

Magic Quadrant for Cloud ERP for Product-Centric Enterprises

Published 26 September 2022 - ID G00758033 - 39 min read

By Greg Leiter, Dixie John, and 2 more

Product-centric organizations are rapidly adopting cloud ERP applications with superior process automation and analytic capabilities. Application leaders should use this Magic Quadrant to evaluate cloud ERP vendors as part of a composable strategy that emphasizes standardization and agility.

Strategic Planning Assumptions

- By 2024, more than 60% of organizations will deploy cloud ERP as an ecosystem of application and technology platforms from multiple vendors.
- By 2024, at least 50% of existing ERP megavendor customers will evaluate multiple vendors, rather than automatically adopt the latest version of their incumbent ERP suite.

Market Definition/Description

Gartner defines the market for cloud enterprise resource planning (ERP) for product-centric enterprises as a market for application technology that supports the automation of operational and financial activities for the manufacturing, distribution, delivery and servicing of goods. Gartner considers ERP to be a foundational technology for operating enterprises.

This market is separate and different from the market for cloud ERP for service-centric enterprises. Service-centric organizations do not physically manufacture and sell products. Instead, they deliver and sell financial, consulting, or a range of other business or consumer services.

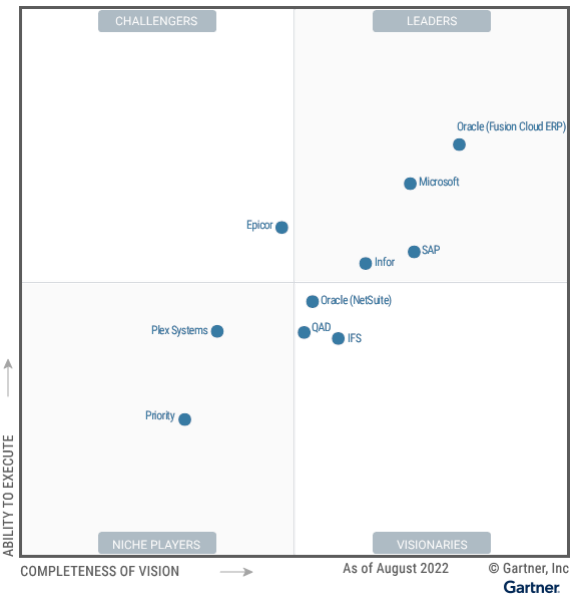
Cloud ERP is characterized by highly configurable processes, frequent functional and technical updates, and substantial reliance on the vendor for operational performance. Modification of source code is not possible, but configuration and customization can be enabled via citizen developer tools, and extension via a platform as a service (PaaS). This gives organizations a high degree of agility with which to react to changing business conditions.

- Cloud ERP is offered via a cloud service application deployment (see Note 1). A full list of attributes for our definition of a “cloud service” appears in the Inclusion and Exclusion Criteria section.
- The core capabilities of product-centric cloud ERP suites are:
- Operational ERP:** Supply chain and manufacturing-related functionality such as demand management, order management, material requirements planning, inventory management, supply chain/direct procurement, manufacturing control capabilities and distribution/logistics.
 - Financial management functionality:** Financial accounting, subledger accounting, consolidation and financial reporting.

- Optional capabilities of product-centric cloud ERP suites include:
- Procurement:** Requisition and purchase order management for indirect goods, services and capital equipment.
 - Human capital management (HCM):** For cost management, as well as staffing, for operational resources.
 - Specialized, industry-specific modules or applications:** These include, but are not limited to, modules such as those used for configure-to-order, make-to-order and field service management; and broader application solutions, such as those used for enterprise asset management (EAM) and product life cycle management (PLM).

Magic Quadrant

Figure 1: Magic Quadrant for Cloud ERP for Product-Centric Enterprises



Source: Gartner (August 2022)

Vendor Strengths and Cautions

Epicor

Epicor is a Challenger in this Magic Quadrant. The solution evaluated is Epicor Industry ERP Cloud, which provides general-purpose operational ERP capabilities and is sold and implemented both directly and through partners. Recent improvements include the use of AI for analytics, advanced unit-of-measurement support and additional localizations that improve support for multinational companies. Future investments are expected to focus on curated industry extensions, improvements to the overall UX, and further enhancements to composability and integration. Epicor Industry ERP Cloud can meet the needs of midsize distributors, discrete manufacturers, light process manufacturers, and project- and asset-intensive manufacturers.

Strengths

- **Understanding of midsize operational ERP market:** Epicor delivers a solid operational ERP solution for midsize manufacturing and distribution companies, along with adjacent capabilities for demand planning, inventory and warehouse management.
- **Support for major industries:** Midsize manufacturers can select from a broad range of vertical categories as a result of Epicor's focus on the manufacturing, distribution, retail, CPG and construction sectors. They will benefit from the company's industry expertise, accelerators for built-in functionality, discrete manufacturing coverage (such as its strength in configure, price and quote [CPQ]), and consistent UI.
- **Use of Microsoft Azure platform for scalability:** Epicor's partnership with Azure provides the ability to scale solutions for customers and supports its global expansion strategy.

