

# Magic Quadrant for Enterprise Low-Code Application Platforms

Published 31 December 2022 - ID G00759450 - 50 min read

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LCAPs provide rapid application delivery to enterprises for all but the most complex use cases. They support varying personas ranging from citizen developers to central IT professionals. Applications and software engineering leaders should use this research to compare and contrast leading vendors in the global market.

## Market Definition

An Enterprise Low-Code Application Platform is an application platform that is used to rapidly develop and deploy custom applications by abstracting and minimizing or replacing the coding needed in development. At a minimum, an LCAP must include:

- Low-code capabilities (such as a model-driven or graphical programming approach with scripting) to develop a complete application
- Support for developing applications consisting of user interfaces, business logic, workflow and data services
- Simplified application test, deployment and management

Optional capabilities include:

- Catalog support for components, connectors and templates
- Custom API generation for the creation of business services
- Front-end user experiences beyond web user interface (UI)
- Business process automation and management
- Event-driven architecture support
- AI-augmented development assistance
- Management of large-scale distributed development teams

- Citizen developer support
- On-premises and multicloud support

Enterprise platform characteristics include support for high performance, availability and scalability of developed applications, disaster recovery, security, API access to and from enterprise and third-party cloud services, usage monitoring, service-level agreements (SLAs), and the provision of technical support and training from the vendor.

Enterprise developers cover professional developers in both central IT and business IT roles, as well as fusion teams of specialists supporting citizen developers.

Advanced capabilities offered by some enterprise LCAPs include:

- Complex business process automation and management
- Event-driven architecture
- AI-augmented development techniques

## Magic Quadrant

**Figure 1: Magic Quadrant for Enterprise Low-Code Application Platforms**





Source: Gartner (August 2022)

## Vendor Strengths and Cautions

### Alibaba

Alibaba Cloud is a Niche Player in this Magic Quadrant. Its LCAP offering is the YiDA platform. Its market differentiation is based on a no-code approach to create forms, processes, integrations, reports, and portal display pages.

Alibaba Cloud's operations are mostly focused in China and APAC, with a small presence in Japan and the Middle East and North American regions. Its relatively large client base is mainly small-to-medium enterprises with most of its clients in the manufacturing, education, retail and technology sectors.

### Strengths

- **Overall viability:** The paying customer base using YiDA is large compared to other LCAP vendors, while the nonpaying customer base is exponentially larger with the potential to be converted into paying customers. Alibaba Cloud also has offices and partners in every major region.

- **Customer experience:** YiDA users mention features such as the drag-and-drop functionality, data recording and process auditing are straightforward. The customer experience rating for YiDA in Gartner Peer Insights is relatively high compared to other vendors.
- **Platform extensibility:** YiDA has an application center, a template center with hundreds of application templates, and a solution repository. It also offers a component center and connector factory enterprises where customers can save the component section as a private module in the custom page designer on YiDA platform.

### **Cautions**

- **Geographic strategy and marketing:** A majority of Alibaba Cloud's customers are based within mainland China, with only a small percentage in other regions. While Alibaba Cloud states that it has offices in multiple regions, it has no sales and marketing strategy specifically targeting regions outside of China.
- **Innovation:** YiDA does provide some AI-augmented development — such as the intelligent layout of page components during application design — but capabilities such as native mobile support and a developer forum remain roadmap entries.
- **DevOps practices:** YiDA offers a self-built testing tool that supports visualized orchestration that is lacking compared to other LCAP vendors. YiDA lacks data model design tooling found in other LCAP vendor platforms.

### **Appian**

Appian is a Visionary in this Magic Quadrant. Its LCAP offering is the Appian Platform. Appian's market differentiation is based on its full-stack, low-code automation capabilities, which are focused on complex case management and business processes. It offers design studios for both professional and citizen developers, which encourages greater collaboration between business and IT by including workflows, approvals and change management for different developer personas.

Appian's operations are based in North America and Europe, and it has an increasing presence in the APAC region. It targets large enterprises, mostly in the finance and government sectors.

### **Strengths**

- **Business logic and workflow:** Appian provides strong automation capabilities — including business process automation, robotic process automation, intelligent document processing, and process mining — backed up with data fabric, and B2C portal capabilities. It provides a single-vendor solution for multiple digital business technology needs as a result.
- **Security and operations:** Appian supports multiregion high availability, Fedramp compliance, data encryption and a variety of certifications. It also supports container-based deployments on Kubernetes and horizontal scalability for larger use cases.
- **Ecosystem:** Appian's sales are increasingly partner-driven, assisted by its specific vertical market offerings such as SaaS for Workforce Safety. It now has 15,000 certified developers. Its

component store is the Appian AppMarket, which includes more than 700 listings covering solutions, connectors, functions, task automations and other utilities.

### **Cautions**

- **Product:** Appian's focus on delivering automation of complex scenarios means that some customers report a steep learning curve and a need for specialized developer skills. Appian has recently revised its integrated development environment to address these concerns. Innovations around process mining and RPA are outside the remit of many application development use cases and come at an extra cost to customers.
- **Sales execution and pricing:** While Appian Community Edition has likely improved adoption, clients are still reporting high pricing for platform usage. The new pricing model hierarchy of application, platform and unlimited pricing is simpler, but still comes at a higher cost than most other LCAP offerings.
- **Marketing strategy:** Appian's business process and low-code automation focus counts against it in terms of market awareness for enterprise application development. This explains the increasing partner-driven focus for sales and delivery, although it continues to grow organically too.

### **Creatio**

Creatio is a Niche Player in this Magic Quadrant. Its LCAP offering is Studio Creatio. Its market differentiation is based on its workflow automation and no-code capabilities, which augment its CRM SaaS offering, with a focus on customer-centric processes. Enterprises can use Studio Creatio to rapidly build, manage, optimize and automate workflows, with the free Process Designer for collaboration across teams.

Creatio's operations are geographically distributed, with a presence among small and midsize enterprises in the EMEA and North America regions. Its major customers tend to be from the banking, finance, insurance, manufacturing and professional services sectors.

