intelligent Robotic Interface (CIRI) 2.4, Cyclone Chatbot, Cyclone Automation Center 1.1, Cyclone Automation Marketplace 2.4, Cyclone Data Insights 1.1, Cyclone Mobile Designer 1.0, Cyclone Mobile Assistant 1.0, Cyclone Swift and Cyclone AI Skill Platform 3.0.

Deployed as a mix of software modules and as-a-service elements, Cyclone Robotics' product set works across multiple clouds (including AWS, AliCloud and Tencent Cloud), private cloud, data centers and desktops including Linux, macOS and Windows.

Its key differentiator is its RPA watchdog feature, which automatically generates special "watch-only" RPA scripts for the target RPA process. Users can then run this script periodically via the watchdog bot to scan target applications for version changes. The end users will receive automated notifications to upgrade their RPA scripts if major changes are found in the targeted application.

Cyclone Controller allows users to create and manage watchdog bots, and in most cases it only requires some configurations to enable the watch process. Cyclone RPA's AI capabilities are delivered via services like Cyclone Intelligent Robotic Interface (CIRI) and the Cyclone AI Skill platform. CIRI is an AI-enabled, attended RPA feature available on desktops and mobile devices for automating routine workflows.

Despite Cyclone's approach for end-to-end automation, its RPA product still lacks some common features, including web-based RPA development, data adapters for large-scale data or ERP platforms, integrated process mining, and an RPA runtime in the cloud. It does not support the greenscreen emulators common in IBM mainframe and AS/400 platforms due to lack of customer's ask on this requirement.

Cyclone Robotics received its highest use-case score for automate via UI integration. It received good scores across all other use cases.

EdgeVerve Systems

EdgeVerve's RPA product, AssistEdge, is a unified automation platform with process automation, process discovery and native AI features. In addition to AssistEdge, EdgeVerve's product portfolio includes AssistEdge Discover, AssistEdge Engage, AssistEdge Cloud RPA and the AssistEdge Community Edition.

EdgeVerve AssistEdge platform offers UI for collaboration between citizen developers and professional developers via a live chat option in the platform. This feature provides a two-way conversational interface between the users. Its focus on governance, security, reliability and scalability also demonstrates a deep understanding of the needs of large enterprises.

EdgeVerve lacks a full-scale web development tool and currently offers only a desktop-based client for Automation Studio. Some Gartner customers in Peer Insights have indicated that EdgeVerve's reporting and monitoring capabilities did not meet their requirements, so those customers who have similar reporting and monitoring issues are advised to check for the upgrade to the latest version of EdgeVerve's RPA. EdgeVerve's RPA product may require some effort to configure and deploy, especially for customers who do not use its professional services and support.

EdgeVerve received its highest use-case score for automate via UI integration. It received good scores across all other use cases.

IBM

IBM's RPA product, IBM Robotic Process Automation (which stems from the acquisition of WDG Automation in June 2020), is a multitenant SaaS offering deployed on Microsoft Azure or on-premises.

IBM RPA has a hybrid architecture. The Bot Agent, which is responsible for running bots, is installed on-premises within the organization firewall, while the web portal is served from the cloud. IBM RPA Studio uses a proprietary programming language called WAL to create scripts leveraging an intuitive citizen friendly drag-and-drop interface. From Studio, users can develop ML models, train AI bots and develop digital assistants (phone and chat). Advanced developers have the ability to program using a text editor interface.

IBM RPA bundles a Vision driver, which uses optical character recognition (OCR) and advanced imaging processing and recognition to locate and act upon screen controls, in addition to the standard Windows, Java, SAP and terminal emulator drivers. IBM RPA provides the ability to create natural language processing (NLP)-driven bot assistants that can be used to interact with an end user and trigger bot scripts to complete work.

IBM's RPA product does not offer real-time collaboration between citizen developers and professional developers. It does not support the native process discovery or autogeneration of process design documents or continuous integration/continuous delivery (CI/CD) features and currently lacks integration to an ML platform. Capabilities like disaster recovery and application redundancy for the bots are managed by the customer. IBM RPA as a service provides the RPA server in the cloud, but attended and unattended bots run within the local client environments.

IBM received its highest use-case score for augment knowledge workers. It also received good scores across all other use cases.

Kryon

Kryon's RPA product is the Kryon Full-Cycle Automation Suite, which includes the Kryon RPA platform and Kryon Process Discovery.

The Kryon Full-Cycle Automation Suite combines RPA, process discovery and analytics capabilities. It is available both on-premises and delivered via Amazon Web Services (AWS). Kryon has strong native process discovery technology that leverages AI to discover processes in real time.

Its process discovery component recommends the best path for customers seeking to execute and optimize a process. The integration of process discovery with its core RPA platform aims to translate process discovery output into usable automation scripts.

Kryon lacks native UI app creation capabilities, limiting the ability to create multiple end-user-facing apps that can interact with an RPA bot. Its partnerships with other vendors, such as EasySend, serve as an alternative to native development capabilities. Kryon does not support AutoML capabilities which leaves users to manually train and build ML models.

Kryon received its highest use-case score for automate via UI integration. It also received good scores across all other use cases.

Laiye

Laiye's RPA product, Laiye UiBot (version 5.3), includes Creator for low-code/no-code RPA and AI development, Worker for runtime bot execution, Commander for orchestration across the platform, and Mage for native AI capabilities for robots such as OCR, NLP, IDP, etc.