Cautions

- **Administrative ERP (financials):** Although strong in operational ERP, Epicor only demonstrated moderate ability to support financial transactional and reporting processes. Recent acquired applications and partner extensions should provide improvements, however.
- **Integration with other enterprise applications:** Epicor's operational ERP offering is still evolving in terms of its ability to integrate with other enterprise applications. However, the newly embedded Epicor Automation Studio solution will provide workflow automation and should ease integrations.
- **Geographic coverage:** Customers moving into new product lines or geographies should assess the alignment with Epicor's multiregional support strategy, which is still evolving.

IFS

IFS is a Visionary in this Magic Quadrant. The solution evaluated is IFS Cloud (22R1). IFS targets midsize and large enterprises in a wide range of industries, with a focus on EMEA and North America. IFS's composable API integration strategy, along with a partnership with Boomi, provides a flexible platform for configuration and customization via extensions. Future innovations include AI-enabled demand forecasting, augmented collaboration, and environmental, social and governance (ESG) reporting capabilities. IFS should be considered by organizations looking for a tightly integrated set of core operational capabilities in process, discrete or complex (asset-intensive or project-based) manufacturing, with embedded enterprise asset management (EAM) and field service management capabilities.

Strengths

- **Breadth of functional coverage:** IFS enables its targeted industry customers to meet a comprehensive set of functional requirements by using a single solution. Its modules can be used across multinational and multicompany process, discrete and complex manufacturing environments.
- **Composable ERP approach:** IFS Cloud's integration platform enables IFS to release new functionality rapidly, and provides extensibility for customers to meet their business requirements.
- **Enterprise asset management:** The EAM solution within IFS Cloud remains a key differentiator. Furthermore, IFS has announced plans to acquire Ultimo, an EAM competitor, which should significantly improve its EAM capabilities.

Cautions

- **Analytics:** Compared with the more advanced analytic capabilities of other vendors in this Magic Quadrant, IFS has a relatively standard set of analytic capabilities.
- **Technical support:** Users of Gartner's client inquiry service point to inconsistent application support and responses to reported issues during deployment and after implementation.
- **Implementation complexity:** The depth of some of IFS's advanced capabilities (such as constraint-based scheduling) gives rise to some complexity in terms of implementation. Although IFS continues to strengthen its partnerships, customers should ensure they receive direct support from IFS for these capabilities.

Infor

Infor is a Leader in this Magic Quadrant. The product evaluated is Infor CloudSuite, which has separate cores depending on the industry (LN for large and global discrete manufacturing, M3 for process manufacturing and distribution, and SyteLine for small and midsize businesses [SMBs]). Infor is suitable for customers in complex industries, such as the industrial equipment, automotive, aerospace and defense, consumer goods, food and beverage, fashion, and wholesale distribution sectors. Infor should be considered by enterprises that require robust operational processes and manufacturing capabilities in industries on which Infor focuses. Future innovations are expected to include business process intelligence capabilities, and analytics and process automation improvements using AI/ML.

Strengths

- **Ability to extend and integrate CloudSuite through Infor OS:** Although not an independently sold integration platform as a service (iPaaS), the Infor OS enterprise application platform provides low-code capability to extend and integrate with multiple Infor products, as well as with external cloud applications and on-premises solutions.
- **Support for multiple and highly complex manufacturing scenarios:** Infor CloudSuites provides a flexible solution for complex scenarios in discrete, process, project, "X to order" and asset-intensive manufacturing within a single ERP suite.
- **Industry-specific multitenant cloud capabilities:** Infor has demonstrated the ability to provide deep functionality to support complex industries, such as the industrial equipment, automotive, aerospace and defense, food and beverage, fashion, and wholesale distribution sectors, along with a capable financial management suite.

Cautions

- **Technical support:** Gartner's interactions with Infor customers indicate that its product support, although improved, is not consistently at the high level expected of a cloud SaaS provider.
- **Application service partnerships:** Compared with other Leaders in this Magic Quadrant, Infor has fewer application service partner arrangements to support its global growth. Infor has developed relationships with several global system integrators, but prospective customers should check for resource constraints.
- **Contracting and licensing flexibility:** Although Infor now offers contracting on a single enterprise metric, licensing for the ERP suite can occasionally be difficult for organizations with multiple lines of business.

Microsoft

Microsoft is a Leader in this Magic Quadrant. It offers Microsoft Dynamics 365 Supply Chain Management along with Microsoft Dynamics 365 Finance as an integrated ERP solution. Dynamics 365 is suitable for midsize, large and global enterprises that need highly specific regional and industry capabilities. Midsize and larger manufacturing, CPG and retail organizations that require industry specialization should consider Microsoft, along with its large ecosystem of partners and ISV solutions. Innovations on Microsoft's roadmap include AI-enabled collaborative demand planning, sustainability capabilities for supply chains, and capabilities surrounding data, AI/ML and decision-making processes.