### **Strengths**

- **Product strategy:** Creatio has improved its single-environment approach for application developers and an Application Hub for managing the development life cycle of low-code applications. Its support for design systems like Figma and Adobe XD indicates enterprise support beyond its developer persona target of business unit developers.
- **Marketing strategy:** Creatio has hosted some innovative marketing events (175 in 2021) such as its outdoor musical launch for the Creation Atlas release — as well as low-code marathons, white papers and webinars. It has also published a 250-page playbook on harnessing no-code approaches.
- **Customer experience:** Creatio has a customer care program to maximize customer success with its platform, including resources like the assignment of a "customer success manager." The company supports university training programs as well as third-party trainers like Udemy.

### **Cautions**

- **Product:** Creatio is primarily a three-tier architecture business process automation tool. The platform primarily focuses on workflow and case management types of applications. Its cloud version has limitations (such as no support for development on external databases through its Studio) although external data sources can be accessed via APIs.
- **Innovation:** Creatio provides limited AI-assisted development. Its roadmap does, however, include more customer development features for UX components using Angular, React or Vue, as well as more BPMN2 support.
- **Business model:** Most of Creatio's customers are small and midsize enterprises, and its existing CRM SaaS customers comprise a significant portion of its LCAP customer base. Further, Creatio is not unique in its focus on CRM SaaS and needs to differentiate itself from other large SaaS+LCAP competitors.

### **Huawei**

Huawei is a Niche Player in this Magic Quadrant. Its LCAP offering is Astro (formerly AppCube). Its market differentiation is based on a no-code approach for information-based applications developed by citizen developers, alongside a low-code, model-driven system for workflow and more complex applications.

Huawei's operations are mostly focused in China, APAC, and Latin America but it has no presence in North America. Its large client base is split evenly across all sizes of enterprises with a client focus on the government and manufacturing sectors.

### **Strengths**

- **Platform ecosystem:** Huawei is a major vendor with many other services (13 major cloud services and 30,000 APIs are supported), of which Astro forms part. Astro developers have access to Huawei's IoT, database and serverless and AI technology stacks as well as more esoteric technologies such as digital twin models and blockchain.
- **Product strategy:** Huawei's target is to become a one-stop shop for low-code development. This includes following the popular and successful "SaaS as a platform" model supporting extensions to its various SaaS offerings in the service, marketing and e-commerce sectors.
- **Sales execution:** Huawei is not only a major cloud provider but has close to 2,000 paying customers for its Astro LCAP and a growth rate of over 40% in revenue, despite its limited geographic coverage.

### **Cautions**

- **Application life cycle:** Astro does not support interactions with external design systems, agile frameworks, or other DevOps tooling. Instead, developers are expected to use their own Codehub tooling for DevSecOps and stay within the Huawei ecosystem.

- **Vertical markets:** Huawei focuses Astro on e-government and manufacturing use cases, which may limit interest from other areas. However, this could be an advantage for specific supported use cases such as IoT, education and smart city applications.
- **Geographic strategy:** Huawei primarily supports customers in China and APAC, with limited Astro usage outside of there and Latin America. Global clients will need to consider carefully any local support arrangements, including systems integrator support, and that standard pricing is only provided for the domestic China market.

## **Kintone**

Kintone is a Niche Player in this Magic Quadrant. Its LCAP offering is the Kintone platform. Kintone's market differentiation is based on two factors: a no-code approach and collaboration features (which enable citizen developers to jointly build workflows) and its large partner ecosystem (which offers a wide range of extensions and plug-ins). Kintone continues to enhance its integration and security capabilities for its marketplace.

Kintone's operations are mostly focused in Japan, with a small direct presence in several other APAC countries and in the U.S. Its clients tend to be small and midsize enterprises, with many clients in the manufacturing and retail sectors.

## **Strengths**

- **Sales execution and pricing:** Kintone increased its customer base and license revenue significantly during the past year, driven by business demand for no-code development and a very aggressive pricing model. Its channel partners also played a significant role in this growth, mainly in Japan, China and several other countries in the APAC region.
- **Customer experience:** Kintone has received positive customer experience ratings on Gartner Peer Insights relative to other LCAP vendors. Its ratings for evaluation and contracting and for integration and deployment have increased year over year.
- **Overall viability:** Both Kintone and its parent company, Cybozu, are profitable and capable of funding future expansion. Kintone has established a healthy partner ecosystem, and its large customer base provides a robust user support community.

## **Cautions**

- **Innovation:** Kintone does not plan to offer native AI-assisted development capabilities on its platform. Compared with other vendors in this Magic Quadrant, it lags in supporting advanced professional development features, intelligent automation, integration and UX capabilities.
- **Industry strategy:** Kintone does not provide targeted solutions for industry-specific use cases. It does offer industry-specific templates. The vast majority of the applications developed on the platform are for employee-facing use cases only.
- **Operations and geographic strategy:** Kintone's geographic reach and ambition is limited. It has yet to gain significant market traction outside of APAC and especially Japan. It has an offering

based on AWS infrastructure in the U.S. but remains mostly unknown.

## **Mendix**

Mendix is a Leader in this Magic Quadrant. Its LCAP offering is the Mendix Platform. Mendix is a subsidiary of Siemens. Its market differentiation is based on its combined support for both citizen and professional developers, its library of composable assets for different business verticals available from the Mendix Marketplace as App Services and Solutions, and specific targeting of independent software vendors (ISVs). Mendix supports multicloud, on-premises deployments and multiexperience development.

Mendix's operations are largely based in Europe, but its headquarters is in the U.S. and has an increasing presence in APAC regions. Its customers are distributed across all sizes of enterprise, mostly in the finance, professional services and manufacturing sectors.

### ***Strengths***

- **Innovation:** Mendix continues to provide advanced enterprise low-code capabilities that benefit new use cases, such as the Internet of Things (IoT) and digital twins. These include Mendix Data Hub for data and event services, and MxAssist Performance Bot, which proactively detects modeling and architectural anti-patterns that can impact app performance.
- **Product:** Mendix scored highly across most key capabilities, especially on UX design, integration support and governance. Its Gartner Peer Insights rating for product capabilities also affirms this. The vendor's support for fusion teams via different editors simplifies citizen development for more sophisticated enterprise applications.
- **Operations:** Flexible deployment options, multicloud support and a release strategy with backward compatibility help to ensure reliability and resilience for Mendix customers. Mendix invests in support for additional region and self-service features, and it remains focused on security and application development governance.