Laiye offers an integrated intelligent automation platform with a range of capabilities including document processing, chatbot, AI model creation and process discovery. It also provides multi-OS support, an essential feature for the Chinese market (where there is greater diversity of PC operating systems than in other regions).

Laiye provides enterprise-level process templates to ensure that business, system or runtime exceptions are caught and handled properly. It provides users with the ability to toggle between two views — visual view for citizen developers and source code view for professional developers — to simplify collaboration between different user personas.

While Laiye offers role-based access controls and data encryption policies, it lacks some security certifications provided by other RPA software vendors, such as a security operations center (SOC). Its RPA platform does not support features such as a web-based development tool, native process mining, and support for mainframe/green screen emulators; however, these capabilities are on its product roadmap.

Laiye received its highest use-case score for augment knowledge workers. It also received good scores across other use cases.

Microsoft

Microsoft's RPA product, Power Automate Desktop, is augmented by Microsoft's SaaS-based automation platform on Azure. Its RPA capabilities stem from its acquisition of Softomotive in May 2020. Microsoft includes RPA functionality, along with Power BI (analytics), Process Advisor (process mining), Power Apps (LCAP), API connectors and Power Virtual Agents (chatbots).

Microsoft Power Automate Desktop is a SaaS offering with a web-based development interface having the advantages of API-based integration in the automation. Its SaaS service enables citizen developers to easily use the graphical user interface (GUI) to build automations. Power Automate Desktop has a low-code development environment, which includes drag-and-drop functions, prebuilt actions for Excel, Outlook and Exchange, and it supports data extraction from PDF files.

Microsoft Power Automate Desktop's automation scripts reside in the cloud within a given Dataverse environment. The scripts are pushed to the target device upon each run, which removes the need for users to deploy and manage script versions on-premises. This approach also enables strict enforcement of governance rules such as role-based access control and data loss prevention policies.

Microsoft's Power Automate Desktop currently does not support advanced computer vision capabilities that are driven by AI/ML/deep learning to accurately predict and identify changes to screen elements, such as action buttons and textboxes. Microsoft's RPA is heavily dependent on Power Automate Desktop as the RPA runtime, which is Windows-centric. It does not support Power Automate Desktop installation on devices with Arm-based processors or other operating systems.

Microsoft received its highest use-case score for augment knowledge workers. It received excellent scores across all other use cases.

NICE

NICE's RPA product, NICE Robotic Automation, includes NICE Employee Virtual Attendant (NEVA), Automation Finder (Process Discovery), Automation Studio and OCR. NICE's RPA solution is primarily designed for real-time attended automation scenarios, most prevalent in contact center environments. It complements NICE's workforce engagement management software for customer service applications. Its RPA product supports on-premises, SaaS, public and private cloud deployments.

NICE's RPA solution provides a strong object-based connectivity approach that enables resiliency to user experience (UX) changes, such as when elements change locations or attributes. Due to its strong ability to recognize these changes, automations can self-heal when applications change.

NICE Robotic Automation also includes a conversational agent with built-in capabilities for real-time speech guidance, NLP-based text analytics and unsupervised ML via NEVA. It also uses voice analytics to pick up any phrase and analyze next best recommendations. NICE has expanded its capabilities for Automation Finder snapshots and included "click to automate" for citizen developers.

NICE's RPA platform does not include native document processing and process mining capabilities. It also depends on third-party components for OCR, ML and NLP for its IDP, which may require additional effort to configure and integrate. Some Gartner clients indicated that the older version of NICE platform lacked the more intuitive, user-friendly GUI. NICE addressed this concern with its existing Automation Studio tool and as adoption of this tool grows, the customer feedback is expected to improve.

NICE received its highest use-case score for automate via UI integration. It also received excellent scores for the augment knowledge workers and accelerate citizen automation use cases. It received good scores for the create headless bots and automate document processing use cases.

Nintex

Nintex's RPA product, Nintex RPA, provides IT-centric RPA development capabilities to complement its other products, including Microsoft SharePoint and Office 365 workflow automation (Nintex Workflow and Forms), LCAPs, iBPMS and Nintex Gateway — a separately licensed on-premises application that enables Nintex Workflow Cloud to access on-premises resources.

Nintex RPA is derived from the company's acquisition of EnableSoft, maker of Foxtrot RPA, in 2019.

Nintex's broad process management and automation platform provides support for a wide range of scenarios. Nintex's RPA product includes an intuitive web-based interface with strong security controls. Nintex RPA has specific features to automate processes on SAP ERP. It also offers many prebuilt templates and accelerators, and it can support bidirectional workflows between RPA bots and Nintex Workflow. Nintex Promapp is an easy-to-use process mapping and management tool that enables professional developers to visually design processes with line-of-business users.

Nintex RPA lacks many of the native features found in other RPA products. It does not provide native document processing, guided navigations for citizen developers, AI-assisted development, autorecovery of bots, or process discovery and mining capabilities.

Nintex RPA received its highest score in the automate via UI integration use case. It also received good scores across all other use cases.

NTT

NTT's RPA products are WinActor (version 7.1.1), WinDirector (version 2.2), WinActor Manager on Cloud (version 3) and WinActor Cast on Call (version 1).

WinActor Eye provides AI computer vision features to specify the icon or UI to be operated. This feature consists of several basic computer vision functions, including histogram search, image manipulation (such as scaling and/or rotation), image comparison and OCR. WinActor provides more than 700 libraries to operate various web-based applications at UI and API levels. These libraries may be included as standard accessories of WinActor, or distributed on its portal website or on the cloud.