### ***Cautions***

- **Marketing strategy:** Mendix's go-to-market strategy is relying more on its parent Siemens (Siemens acquired Mendix in 2018). While this connection is driving much of Mendix's growth, it may not be enough. Gartner speaks with clients who see Mendix as primarily driven by Siemens, such as for industrial use cases. To improve its broader marketing strategy, Mendix is making an effort to build new marketing partnerships with cloud providers, ISVs and provide more coverage for use cases with SAP.
- **Geographic strategy:** Mendix has had less success expanding its market presence outside of North America and Europe compared with some of its competitors. However, the vendor has been increasing headcount in its APAC offices to build a stronger presence in that region.
- **Vertical industries:** While Mendix is a fully featured, general-purpose application development platform that would suit most vertical industries, significant preference is still given to a limited number of business verticals such as finance and manufacturing.



## Microsoft

Microsoft is a Leader in this Magic Quadrant. Its LCAP offering is Microsoft Power Apps — including Dataverse data service, Power Pages (was Power Apps portals), and Power Automate — which are included in Power Apps licenses. Power Apps typically targets citizen developers, but also offers a broad range of code-first tools for professional developers, such as publishing a custom API in a single click from Azure APIM, registering a custom control built in React or TypeScript with the Power Apps Component Framework, or publishing a custom AI model to the platform.

Microsoft's operations are geographically diversified, and it has clients across all industries and enterprise sizes. We estimate that Microsoft Power Apps maintains the largest user base of any LCAP due to the number of enterprise users of Microsoft 365 and Dynamics, and their partial entitlements to the Power Platform.

### *Strengths*

- **Business model:** Some Power Apps capabilities are included in most Microsoft 365 and Dynamics 365 enterprise plans. Office 365 users can access standard prebuilt connectors, utilize custom connectors in Teams, and build on Dataverse for Teams. Dynamics 365 users can utilize all connector types, build on Dataverse, and create stand-alone Power Apps in their licensed Dynamics 365 environments. Open-sourcing Power Fx has made the low-code Power Apps and Excel language available for open contribution and usage by the broader GitHub community.
- **Product strategy:** Power Apps targets API-driven development with more than 800 connectors for many common enterprise applications and has a curated marketplace of approved integrations. External connectors can be developed and consumed, but only over REST APIs. The full version of Microsoft Power Platform gets access to premium connectors and support for custom API services and OpenAPI Specification. The Power Apps Developer Plan is a free development environment that enables users to connect to any data source using custom or out-of-the-box connectors.
- **Platform extensibility:** AppSource is the publicly available app and component store for Microsoft. It includes over 3,600 solutions, which can contain platform components, flows, process, table/schema, logic, bots, connectors and reports. Microsoft also supports community-driven development where developers can publish extensions and tools to AppSource as well as purely community-driven initiatives such as PCF Gallery, which has an active professional developer and ISV community.

### *Cautions*

- **Pricing:** Power Apps is included at no additional cost with every Office 365 license for personal productivity, but Gartner clients continue to report concerns about pricing and licensing complexity, especially around the licensed version of Power Apps required to access enterprise

data sources and applications. Professional developers wanting to extend to Azure features like Azure DevOps will need to license those separately.

- **Mobile deployment:** Power Apps provides a responsive application UI for canvas, model-driven and portal development, but requires a “wrap” application in order to distribute mobile apps via public app stores. This uses AD authentication, which means a poor match for B2C use cases.
- **Integration and APIs:** Power Apps applications do not generate APIs for other applications to integrate with. However the underlying Microsoft Dataverse data service, if used, does provide APIs, and Microsoft Power Automate can be used to integrate between applications and connectors. Power Apps can provide webhooks to external services via Dataverse. Note that Dataverse access requires either a premium connector, or for Power Apps to be hosted in Teams, under current licensing terms.

## **Newgen**

Newgen is a Niche Player in this Magic Quadrant. Its LCAP offering is the NewgenONE Digital Transformation Platform. Newgen’s market differentiation is based on its breadth of capabilities for automating complex processes and content services at scale. It uses modern microservices-based architecture and artificial intelligence/machine learning (AI/ML) to deliver business applications with process automation and content management capabilities.

Newgen’s operations are mainly based in India, but it has a growing presence in the wider APAC region, EMEA and North America. Its clients tend to be large and midsize organizations in the financial services, insurance and government sectors.

## **Strengths**

- **Business logic and workflow:** Newgen provides a robust platform to automate complex business processes. It follows Business Process Model and Notation (BPMN) and decision model and notation (DMN) standards for process modeling and decision modeling, respectively. It also offers AI-enabled document processing capabilities such as intelligent data capture, document classification and automated document generation.
- **Sales execution and pricing:** Newgen continues to offer flexible licensing options, including perpetual, subscription and value-based pricing (that is, pricing associated with business value metrics or outcomes). The platform is also sold by its global systems integrator partners.
- **Customer satisfaction:** On Gartner Peer Insights, Newgen customers expressed a high degree of satisfaction with the quality and availability of the vendor’s end-user training. Evaluation and contracting are also rated highly for this market.

## **Cautions**

- **Platform ecosystem:** The ecosystem around Newgen’s platform continues to lag behind its competitors. The vendor’s marketplace is essentially a portal that consists of a few prebuilt applications alongside some training materials and implementation guidelines.

- **Product:** Newgen has limited native support for testing of applications built on the platform. Its low-code capabilities are focused more on automation than application development, without much separation of tooling for different developer persona.
- **Geographic strategy:** Newgen's primary customer base is in India, the Middle East and Africa. However, it now has a growing physical presence and a number of customers in the North America and Europe regions. Prospective clients in the U.S. and Western Europe need to evaluate Newgen's local support and partner abilities to meet their requirements.

## **Oracle**

Oracle is a Challenger in this Magic Quadrant. Its LCAP offering is Oracle APEX, previously known as Application Express, and part of the Oracle Database business. It is available as a database feature or as the APEX service on Oracle Cloud. Its market differentiation is based on its use of Oracle Autonomous Database for scalability and high availability (in the cloud or on-premises), its use of SQL as its expression language, and its low entry costs, including a free tier.

Oracle's operations are based in the U.S., but it is represented across all regions. Its customer base is primarily large and very large enterprises across all vertical sectors. Midsize and small enterprise markets are generally managed through channel partners and inside sales.

## **Strengths**

- **Overall viability:** Oracle continues to be the third-largest vendor in application infrastructure and middleware services, and its database remains the leading database solution for enterprises. Oracle has a proven track record in revenue retention, growth and profitability. Its acquisition and planned rewrite of Cerner's systems, using APEX, highlights Oracle's financial strength and its commitment to the platform.
- **Sales execution and pricing:** Oracle provides APEX as a value-added service to its database customers, along with APEX Cloud Service (which is priced per resource) through a network of 80,000 sales reps trained to sell APEX. As a result, APEX is the standard choice for the large community of Oracle Database users.
- **Geographic strategy:** Oracle is a multinational vendor that provides global support for its solutions through 37 cloud regions (and seven more planned). It fosters an active, international APEX user community with 500,000 developers and 200 hosting and implementation partners worldwide.

## **Cautions**

- **Product:** While APEX's relationship to the Oracle Database can be beneficial, it can also constrain the user's ability to perform common tasks such as third-party database access (outside of Oracle's MySQL) and is missing basic business process orchestration (until 2022). Customers' success with APEX will vary with their use cases, as APEX's architecture is constrained to that of the parent database and its emphasis on SQL and stored procedures.

- **Native mobile support:** While APEX supports responsive and progressive web apps, APEX does not support native mobile app development for Android or iOS.
- **Innovation:** Oracle has been slow to implement features on APEX that are commonly included in other LCAPs. For example, a graphical application logic editor is not available, and implementations for workflow and server-side JavaScript as an extension language arrived much later than other LCAPs. The use of AI/ML to guide application development is limited to the APEX Advisor tool for application verification testing.

## **OutSystems**

OutSystems is a Leader in this Magic Quadrant. Its LCAP is the OutSystems platform. Its market differentiation is based on an evolutionary approach to software engineering where low-code development can be used to produce applications and application components of any complexity. This concept is supported by enterprise-level platform features and extensibility that boost professional developer experience and productivity. OutSystems provides robust security, multiexperience development and AI-augmented development capabilities to enhance the application delivery process.

OutSystems' operations are primarily in Europe and North America, but it has an increasing presence in APAC. It has a high percentage of both small and large enterprise customers, which tend to be in the banking, finance, insurance and professional services industries.

## **Strengths**

- **Product:** OutSystems offers advanced low-code capabilities such as AI-augmented development, native plus third-party continuous integration/continuous delivery (CI/CD), application testing, enterprise agile planning, and governance. These capabilities support rapid development of enterprise-grade applications.
- **Marketing execution:** OutSystems runs both top-down and bottom-up engagement initiatives including events for senior leaders (like thought leadership webinars, CIO roundtables and clinics) as well as developer channels (like PODcasts, DeCoded, tech talks and demos). They broaden the platform's use cases and technical scope, optimize pricing and target global systems integrators (GSIs) to position OutSystems as a solution for every business problem.
- **Customer experience:** OutSystems include a customer success program in every subscriptions. This includes intensive training on a variety of topics with developer certification, expert architecture guidance and strategic partnerships with major GSIs to deliver great customer experience that is measured with publicly available CSAT ratings.

## **Cautions**

- **Business model:** OutSystems identifies and accepts the challenges of solving the most complex business problems and becoming a comprehensive hyperautomation platform for most, if not all, business domains. Fast-changing trends in the IT industry and fierce competition in the LCAP market are pushing OutSystems to rely more on partners for all aspects of its business operations. Its challenge in this environment is to maintain the

reliability, quality and security of its platform in the face of fast-growing third-party contributions, dynamic use cases and variety of channels for customer engagement.

- **Vertical industries:** OutSystems has no distinctive focus on industries or business verticals, with specific industries targeted through partners and independent software vendors. Customers seeking industry-specific domain expertise, native integrations or solution accelerators may find that other LCAP vendors offer more direct solutions.
- **Marketing strategy:** Public cloud and cloud-native concepts are notable parts of the OutSystems marketing message, yet public cloud and associated technologies are identified by most customers as mature requirements. Cloud-native concepts are accepted by Gartner clients to be inherent to LCAP. One of the purposes of “low-code” is to abstract from the underlying implementation, including public cloud services.

## **Pegasystems**

Pega is a Visionary in this Magic Quadrant. Its LCAP is a part of the Pega Infinity platform, which primarily competes in business process automation, but also offers multiexperience development, CRM and robotic process automation (RPA) for enterprise workflows. Its market differentiation is based on a full set of automation technologies, including process optimization, digital experience APIs for B2C user interfaces, and separate citizen and professional developer experiences.

Pega’s operations are geographically distributed and its customers tend to be large enterprises in the banking, finance and insurance, telecom and healthcare sectors.

## **Strengths**

- **Business logic and workflow:** Pega’s strength lies in low-code development for process and workflow automation using the Pega Infinity platform. Rules-driven, straight-through processing or human-in-the-loop automations enable complex digital business applications, and can involve process mining, RPA, AI-driven process optimization, and case management, albeit with some of these at additional cost for most pricing plans.
- **User experience:** The Pega Cosmos design system, and multiexperience support using React together with the updated digital experience API (DX-API) provide comprehensive user interface capabilities. The DX-API in particular allows users to implement external design systems like Sketch, Material and Fluent while using Pega’s model-driven authoring.
- **Product:** Pega’s latest Infinity platform provides a cloud-native, multitenant, microservices-based runtime architecture that can scale up and down, helping clients address use cases more cost effectively. Pega is extending product coverage to B2B SaaS in 2022.

## **Cautions**

- **Sales execution and pricing:** Pega licensing costs continue to be a barrier to some customers that want to extend usage in their organizations, and can be especially challenging for small and midsize organizations, despite Pega’s tiered pricing model. Some Gartner clients also complain of difficulties in negotiating with Pega.

- **Customer experience:** Pega's platform primarily targets complex enterprise applications. Platform complexity causes some customers to report an increase in reliance on systems integrators and scarce skills as well as occasional support challenges.
- **Marketing and sales strategies:** Market awareness of Pega's LCAP and low-code capabilities (outside of hyperautomation and digital business technology areas) continues to trail that of its main competitors in this Magic Quadrant. Pega's recent innovations have mostly focused on automation use cases, and it is still considered an expensive proprietary BPM solution by many software engineering leaders.

## **Quickbase**

Quickbase is a Niche Player in this Magic Quadrant. Its LCAP offering is the Quickbase platform. Its market differentiation is based on its no-code application development for business-led development initiatives including project management and system integration. Quickbase positions itself as a no-code platform and prioritizes features for citizen developers and business technologists. It participates in this Magic Quadrant because it supports low-code scenarios for integration, application logic and user interface customization.