WinActor Cast on Call is a pay-as-you-go service that serves as an alternative to purchasing ready-made scenarios for automation. In this service, many standard scenarios are offered to users, who can choose scenarios and can operate them for business process automation.

NTT's RPA product does not support features that are available in many other vendors' RPA products, such as native document processing, native AI/ML and support for real-time collaboration between developers. Customers may need NTT's and/or partners' (either paid or free-of-charge) support services for DR plan with SLAs, third-party version management, test automation and CI/CD tools.

NTT received its highest use-case score for automate via UI integration. It also received good scores across all other use cases.

Pegasystems

Pegasystems RPA product, Pega Robotic Automation, is part of the Pega Infinity platform, a tool which includes a design studio, an orchestration manager and a bot manager for attended and unattended automations. Pega Infinity is usually purchased for its end-to-end process automation and orchestration, and its RPA augments these capabilities. The Pega Robot Studio IDE used for unattended screen UI automations is currently on-premises only; all other automations are built in the cloud.

Pega Infinity delivers end-to-end process automation capabilities. Pegasystems enables developers to operate in “layers” so they can reuse these objects and components across applications. Pega Infinity leverages its “X-ray Vision” technology, an AI-powered tool used for dynamic control identification that enables robots to tolerate a degree of change without requiring refactoring when applications change. The platform also provides strong process orchestration capabilities, and prebuilt AI/ML models for decision automation. In 2020, Pega added an autobalancing feature to automatically move robots between workgroups and prioritize work across these groups.

Pega Infinity is primarily targeted at large enterprises, with premium features and pricing. To achieve resilient and enterprise-scaled automations, customers usually need to commit a significant amount of time, skills and funding to configure, integrate and develop applications. Its RPA platform lacks the tactical focus of other RPA products. Customers focused on quick and targeted use cases may find simpler alternatives to Pega Infinity at a lower cost.

Pega received the highest use-case score of all vendors for create headless bots. It received excellent scores across all other use cases.

Samsung SDS

Samsung SDS’s RPA product is Brity RPA. It is composed of a set of client programs (RPA Bot and RPA Designer), which run on the user’s desktop OS; and RPA Orchestrator, which runs on the Linux OS. Samsung SDS also provides a SaaS offering.

Brity RPA provides a designer GUI where users can develop automation scenarios using charts in a Windows OS environment. It includes a chatbot, native AI and a web-based OCR portal for image and document recognition. Samsung SDS also offers prebuilt bots and reusable libraries via its developer portal and bot market.

Currently, Brity RPA process discovery is available for SaaS service in beta version, but it offers limited or no support for automated discovery and analysis of customer interactions, bot autorecovery and CI/CD support. Samsung SDS offers a limited number of prebuilt connectors for applications from vendors such as Oracle and SAP, or for Microsoft Office 365.

Samsung SDS's Brity RPA received its highest score for automate via UI integration while limited support for some key features, as mentioned above, resulted in lower scores for other use cases.

SAP

SAP's RPA product is SAP Intelligent Robotic Process Automation. It integrates tightly with SAP Workflow Management and SAP Conversational AI to deliver end-to-end process management and automation. SAP Intelligent RPA is available as a SaaS offering on the SAP Business Technology Platform, as part of the SAP Extension Suite.

SAP Intelligent RPA Cloud Studio supports all developer personas, with a particular focus on citizen developers. It provides configuration, orchestration, monitoring, and triggering and notification features. SAP Intelligent Robotic Process Automation's key differentiators are its tight integration with SAP's software ecosystems, including capabilities for business process management, workflow, rule management, and process visibility and flexibility.

SAP Intelligent RPA does not provide any on-premises orchestration component (cloud only), and it does not support containerization or a bot runtime on cloud. However, SAP does include these capabilities on its product roadmap. It currently does not support common RPA features such as bot autorecovery and autoscaling of bots from its cloud orchestrator; the platform also cannot detect and fix broken bots at runtime and resolve issues automatically.

SAP received its highest use-case score for automate via UI integration. It received good scores across all other use cases.

Servicetrace

Servicetrace's RPA product, XceleratorOne (X1), is focused on delivering a secure, end-to-end environment that combines RPA, process management, BPM, AI and task-mining capabilities in a single offering.

Servicetrace X1 offers a broad set of features, including AI/ML-based native OCR and computer vision with pattern recognition, intelligent process recorder, an embedded BPM engine (powered by Camunda), Native test automation, Patented vertical scaling, ROI analytics and an agile Kanban board.

Servicetrace X1 automation development follows a multiphase model, where the web-based development environment begins in the server and then uses either the Modeler (for creating the BPM model) or the Process Recorder (for recording the process). X1 implements automations using Business Process Model and Notation (BPMN) 2.0. Servicetrace provides a self-building bot capability, which autorecords multiple user execution actions (e.g., mouse actions and keystrokes) to create an editable workflow and a multipath BPMN design.

However, Servicetrace's X1 product does not provide integrated native document processing, prebuilt ML models to classify attributes or doc source types. Although Servicetrace provides an RPA-as-a-service feature via Microsoft Azure, it does not offer containerization and multicloud support for orchestrator.

Servicetrace received its highest use-case score for automate via UI integration. It received an excellent score for the create headless bots and augment knowledge workers use cases. It also received good scores for the accelerate citizen automation and automate document processing use cases.

UiPath

UiPath's RPA product, the UiPath Automation Platform (version 2021.4), has the Studio, Orchestrator and Robot components at its core. The Platform also provides a wide range of capabilities, including Automation Hub to manage the development pipeline, process and task mining, document processing, AI Center, native test automation and UiPath Apps for low-code application development.