Quickbase's operations are mostly focused in North America, with a small presence in the Europe and APAC regions. Its relatively large client base tends to comprise smaller enterprises, but over 70% of its revenue is now from more midsize and larger enterprises. Quickbase increasingly targets clients running projects in construction, real estate and facilities, public sector, infrastructure and industrial equipment.

## **Strengths**

- **Customer experience:** While targeting business technologists and citizen developers, Quickbase has achieved a high rating on Gartner Peer Insights. In particular, it is valued by customers for integration, deployment, services and support. It has also responded to feedback and developed new capabilities such as its dashboard builder.
- **Product:** Prebuilt, no-code implementation for specific use cases and data sources is available for both citizen developers and business technologists, but Quickbase remains open for advanced customizations and professional developers through Quickbase APIs.
- **Business model:** Quickbase is not aiming to offer a no-code or low-code platform for general purpose application development, but it delivers on its promise of automation for managing complex projects. It has extended its product to better support this with asset management, staff scheduling, and Gantt project displays.

## **Cautions**

- **Operations:** Quickbase leverages public cloud services from GCP and AWS, and has opened up to integration with client applications running on-premises. But it still falls behind the Leaders in this Magic Quadrant in terms of regional availability and public-cloud and cloud-native capabilities.

- **Geographic strategy:** Quickbase's geographic reach is mostly limited to North America. It currently has few customers outside of this region, and is building a channel to grow and support customers outside North America through a mix of partners and in-region resources.
- **Vertical industries:** Quickbase's focus on a limited selection of vertical industries could be a disadvantage for some customers compared to more IT-focused, cross-industry LCAPs that are extending to include citizen development capabilities.

## **Retool**

Retool is a Niche Player in this Magic Quadrant. Its LCAP offering is the Retool platform. Its market differentiation is a low-code platform for professional developers. It offers drag-and-drop app building combined with tooling using JavaScript, HTML, CSS and SQL. The data layer has a library of native database and API integrations to connect to nearly anything with a REST or GraphQL API.

Retool's operations are mostly focused in North America, with smaller presences in the Europe and APAC regions. Its relatively new and large client base tends to comprise small-to-midsize enterprises. Most of Retool's clients are in the technology sector, with some customers also from retail, finance, healthcare and professional services sectors.

## **Strengths**

- **Overall viability:** Retool has established a very large paying customer base with an even larger nonpaying contingent that provides the potential for conversion. Revenue growth YoY and total funding raised puts Retool in a solid position currently.
- **Marketing strategy:** Retool is targeting professional developers, a segment traditionally known for its poor awareness of or interest in LCAP, but a market that has potential for growth. Increasing interest from software engineering leaders in improving productivity as well as low-code approaches addressing more technical app use cases will increase interest in this segment.
- **User experience design:** Multiple customers state in Gartner Peer Insights that a key driver to use Retool is its drag-and-drop UI components. Users can make application design choices in Retool by customizing out-of-the-box components (using built-in customizability options, JavaScript or CSS) and managing the layout through drag-and-drop design.

## **Cautions**

- **Product (offering) strategy:** Retool targets developer audiences using low-code approaches to building internal software. The consequence of this is a level of tooling that is too complex for citizen developers. This makes it an unsuitable choice for enterprises seeking low-code tools for fusion teams that involve business technologists, or for B2C application use cases.
- **Development productivity:** Developers must use Retool's query editor rather than their own preferred IDE. Feedback in Gartner Peer Insights mentions that editing more complex apps can feel slower. Building highly performant, complex apps may also require knowledge of SQL.

- **Innovation:** Retool does not provide some of the features that other LCAP vendors offer, such as native AI services and AI-augmented development, and its built-in database is poorly documented and likely rarely used. Retool does not currently support external templates or design systems. Instead, it offers custom components where users can create a React component or import a component from an external library.

## **Salesforce**

Salesforce is a Leader in this Magic Quadrant. Its LCAP offering is Salesforce Platform. This is a suite of low-code and conventional development tooling, ranging from no-code visual designers (such as Lightning App Builder and Flow Builder) to IDEs for scripting and 3GL support (such as the Salesforce Apex language). Salesforce's operations are geographically distributed, and its clients tend to be medium to large enterprises that are already using its CRM products. Salesforce is focusing its Platform investments on Salesforce Flow, Lightning App Builder and web components and numerous minor enhancements.

### **Strengths**

- **Industry strategy:** Salesforce offers 12 industry cloud solutions, all of which use its LCAP capabilities for extensibility. Many partners also use the Salesforce LCAP to create industry-specific modules and applications for customers.
- **Market responsiveness:** Salesforce consistently unveils new capabilities in three annual releases (Spring, Summer and Winter) and releases patches throughout the year. It also tends to release platform capabilities into developer preview and beta stages in advance of general availability. New capabilities for Salesforce Flow, such as Flow Orchestration, demonstrate its alignment with market demands.
- **Platform ecosystem:** The Salesforce marketplace (AppExchange) with over 7,000 resources, and its community (Trailhead) supporting 74,000 developers, comprise an ecosystem that is unrivaled in the LCAP market. The Salesforce ecosystem is a major value-added resource for customers looking to adopt its LCAP.

### **Cautions**

- **Lagging innovation:** Other leading LCAPs provide AI-augmented development, yet Salesforce does not offer this capability in its platform. Its newer investments in low-code DevOps tooling also lag some of the Leaders in ease of use (mentioned in Peer Insights). When Salesforce announces innovations, it can take nearly a year before these features are fully released, as with Salesforce Functions.
- **Complex environment:** The Salesforce Platform has a fragmented approach to supporting logic and workflow. There is a loose collection of differing workflow tools, including Einstein bots, Flow Orchestration, industry workflows from Vlocity OmniScript and add-ons in AppExchange. On Gartner Peer Insights, Salesforce received its lowest ratings for challenges in deploying the complex development environment, with low-code DevOps a continued roadmap topic.



- **Pricing:** Salesforce has set a goal of making customer procurement transactions easier, simplifying some of the terms on its order forms, and introducing consumption-based offerings. However, some Gartner clients express concerns over Salesforce's relatively high prices and its myriad options (such as for environments and security options) which can be complex to navigate as the application use cases grow.

## **ServiceNow**

ServiceNow is a Leader in this Magic Quadrant. Its LCAP offering is App Engine, which is part of the Creator Workflows offering and part of the Now Platform alongside its integration and automation components. It is licensed either for extending its SaaS or for new applications, and has a ServiceNow Store app marketplace. ServiceNow's market differentiation is based on the wide set of platform capabilities that power its SaaS offerings, and its support for fusion team collaboration, business processes, workflows and case management.

ServiceNow's operations are geographically distributed, and its customers tend to be large enterprises, primarily with IT organizations that are also ServiceNow ITSM customers.

## **Strengths**

- **Customer experience:** Gartner Peer Insights has reported an increase in satisfaction with ServiceNow and few complaints, matching Gartner client inquiries. ServiceNow continues to grow its staff and geographic coverage to support its customers, and has 640,000 members in its Now Community.
- **Sales execution:** As a rapidly growing SaaS vendor, ServiceNow has continued to exploit its "SaaS as a platform" roots to sell App Engine to a large number of organizations for new business applications, resulting in high business growth.
- **Market responsiveness:** ServiceNow has boosted its ecosystem with over 3,000 apps available, two-thirds of which are from external sources. It is moving into wider automation use cases with its Celonis partnership and added RPA capabilities, which will also support its initiative about assisting SAP modernization.

## **Cautions**

- **Industry strategy:** ServiceNow has customers across multiple industries, but many of its traditional App Engine developers remain in IT, with few Gartner clients reporting citizen development or fusion team usage. ServiceNow is addressing industry support with a new solution program for specific industries and applications with systems integrators, but it is too early to identify whether this is having a big impact on increasing adoption.
- **Platform strategy:** ServiceNow's focus on workflow and business processes has led it into direct competition with mainstream business process automation vendors that have more sophisticated support for concepts like integration with process analysis tools, and better focus on business developers as a developer community. ServiceNow's roadmap continues to try and address this for more complex process and case management use cases.

- **Pricing:** Gartner Peer Insights reports issues with rigid licensing and high costs, and Gartner clients have indicated high variations in pricing in the past. ServiceNow has continued to simplify its pricing structure throughout 2021 and 2022.

## **Unqork**

Unqork is a Niche vendor in this Magic Quadrant. The Unqork Platform provides a no-code, single-tenant architecture of solutions delivered through declarative assertions in a drag-and-drop interface. Privately held and founded only in 2017, Unqork has targeted Global 1000 businesses, and has initially focused on insurance, financial services and governments, but is currently expanding into high-tech, retail, manufacturing and professional services. Largely through global partners, including EY and KPMG, Unqork is expanding its footprint into Europe and Asia. Composability (“bring your own component”) and AI-assisted configuration are two areas of significant investment focus for Unqork.

## **Strengths**

- **Productivity:** Current customers on Peer Insights cite Unqork as “a next-generation platform,” with ease of use and speed to deliver/time to market as key positives, once developers negotiate the “mindset shift” to no-code development.
- **Momentum:** Privately held, VC-backed Unqork completed Series C funding round in October 2020 raising \$207 million for a valuation of \$2 billion. To date, Unqork has already raised \$415 million from investors, while realizing 99% YoY revenue growth in the last fiscal year.
- **Innovation:** Unqork has evolved a model of product engineering rapidly extending the platform to support new use cases. The current roadmap adds a software development kit (SDK) to allow professional developers to extend Unqork directly. Unqork also invests in productivity features like formula autocomplete and real-time configuration analysis, laying a foundation for predictive configuration powered by AI/ML. Unqork features bidirectional integration with enterprise agile planning tools using out-of-the box plug-in components.

## **Cautions**

- **Ecosystem:** Unqork is a small and ambitious startup with aggressive go-to-market, rapid growth in two verticals, a nascent developer community, and only a small fraction of the customer base of LCAP Magic Quadrant Leaders. The Unqork Marketplace — which offers primarily Unqork-developed applications, templates, integrations and snippets — is only one year old, and considerably smaller than its competitors.
- **Vertical focus:** Unqork was designed specifically for highly regulated industries like insurance and financial services. Despite this focus, Unqork is currently well-established in only two verticals: financial services and government. However, Unqork risks spreading itself too thin pursuing other verticals (such as high-tech, retail and manufacturing) with comparatively lower levels of partner support.
- **Pricing:** Unqork offers three pricing tiers: standard, enterprise and business critical, which are all consumption-based on a per-transaction basis. This means that costs grow with usage, with

at least one report of ROI becoming a challenge for more complex use cases.

## **Zoho**

Zoho is a Visionary in this Magic Quadrant. Zoho Creator Platform is Zoho's low-code application platform for custom workflows and applications, and is also used by some of its SaaS customers for solution augmentation. It differentiates in the market with cloud-native capabilities such as unified analytics and process analysis while targeting users who are less inclined to pay the higher subscription rates of larger vendors.

Zoho is privately owned and its operations are geographically distributed and it primarily serves customers in the SME market (less than 1,000 employees) but targets larger organizations. Its strengths are in manufacturing, professional services, technology and education.

### **Strengths**

- **Product:** Zoho Creator is a mature platform that supports diverse developer personas for multiexperience application development as well as business processes. It provides graphical process, data and UI designers as well as a low-code application development language, Deluge, along with support for Java, JavaScript, XPath and Node.js.
- **Market understanding:** Zoho targeted Creator for custom applications outside of its SaaS offerings, but is increasing its footprint amongst its SaaS customers. It provides low-cost access to enterprise-class features such as multiregion and multicloud/on-premises deployments and backups, vertical and horizontal autoscaling, and rich application performance monitoring. It also plans to add the necessary governance abilities to establish developer guardrails to administer fusion teams.
- **Innovation:** Zoho provides some LCAP innovations around AI support for data, through to extensibility via serverless functions for pro-code development. Its process blueprint feature is indicative of the merger of business-process-centric and low-code development features. Zoho's roadmap is extensive compared with many other LCAPs, and addresses automation (including RPA), multiexperience (including augmented and virtual reality), collaboration, testing and governance.