UiPath has implemented a governance tool, Automation Ops, which allows centralized management and controls for citizen development and attended user programs. It also provides single source deployment for various types of Studio products, and various types of users. UiPath Apps is a web-based, drag-and-drop interface that enables both professional and citizen developers to create custom, low-code UX front ends for their automations. UiPath integrates with any type of application, including native integration with ERPs and CRMs.

UiPath lacks a real-time collaboration feature between citizen developers and professional developers. However, a file that is created by a citizen developer in StudioX can be taken over by a professional developer, who can then open and work on the file in Studio or Studio Pro. Also, UiPath does not support guided navigation for development. UiPath still lacks a web-based development environment, but UiPath does offer cloud orchestration capabilities and plans to deliver a web-based developer environment soon.

UiPath received the highest use-case score of all vendors for both automate via UI integration and accelerate citizen automation. It also received excellent scores across all other use cases.

WorkFusion

WorkFusion's RPA product is WorkFusion Intelligent Automation Cloud. It is a cloud-based service that provides an integrated, end-to-end automation platform with native AI and automated ML and NLP capabilities.

WorkFusion Intelligent Automation Cloud includes an integrated BPM canvas that allows developers to coordinate their RPA efforts, with clear looping and ML elements. Its native continuous learning capability can detect and fix broken ML bots with no human intervention. WorkFusion provides a strong built-in ML capability that can perform a wide array of ML tasks across most RPA use cases. WorkFusion offers prepackaged, pretrained ML models designed for specific use cases, such as loan processing, end-customer account creation and claims intake. WorkFusion's key differentiators are its ML capabilities and its focus for banking, finance and insurance use cases.

WorkFusion does not support native discovery and analysis of customer interactions, but enables easy integration with discovery tools for automation development. It also lacks automated process design document (PDD) generation, but enables integration with external tools. Customers also mentioned that WorkFusion's platform required complex, effort-intensive infrastructure maintenance for all servers, app hubs and nodes.

WorkFusion received the highest score of all vendors for both the augment knowledge workers and automate document processing use cases. It also received an excellent score for the automate via UI integration use case. It received good scores for the accelerate citizen automation and create headless bots use cases.

Context

The RPA software market remains one of the fastest-growing segments in the enterprise software market. Despite COVID-19 uncertainties, the RPA market grew at a rate of 38.9% in 2020, outpaced all other software markets and greatly exceeded the 8.9% growth rate of the overall enterprise software market in 2020. ¹

We have observed three trends in the RPA market:

- **Hyperautomation.** Software engineering leaders are scaling beyond tactical automation to deliver greater efficiency, efficacy and business agility with increased focus on hyperautomation. Hyperautomation is a discipline that orchestrates several technologies to deliver end-to-end, intelligent and event-driven automation. RPA complements adjacent technologies to support the goals of hyperautomation, especially for business technologists who are not in IT.
- **Expanded product capabilities.** RPA is moving beyond orchestrated screen scraping technology to rapidly evolve into a larger automation platform with embedded process discovery, intelligent document processing, AI/ML, low-code development and complex workflow orchestration. RPA on the cloud is gaining momentum by offering composable automation features as packaged business capabilities, including headless bots, serverless bots, nanobots and microbots.
- **New pricing models.** As more RPA vendors begin to offer consumption-based pricing, an increasing number of small and midsize organizations can afford to adopt RPA. Many SaaS providers are entering the RPA market, offering enterprise-grade automation platforms with more flexible pricing models — including per-second or per-minute utilization of bots. Many vendors also include unlimited bots at a fixed price or offer free RPA starter packs.

Product/Service Class Definition

Gartner defines robotic process automation (RPA) as a licensed software platform for building scripts to integrate any application via user interface and a control dashboard/orchestrator. RPA platforms automate repetitive, rule-based predictable tasks.

RPA software platforms typically use a combination of UI interactions and APIs to integrate and perform data transcription work between different applications such as:

- ERPs

- CRMs
- Client/server systems
- Mainframes
- Web
- Mobile
- Other applications

An RPA platform operates by mapping a human process or task in the RPA software language for the software script to follow, with runtime (commonly referred to as a “robot” or “bot”) allocated to execute the script by a control dashboard/orchestrator. These bots could be developed via programming or by leveraging intuitive low-code/no-code GUIs native to the RPA software platform.

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

- Enable citizen developers to build automation scripts
- Integrate with enterprise applications, primarily via UI scraping
- Provide orchestration and administration capabilities including configuration, monitoring and security

Some RPA platforms offer advanced capabilities such as:

- Intelligent document processing
- Auto-ML and NLP libraries with drag-and-drop models
- Process mining and discovery

We also see some emerging capabilities such as:

- API connectors that can be orchestrated along with UI scrapers
- Low-code UX to build UI front ends for bots

- Headless or serverless orchestration of automation workflows also described as “headless bots”

Critical Capabilities Definition

Automation Design and Development

Ability to create automation scripts with GUIs for both citizen developers and professional developers.

UI Apps Creator For Automation

Ability to create multiple end-user-facing apps (Such as mobile, web and voice apps) That can interact with bots.

UI Integration

Ability to integrate with applications via UI interaction.

Self Healing Bots/Robots

Ability to support UI resilience such that bots do not fail when the underlying application’s UI changes.

Serverless Automation and API

Ability to support API and other connectors to expose automation outside the native RPA platform (includes support for industrialized microservices, microprocesses and/or microapps and microbots).

Orchestrator/Control Panel

Support for orchestration and administration of tasks and workflows, initial configurations of runtime, postproduction monitoring and management of RPA runtime bots.

Process Discovery and Mining

Native ability to include task or process mining and discovery to identify optimal processes for automation and to autogenerate workflow design for citizen developers.

Intelligent Document Processing

Ability to leverage OCR to extract unstructured data and apply in-built ML classification models to standardize and structure the data for consumption of bots.

Auto-ML/NLP

Ability to apply reusable and retrainable AI/ML and NLP components in a business context such as fraud detection, sentiment analysis and risk modeling.

SDLC and Multipersona Support

Ability to support different personas within an organization to enable collaboration and co-creation across the automation life cycle (e.g., version management, deployment, testing, etc.).

Hosting and Cloud Capabilities

Ability to support different hosting options, such as on-premises, virtual machines and scalable development, and to deliver on local, private or public cloud services with associated ecosystems.

DR and High Availability

Ability to support business continuity and resilience with defined recovery point objectives (RPOs) and recovery time objectives (RTOs).

Security & Compliance

Native ability to support data and application security, separation of duty, access provisioning and regulatory compliance (including regulations such as SOC 2, FedRAMP and PCI).

Platform Ecosystem

Ability to manage ecosystems and partner communities (including clients, suppliers and service providers) and access to services via tools like community portals and bot stores.

Use Cases

Automate via UI Integration

Automation of unattended processes or tasks involving data transcription between applications where no back-end integration or API is available.

Some important characteristics of this use case include:

- Data transfer and/or matching between systems.
- Systems can be legacy systems, enterprise apps or productivity apps such as Excel.
- Augmented computer vision and UX resilience.
- Autorecovery of bots.
- Integration via UI/screen scraping.

Augment Knowledge Workers

Enhancing the productivity of knowledge workers with attended automation, complex decision making and augmented AI/ML capabilities.

Some important characteristics of this use case include:

- Assisting by providing contextual information to support the customer case.
- Assisting by providing advice on next best actions or related scenarios.
- Delivering output to applications or steering actions on a website or chatbot.
- If available, demonstrating the use of NLP and ML as a part of the solution. If chatbot integration is available, show how this is configured and how users interact with it.

Accelerate Citizen Automation

Allow citizen developers to rapidly build automation scripts/bots using low-code/no-code development and accelerator templates.

Some important characteristics of this use case include:

- How intuitive the developer UX is.

- Guided navigation with visual development experience for citizen developers.
- Integrated process mining and process discovery.
- Collaboration between multiple developer personas.

Automate Document Processing

Automation of unstructured or semistructured data ingestion from documents to prepare for bot consumption by converting them to a standardized and structured format, reducing repetitive work.

Some important characteristics of this use case include:

- Ability to leverage AI capabilities to classify (i.e., extract information from handwritten documents) emails and other documents and to make it available for easy consumption.
- Citizen-developer-friendly classification models.
- Options to select different OCR.
- Ease of integration and configuration.

Create Headless Bots

Ability to create composable, reusable and serverless automation components, exposed via APIs or other methods and consumed by other orchestration engines, bots or apps.

Vendors Added and Dropped

Added

- Appian
- Cyclone Robotics
- IBM
- Kryon
- Laiye
- Nintex

Dropped

- AntWorks
- HelpSystems
- Jacada
- Kofax

Inclusion Criteria

To qualify for inclusion, vendors must:

- Demonstrate an **active go-to-market strategy for its RPA platform** as demonstrated on its website, Gartner Peer Insights forum, social media and marketing that explicitly mentions RPA.
- Offer a platform that, at a minimum, supports:
 - Design, development and deployment of UI interaction scripts/bots.
 - Orchestration of bots and overall workflow (a central orchestrator or control panel/administrative component is a must).
 - Automation capabilities for desktop, virtual machine (VM) and server/cloud (not just any one environment; desktop and VM support is a must).
 - Both attended and unattended forms of automation (attended and unattended bots).
 - Ability to store data in a database native to the RPA platform.

The platform must also have at least two of the following:

- **Augmented citizen developer capabilities.** Demonstrate built-in, AI-driven smart workflow development capabilities with guided navigation or chatbot-assisted features to build usable bots without active scripting.
- **Process discovery/task mining.** Demonstrate native process discovery/task mining capabilities to augment citizen development and automated process design doc (PDD) generation (not via integration with third-party tools).

- **Intelligent document processing (IDP).** Demonstrate built-in IDP capabilities with prebuilt, easily trainable AI/ML models that can intelligently classify and standardize data extracted by OCR (integration with third-party OCR is allowed, but the IDP must be native).
- **API and integration support (other than UI interaction).** Demonstrate native API and integration support to create serverless automation objects that can be integrated with any orchestration engine.