### **Cautions**

- **Business model:** Despite its enterprise features, Zoho remains successful but entrenched in the small and midsize enterprise market, and is largely unseen by many Gartner clients despite its technology assets.
- **Marketing execution:** Zoho's marketing reflects its business model and lacks visibility with potential enterprise customers. It has invested in promotional activities including events (Zoholics) and content (Decode), but as yet has struggled to increase its mind share among enterprise customers for LCAP.
- **Process and business logic:** While Zoho Creator provides visual process and decision models, it does not support the relevant enterprise standards such as BPMN that would allow

collaboration with other enterprise tooling. However, it plans to add more BPMN-based elements and practices to the platform in future, and supports business logic in serverless functions.

## Vendors Added and Dropped

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

### Added

We updated our 2022 business inclusion criteria to better represent the balance between financial performance, customer adoption and developer usage. Based on the changes, the following additional vendors qualified for this year's evaluation:

- Alibaba
- Huawei
- Retool
- Unqork
- Zoho

### Dropped

No vendors were dropped this year.

## Inclusion and Exclusion Criteria

To qualify for inclusion, each LCAP vendor must:

1. Demonstrate a go-to-market strategy with specific pricing for its low-code application platform for cross-industry or general-purpose application development:
  - The LCAP must not be used only (or mainly) for building industry-specific applications, and it must not be only a product bundled within some other solution or platform.
  - The LCAP must support development and deployment of applications by professional developers in both central IT and lines of business — not just for citizen developers.
2. Provide an LCAP offering with both no-code and low-code capabilities to:
  - Develop, version, test, deploy, execute, administer, monitor and manage the applications and their relevant artifacts.

- Embed data storage features without relying on additional procured services (in other words, it must include a database).
- Support the design of data schema and application logic.
- Create rich application UIs (not only a forms builder or building an administration UI, for example).
- Enable the invocation of external third-party services via APIs or event topics.
- Support some automation of platform patching and versioning.
- Provide single-step deployment across environments (including development, test, staging and production).
- Access a platform repository or marketplace for sharing components, modules, connectors and templates.

3. Offer an enterprise LCAP aimed at enterprise-class projects that provides:

- High availability and disaster recovery.
- Secure access to applications.
- Technical support to customers.
- Third-party application access to application logic or data, via APIs or event topics.

In addition to the above market and technical criteria, each vendor must meet the following business criteria:

1. **Size:** The vendor must, by end of 31 March 2022, fulfill one of the following size requirement combinations:

- LCAP license and/or subscription revenue of at least \$50 million for LCAP over the previous year, and at least 100 paying enterprise customer organizations (of at least 1,000 employees) for its LCAP offering, excluding other related product offerings.
- LCAP license and/or subscription revenue of at least \$20 million for LCAP over the previous year, and at least 5,000 paying enterprise customer organizations for its LCAP offering, excluding other related product offerings.
- LCAP developer community of more than 100,000 developers using the LCAP across all customers.

2. **Growth:** The vendor must have at least 20% year-over-year growth in revenue for the previous year for LCAP licenses and subscriptions, excluding professional services or other related

product offerings, in the past year ending 31 March 2022.

3. **International presence:** The vendor must have direct customers (that is, not through resellers) in three of the following geographies:

- North America
- South America
- Europe
- Middle East and Africa
- China
- Japan/Asia/Pacific

We exclude vendors for any one of the following reasons:

- Require a specific, licensed, third-party component or product that is not already resold into their platform — that is, branded, sold and supported directly by the vendor.
- Only sell their platform with, and for the use of, their professional services and consultants.
- Require the purchase and/or installation of other unrelated products or platforms offered by the same vendor (such as a CRM application or content management system).
- Did not market a generally available product prior to 2021 that was described as a distinct LCAP offering (for example, a SaaS vendor that provided a low-code tool as part of its SaaS license only and separated it out in 2021).
- Do not offer a commercially supported enterprise offering — that is, they only offer the platform as open-source software.

## Evaluation Criteria

### Ability to Execute

Gartner's weightings for Ability to Execute emphasize product and sales execution/pricing criteria.

**Table 1: Ability to Execute Evaluation Criteria**

<b><i>Evaluation Criteria</i></b> ↓	<b><i>Weighting</i></b> ↓
Product or Service	High
Overall Viability	Medium

<b><i>Evaluation Criteria</i></b> ↓	<b><i>Weighting</i></b> ↓
Sales Execution/Pricing	High
Market Responsiveness/Record	Medium
Marketing Execution	Low
Customer Experience	Medium
Operations	Low

Source: Gartner (August 2022)

## Completeness of Vision

Gartner’s weightings for Completeness of Vision emphasize offering/product strategy and innovation criteria.

**Table 2: Completeness of Vision Evaluation Criteria**

<b><i>Evaluation Criteria</i></b> ↓	<b><i>Weighting</i></b> ↓
Market Understanding	High
Marketing Strategy	Medium
Sales Strategy	Medium
Offering (Product) Strategy	High
Business Model	Medium

<b>Evaluation Criteria</b> ↓	<b>Weighting</b> ↓
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Low

Source: Gartner (August 2022)

## Quadrant Descriptions

### Leaders

Enterprise LCAP Leaders demonstrate both strong execution (particularly in terms of business performance) and a strong vision (in terms of product and go-to-market strategies). These vendors stand out in a highly competitive, global market and serve a wide range of organizations and application use cases with their robust LCAP offerings. This year's Leaders are again Mendix and OutSystems, and the SaaS platform vendors (whose LCAP complements their SaaS offerings) Microsoft, Salesforce and ServiceNow.

### Challengers

Enterprise LCAP Challengers demonstrate strength in execution but lack the vision of Leaders (especially in offering and go-to-market strategies for broader use cases and markets). Such vendors have shown strong execution in their respective focus areas and are expanding their customer base. However, they have not demonstrated the vision required to expand their offering beyond their core customers to serve different types of buyers and needs. This year's only Challenger is Oracle, whose database-oriented platform is still playing catchup with the Leaders in areas such as workflow capabilities.

### Visionaries

Enterprise LCAP Visionaries demonstrate a strong vision, but less so in execution as an application platform. This year's Visionaries are Appian, Pega and Zoho, who also all compete in business process automation. Appian and Pega especially provide low-code automation platforms covering many digital business technologies, while Zoho is more known for its SaaS capabilities. There are also many smaller specialist vendors not in this Magic Quadrant that have compelling vision and specific use case support, and ought to be considered if execution track record is not a priority for evaluation.