Lastly, the vendor must have at least one of the following:

- \$15 million (in U.S. dollars) annual revenue in 2020 from RPA software and/or subscription licensing.*
- \$10 million (in U.S. dollars) annual revenue with at least 50% YoY growth in 2020 from RPA software and/or subscription licensing.* And have at least 300 existing paying enterprise customer organizations (logos)* in total for RPA licensed software and subscriptions in 2020, with a minimum 100 paying logos each in at least two of the following geographies:
 - North America
 - South America
 - Europe
 - Middle East and Africa
 - Asia/Pacific, including Japan and China

** Annual revenue, growth and customer numbers as applicable to criteria A, B and C imply revenue, YoY growth and total number of customers as of 2020 from RPA software and/or subscription licensing only (not including professional services, maintenance and other non-RPA software licenses).*

Table 1: Weighting for Critical Capabilities in Use Cases

(Enlarged table in Appendix)

Critical Capabilities ↓	Automate via UI Integration ↓	Augment Knowledge Workers ↓	Accelerate Citizen Automation ↓	Automate Document Processing ↓	Create Headless Bots ↓
Automation Design and Development	22%	8%	15%	10%	4%
UI Apps Creator For Automation	3%	5%	10%	0%	0%
UI Integration	19%	15%	9%	9%	10%
Self Healing Bots/Robots	10%	3%	2%	3%	7%
Serverless Automation and API	0%	2%	0%	9%	40%
Orchestrator/Control Panel	10%	2%	6%	10%	4%
Process Discovery and Mining	1%	2%	20%	0%	0%
Intelligent Document Processing	0%	10%	5%	25%	0%
Auto-ML/NLP	2%	35%	9%	15%	0%
SDLC and Multipersona Support	10%	3%	7%	5%	5%
Hosting and Cloud Capabilities	5%	2%	0%	0%	25%
DR and High Availability	5%	0%	0%	4%	0%
Security & Compliance	8%	4%	7%	0%	5%
Platform Ecosystem	5%	9%	10%	10%	0%
As of 19 July 2021					

Source: Gartner (August 2021)

This methodology requires analysts to identify the critical capabilities for a class of products/services. Each capability is then weighted in terms of its relative importance for specific product/service use cases.

Critical Capabilities Rating

Each of the products/services that meet our inclusion criteria has been evaluated on the critical capabilities on a scale from 1.0 to 5.0.

Table 2: Product/Service Rating on Critical Capabilities

(Enlarged table in Appendix)

Critical Capabilities	Appian	Automation Anywhere	Blue Prism	Cyclone Robotics	EdgeVerve Systems	IBM	Kryon	Laiye	Microsoft	NICE	Nintex	NTT	Pegasystems	Samsung SDS	SAP	ServiceTrace	UiPath	WorkFusion
Automation Design and Development	4.2	4.5	4.3	4.0	4.1	3.8	4.2	3.9	4.0	4.3	3.8	4.0	4.0	4.2	4.2	4.1	4.4	4.0
UI Apps Creator For Automation	4.3	4.0	3.8	3.7	3.9	3.0	3.0	3.5	4.1	3.8	2.2	2.6	4.0	2.0	3.0	3.5	4.1	3.7
UI Integration	3.8	4.4	4.4	4.3	4.4	4.0	4.3	4.3	4.2	4.6	4.3	4.2	4.4	3.3	4.5	4.7	4.5	4.3
Self Healing Bots/Robots	4.0	4.4	4.3	4.2	4.0	3.5	3.6	4.1	3.7	4.4	2.6	3.6	4.4	2.4	3.5	4.4	4.3	4.0
Serverless Automation and API	3.8	3.5	3.3	3.4	3.4	3.4	3.5	3.3	3.8	3.5	3.4	3.0	4.0	2.0	3.7	3.6	3.7	3.6
Orchestrator/ Control Panel	4.0	4.3	4.4	4.1	4.0	3.8	3.9	3.9	3.6	4.2	3.8	4.1	4.5	3.8	3.9	4.6	4.4	4.2
Process Discovery and Mining	3.0	3.9	3.6	2.6	3.8	3.7	4.0	3.0	3.7	3.9	2.0	3.1	3.6	2.4	3.8	3.9	4.0	3.0
Intelligent Document Processing	3.9	4.1	3.4	2.9	3.6	3.2	3.1	3.0	4.0	3.0	2.4	2.9	3.7	2.7	3.6	3.0	3.9	4.2
Auto-ML/NLP	4.3	4.2	3.9	3.7	3.9	4.4	3.5	4.3	4.6	4.2	2.5	3.0	4.0	3.0	3.7	4.2	4.0	4.8
SDLC and Multipersona Support	4.3	4.3	4.1	3.6	3.9	3.8	3.8	4.0	4.4	4.3	3.2	4.0	4.3	3.0	3.6	4.6	4.3	4.2
Hosting and Cloud Capabilities	3.9	4.3	4.3	3.5	3.5	3.5	3.7	3.9	4.5	4.0	3.0	3.0	4.3	2.7	3.8	3.9	4.2	4.0
DR and High Availability	4.5	3.9	3.7	3.9	4.0	3.8	3.4	3.8	4.4	4.4	2.0	2.9	4.0	3.2	3.7	3.0	4.4	3.6
Security & Compliance	4.1	4.0	4.3	3.9	4.0	3.6	3.6	3.2	4.6	4.2	3.6	3.9	4.2	3.4	4.4	4.5	4.0	4.1
Platform Ecosystem	4.4	4.5	4.5	4.0	3.8	4.0	3.7	4.2	4.3	4.5	4.5	4.4	4.5	3.5	4.5	2.8	4.5	4.2
As of 19 July 2021																		

Source: Gartner (August 2021)

Table 3 shows the product/service scores for each use case. The scores, which are generated by multiplying the use-case weightings by the product/service ratings, summarize how well the critical capabilities are met for each use case.