## Niche Players

Enterprise LCAP Niche Players are vendors that focus on a specific area of the market or have a regional geographic footprint. While they have not demonstrated the strongest Vision or Ability to Execute in application platforms relative to other vendors we evaluated, qualifying for this Magic Quadrant is an accomplishment in itself (versus the hundreds of others that market their products as LCAPs). Niche Players in LCAP may also be high performers in other areas such as business process automation (like Creatio, Newgen and Unqork), content services (Newgen), professional development (Retool), and citizen development (Kintone and Quickbase), and can be more suitable for specific application use cases. Of particular note is the qualification of China-focused LCAPs from Alibaba and Huawei. Therefore this year's Niche Players are Alibaba, Creatio, Huawei, Kintone, Newgen, Pega, Quickbase, Retool, and Unqork.

## Context

As demand for applications continues to rise, software engineering leaders cannot afford to rely solely on traditional, code-based application development approaches. They must accept the march of progress to higher abstraction levels for application development and embrace low-code to accelerate professional application development. They must also enable business-based development teams to create and maintain their own applications, up to and including citizen development.

As a result, LCAPs for a variety of developer audiences are becoming mainstream. Even conservative IT organizations that have previously resisted modernization and automation are exploiting LCAPs to move to the cloud, enable mobile user experiences, address skills and resource shortages, and achieve faster time to deployment. Progressive IT organizations are exploiting low-code for commodity application services such as basic data-oriented applications, as well as composability to layer low-code on expansive API products such as SaaS and hand-coded custom proprietary services.

Application and software engineering leaders need to consider three main areas:

### 1. Technology fit:

- **Analyze** your use cases and business needs carefully to deliver the best results from an LCAP (see [Critical Capabilities for Enterprise Low-Code Application Platforms](#)).
- Compare these needs against the technology offerings in LCAP versus **alternative overlapping low-code markets** such as multiexperience development platforms (MXDP), business process automation (BPA), robotic process automation (RPA), integration platform as a service (iPaaS) and citizen automation and development platforms (CADPs).
- Ensure LCAP implementations **interact with the business processes**, which should be identified and optimized first. Consider either LCAP with strong built-in business process capabilities, or use complementary business process services that can be called from your LCAP as needed.

- Exploit **composability and modularity** as all enterprise LCAP can call external services including self-built APIs as well as bought API services such as SaaS. This enables LCAP to handle almost unlimited complexity in applications as sophisticated functionality can be delegated to external services in a composite manner.
- Strategize on how to fit the enterprise LCAP solution will fit into existing **application architectures** and strategic tooling investments, especially in terms of integration effort, compatibility with existing design systems and agile frameworks, and existing services.

## 2. Commercial considerations:

- Define all immediate requirements and anticipate application needs for the **next two to three years** to avoid having to replace platforms for new use cases. Take special care on pricing considerations and ensure that contracts cover future usage to avoid renegotiating.
- Evaluate LCAP options prior to major investments by utilizing free or evaluation versions with at least one **proof of concept** to become familiar with the developer experience and platform functionalities.
- Evaluate the long-term effect of **subscription costs** versus functionality and developer costs. Compare products with similar capabilities and prices.
- Understand and communicate the potential pitfalls of using LCAPs — including **lock-in and long-term costs** — to business stakeholders.

## 3. Developer talent and skills:

- Select a LCAP that is appropriate to your **developer persona**, such as tools like Quickbase and Kintone for citizen developers and tools like Mendix and OutSystems for full time IT and business-led developer teams.
- Exploit **fusion team collaboration** approaches to maximize developer performance. This may mean educating other software engineering leaders in your organization that low-code platforms are not just for citizen developers! It may also imply using tools that support multiple developer personas like Mendix and Pega.
- Evaluate the maturity of the LCAP's developer and partner community support as well as its **ecosystem** of connectors, templates and prebuilt business and technology services.
- Train professional and citizen developers prior to app development and provide ongoing self-learning programs, instead of only relying on the LCAP vendor or its partners.

## Market Overview

The enterprise LCAP market is part of an overall low-code development technologies space, which is expected to reach \$29 billion in revenue by 2025 (with a compound annual growth rate [CAGR] of more than 20%). Specifically, the LCAP segment is projected to expand to \$14.38 billion in 2025, with a CAGR of 26.4%.

The rapid increase in enterprise adoption and usage of enterprise LCAPs is driven by three key trends:

- **Democratization:** On average, 41% of employees in an organization are business technologists — that is, employees who report outside of IT departments and create technology or analytics capabilities for internal or external business use. In a Gartner 2021 survey <sup>1</sup> on business technologists, these non-IT employees primarily use either a low-code or no-code approach to create analytics or technology capabilities, versus manual coding.
- **Hyperautomation:** Hyperautomation involves the orchestrated use of multiple technologies, tools or platforms. LCAPs have emerged as a key component of successful hyperautomation, with low-code development tools being among the three tools used the most (based on frequency and volume) to support automation initiatives.
- **Composable business:** Organizations are adopting application composition technologies that enable fusion teams to implement composable applications. LCAPs are one of the key technologies that drive greater exploitation of application services, functionalities and capabilities.

The vendors in this Magic Quadrant are all providing enterprises with various capabilities and services and successfully delivering applications to their customers. However, the market continues to expand with more vendors appearing throughout 2021 and 2022.

## Acronym Key and Glossary Terms

Fusion Team	A fusion team is a multidisciplinary team that blends technology or analytics and business-domain expertise, and shares accountability for business and technology outcomes. Instead of organizing work by functions or technologies, fusion teams are typically organized by the cross-cutting business capabilities, business outcomes or customer outcomes they support. Fusion teams do not have a prescribed reporting structure. Team leaders or members may report to either dedicated IT departments or business areas outside of IT. Fusion teams often start as Agile project or Scrum teams, and gradually adopt a product-management discipline to oversee a capability end to end, from strategy to delivery and continuous enhancements.
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## Evidence

<sup>1</sup> The 2022 Gartner Low-Code Vendor Survey was conducted online during February and March 2022

among 136 vendors. This evidenced continued interest in and evolution of LCAP.

Gartner’s **Peer Insights** was used to provide customer feedback on vendors from January 2021 to May 2022. A period of January 2020 to May 2022 was used for vendors with less than five

reviews from the 2021-2022 period. Two vendors had no reviews to consider.

## 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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