Table 3: Product Score in Use Cases

(Enlarged table in Appendix)

Use Cases	Appian	Automation Anywhere	Blue Prism	Cyclone Robotics	EdgeVerve Systems	IBM	Kryon	Laiye	Microsoft	NICE	Nintex	NTT	Pegasystems	Samsung SDS	SAP	ServiceTrace	UiPath	WorkFusion
Automate via UI Integration	4.09	4.32	4.26	3.98	4.05	3.77	3.90	3.95	4.13	4.33	3.51	3.84	4.25	3.36	4.03	4.23	4.34	4.09
Augment Knowledge Workers	4.12	4.25	4.04	3.76	3.94	3.93	3.67	3.97	4.29	4.14	3.14	3.46	4.11	3.08	3.91	4.00	4.17	4.33
Accelerate Citizen Automation	3.93	4.21	4.05	3.61	3.95	3.74	3.78	3.70	4.09	4.13	3.13	3.58	4.06	3.09	3.92	3.98	4.21	3.93
Automate Document Processing	4.08	4.20	3.93	3.65	3.85	3.73	3.62	3.75	4.11	3.93	3.20	3.50	4.09	3.10	3.89	3.76	4.16	4.20
Create Headless Bots	3.90	3.99	3.90	3.66	3.67	3.55	3.70	3.68	4.08	3.93	3.37	3.34	4.19	2.61	3.85	4.00	4.05	3.89
As of 19 July 2021																		

Source: Gartner (August 2021)

To determine an overall score for each product/service in the use cases, multiply the ratings in Table 2 by the weightings shown in Table 1.

Evidence

¹ [Market Share: Application Infrastructure and Middleware, Worldwide, 2020](#)

² Gartner's 2021 Hyperautomation study was conducted online during March 2021 among 558 business technologists from North America (n = 226), Europe (n = 146), LATAM (n = 78) and Asia/Pacific (n = 108).

To be qualified to answer the survey, respondents would need to:

- Have created, built or coded analytics or technology capabilities on their own or with input from others in the last 12 months.

- Have used at least one of the tools to produce analytics or technology capabilities for work. Twenty-one tools were considered under four categories: application development tools, automation tools, integration tools, and data science and AI tools.

Results of this study do not represent global findings or the market as a whole, but reflect sentiment of the respondents and companies surveyed.

Critical Capabilities Methodology

This methodology requires analysts to identify the critical capabilities for a class of products or services. Each capability is then weighted in terms of its relative importance for specific product or service use cases. Next, products/services are rated in terms of how well they achieve each of the critical capabilities. A score that summarizes how well they meet the critical capabilities for each use case is then calculated for each product/service.

"Critical capabilities" are attributes that differentiate products/services in a class in terms of their quality and performance. Gartner recommends that users consider the set of critical capabilities as some of the most important criteria for acquisition decisions.

In defining the product/service category for evaluation, the analyst first identifies the leading uses for the products/services in this market. What needs are end-users looking to fulfill, when considering products/services in this market? Use cases should match common client deployment scenarios. These distinct client scenarios define the Use Cases.

The analyst then identifies the critical capabilities. These capabilities are generalized groups of features commonly required by this class of products/services. Each capability is assigned a level of importance in fulfilling that particular need; some sets of features are more important than others, depending on the use case being evaluated.

Each vendor's product or service is evaluated in terms of how well it delivers each capability, on a five-point scale. These ratings are displayed side-by-side for all vendors, allowing easy comparisons between the different sets of features.

Ratings and summary scores range from 1.0 to 5.0:

1 = Poor or Absent: most or all defined requirements for a capability are not achieved

2 = Fair: some requirements are not achieved

3 = Good: meets requirements

4 = Excellent: meets or exceeds some requirements

5 = Outstanding: significantly exceeds requirements

To determine an overall score for each product in the use cases, the product ratings are multiplied by the weightings to come up with the product score in use cases.

The critical capabilities Gartner has selected do not represent all capabilities for any product; therefore, may not represent those most important for a specific use situation or business objective. Clients should use a critical capabilities analysis as one of several sources of input about a product before making a product/service decision.

Document Revision History

[Critical Capabilities for Robotic Process Automation - 1 September 2020](#)

[Critical Capabilities for Robotic Process Automation - 3 December 2019](#)

Recommended by the Authors

Some documents may not be available as part of your current Gartner subscription.

[Magic Quadrant for Robotic Process Automation](#)

[How Products and Services Are Evaluated in Gartner Critical Capabilities](#)

[Tool: Robotic Process Automation Opportunity Spotter](#)

[Competitive Landscape: Robotic Process Automation Software](#)

[Considerations for Implementing Robotic Process Automation](#)

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Table 1: Weighting for Critical Capabilities in Use Cases

Critical Capabilities	↓ Automate via UI Integration	↓ Augment Knowledge Workers	↓ Accelerate Citizen Automation	↓ Automate Document Processing	↓ Create Headless Bots
Automation Design and Development	22%	8%	15%	10%	4%
UI Apps Creator For Automation	3%	5%	10%	0%	0%
UI Integration	19%	15%	9%	9%	10%
Self Healing Bots/Robots	10%	3%	2%	3%	7%
Serverless Automation and API	0%	2%	0%	9%	40%
Orchestrator/Control Panel	10%	2%	6%	10%	4%
Process Discovery and Mining	1%	2%	20%	0%	0%
Intelligent Document Processing	0%	10%	5%	25%	0%
Auto-ML/NLP	2%	35%	9%	15%	0%

Critical Capabilities	↓ Automate via UI Integration	↓ Augment Knowledge Workers	↓ Accelerate Citizen Automation	↓ Automate Document Processing	↓ Create Headless Bots	↓
SDLC and Multipersona Support	10%	3%	7%	5%	5%	
Hosting and Cloud Capabilities	5%	2%	0%	0%	25%	
DR and High Availability	5%	0%	0%	4%	0%	
Security & Compliance	8%	4%	7%	0%	5%	
Platform Ecosystem	5%	9%	10%	10%	0%	
As of 19 July 2021						

Source: Gartner (August 2021)

Table 2: Product/Service Rating on Critical Capabilities

<i>Critical Capabilities</i>	<i>Appian</i>	<i>Automation Anywhere</i>	<i>Blue Prism</i>	<i>Cyclone Robotics</i>	<i>EdgeVerve Systems</i>	<i>IBM</i>	<i>Kryon</i>	<i>Laiye</i>	<i>Microsoft</i>	<i>NICE</i>	<i>Nintex</i>	<i>NTT</i>	<i>Pegasystems</i>	<i>Samsung SDS</i>	<i>SAP</i>	<i>Servicetrace</i>	<i>UiPath</i>	<i>WorkFusion</i>
Automation Design and Development	4.2	4.5	4.3	4.0	4.1	3.8	4.2	3.9	4.0	4.3	3.8	4.0	4.0	4.2	4.2	4.1	4.4	4.0
UI Apps Creator For Automation	4.3	4.0	3.8	3.7	3.9	3.0	3.0	3.5	4.1	3.8	2.2	2.6	4.0	2.0	3.0	3.5	4.1	3.7
UI Integration	3.8	4.4	4.4	4.3	4.4	4.0	4.3	4.3	4.2	4.6	4.3	4.2	4.4	3.3	4.5	4.7	4.5	4.3
Self Healing Bots/Robots	4.0	4.4	4.3	4.2	4.0	3.5	3.6	4.1	3.7	4.4	2.6	3.6	4.4	2.4	3.5	4.4	4.3	4.0
Serverless Automation and API	3.8	3.5	3.3	3.4	3.4	3.4	3.5	3.3	3.8	3.5	3.4	3.0	4.0	2.0	3.7	3.6	3.7	3.6

Orchestrator/ Control Panel	4.0	4.3	4.4	4.1	4.0	3.8	3.9	3.9	3.6	4.2	3.8	4.1	4.5	3.8	3.9	4.6	4.4	4.2
Process Discovery and Mining	3.0	3.9	3.6	2.6	3.8	3.7	4.0	3.0	3.7	3.9	2.0	3.1	3.6	2.4	3.8	3.9	4.0	3.0
Intelligent Document Processing	3.9	4.1	3.4	2.9	3.6	3.2	3.1	3.0	4.0	3.0	2.4	2.9	3.7	2.7	3.6	3.0	3.9	4.2
Auto-ML/NLP	4.3	4.2	3.9	3.7	3.9	4.4	3.5	4.3	4.6	4.2	2.5	3.0	4.0	3.0	3.7	4.2	4.0	4.8
SDLC and Multipersona Support	4.3	4.3	4.1	3.6	3.9	3.8	3.8	4.0	4.4	4.3	3.2	4.0	4.3	3.0	3.6	4.6	4.3	4.2
Hosting and Cloud Capabilities	3.9	4.3	4.3	3.5	3.5	3.5	3.7	3.9	4.5	4.0	3.0	3.0	4.3	2.7	3.8	3.9	4.2	4.0
DR and High Availability	4.5	3.9	3.7	3.9	4.0	3.8	3.4	3.8	4.4	4.4	2.0	2.9	4.0	3.2	3.7	3.0	4.4	3.6
Security & Compliance	4.1	4.0	4.3	3.9	4.0	3.6	3.6	3.2	4.6	4.2	3.6	3.9	4.2	3.4	4.4	4.5	4.0	4.1
Platform Ecosystem	4.4	4.5	4.5	4.0	3.8	4.0	3.7	4.2	4.3	4.5	4.5	4.4	4.5	3.5	4.5	2.8	4.5	4.2
As of 19 July 2021																		

Source: Gartner (August 2021)

Table 3: Product Score in Use Cases

<i>Use Cases</i>	<i>Appian</i>	<i>Automation Anywhere</i>	<i>Blue Prism</i>	<i>Cyclone Robotics</i>	<i>EdgeVerve Systems</i>	<i>IBM</i>	<i>Kryon</i>	<i>Laiye</i>	<i>Microsoft</i>	<i>NICE</i>	<i>Nintex</i>	<i>NTT</i>	<i>Pegasystems</i>	<i>Samsung SDS</i>	<i>SAP</i>	<i>Servicetrace</i>	<i>UiPath</i>	<i>WorkFusion</i>
Automate via UI Integration	4.09	4.32	4.26	3.98	4.05	3.77	3.90	3.95	4.13	4.33	3.51	3.84	4.25	3.36	4.03	4.23	4.34	4.09
Augment Knowledge Workers	4.12	4.25	4.04	3.76	3.94	3.93	3.67	3.97	4.29	4.14	3.14	3.46	4.11	3.08	3.91	4.00	4.17	4.33
Accelerate Citizen Automation	3.93	4.21	4.05	3.61	3.95	3.74	3.78	3.70	4.09	4.13	3.13	3.58	4.06	3.09	3.92	3.98	4.21	3.93
Automate Document Processing	4.08	4.20	3.93	3.65	3.85	3.73	3.62	3.75	4.11	3.93	3.20	3.50	4.09	3.10	3.89	3.76	4.16	4.20
Create Headless Bots	3.90	3.99	3.90	3.66	3.67	3.55	3.70	3.68	4.08	3.93	3.37	3.34	4.19	2.61	3.85	4.00	4.05	3.89

As of 19 July 2021

Source: Gartner (August 2021)