Strengths

- **Cloud platform and Microsoft applications:** Microsoft Dynamics 365 runs on the Microsoft Azure cloud. This enables clients to use the Microsoft Power Platform for analytics via Power BI, low-code extensions via Power Apps, data management via Dataverse, and hyperautomation via Power Automate. In addition, Dynamics 365 has direct integrations with Microsoft Office 365 applications such as Excel and Teams.
- **Extensibility:** Microsoft Dynamics 365 has more than 5,000 extensibility points for developers and ISV partners. This enables customers to develop differentiated and innovative business processes beyond the standard configuration within Dynamics 365, while maintaining the integrity of these processes when Microsoft releases new functionality.

- **Large-enterprise and two-tier ERP strategy offering:** Customer adoption rates for Microsoft Dynamics 365 continue to grow rapidly, including among large enterprises. Microsoft also positions Dynamics 365 as a leading solution for complex and global enterprises that need specific localizations when adopting a two-tier or multiple-tier ERP strategy.

Cautions

- **Support for complex manufacturing requirements:** Although Microsoft's sales to large organizations are growing, those with complex manufacturing requirements need to ensure that this vendor's solution can meet their business requirements. Discussions with users of Gartner's client inquiry service identify this as a point of concern.
- **Financial capabilities:** Microsoft Dynamics 365 has strong administrative capabilities, particularly for finance, but is nevertheless weaker in this area than other vendors it competes with for large and global enterprises. Although it has integration with a market-leading analytics solution (Power BI), Dynamics 365 currently has limited financial planning and financial closing capabilities, although innovations are expected to close this gap.
- **Implementation quality:** Users of Gartner's client inquiry service point to concerns about the deployment and integration of Microsoft Dynamics 365. Microsoft relies on a large population of resellers and ISVs to interact with customers. This can lead to wide differences in the quality of experience for implementation services and when integrating non-Microsoft products. Prospective customers should evaluate multiple implementation partners when considering deployment of Dynamics 365.

Oracle (Fusion Cloud ERP)

Oracle is a Leader in this Magic Quadrant with Oracle Fusion Cloud ERP. This is a highly configurable solution for upper-midsize and large enterprises with global clients across the Americas, EMEA and Asia/Pacific. It provides an integrated suite of administrative and logistics operational ERP capabilities backed by a common data model. It is suitable for enterprises that need a comprehensive set of capabilities for complex supply chain, manufacturing and finance business processes. Oracle Fusion Cloud ERP is managed in Oracle data centers. Future innovations are expected to include the ongoing release of additional industry-specific capabilities, including further digital supply chain AI and Internet of Things capabilities, and a substantially new UX.

Strengths

- **Breadth of suite:** Oracle Fusion Cloud ERP scores highly for its breadth of capabilities, covering discrete and complex manufacturing, distribution, finance, procurement and HCM.
- **Global scale and reach:** Oracle Fusion Cloud ERP is aimed at, and very capable for, large and global organizations. Oracle has a wide network of implementation partners across the globe. Oracle Fusion Cloud ERP is available with local language, currency and regulatory support in most countries.
- **Embedded AI and ML and analytics:** Oracle Fusion Cloud ERP's single data model is a basis for integrated business processes, with AI and ML embedded across the solution for automation. Combined with its analytics capabilities, the solution can provide real-time data for augmented decision making.

Cautions

- **Implementation:** Oracle Fusion Cloud ERP's deep capabilities can lead to complexity in implementation and make it challenging to keep pace with quarterly updates. Customers, along with their implementation partners, should ensure they have robust innovation adoption and change management programs in place during implementation and after go-live.
- **Integration across solutions:** Customers sometimes report challenges integrating Oracle Fusion Cloud ERP with other on-premises or cloud solutions within their application portfolio. When deploying Oracle Fusion Cloud ERP, customers should assess the end-to-end solution design to ensure compatibility when operating in a hybrid environment.
- **User interface:** Customer feedback indicates desire for improvements to module navigation, search functionality and the mobile app experience. Oracle is rapidly moving to address this with its Redwood design system, which is delivering an enhanced UX across its entire application portfolio.

Oracle (NetSuite)

Oracle is a Visionary in this Magic Quadrant with NetSuite, which is sold primarily to midmarket enterprises but has a wide global footprint. Its ERP functions provide foundational administrative ERP capabilities plus operational capabilities for industries, including discrete and process manufacturing, wholesale distribution and retail. NetSuite is managed in Oracle data centers. Midsize discrete-manufacturing and distribution customers seeking a single ERP suite solution should consider NetSuite. Future areas of innovation are expected to include ongoing development of autonomous supply chain collaboration capabilities and extended planning and analysis (xP&A) capabilities.

Strengths

- **Breadth of functional capabilities:** Oracle's NetSuite has been adopted by thousands of product-centric customers because it is a well-integrated suite with a wide range of ERP capabilities, such as the ability to integrate with hundreds of third-party applications. It also has substantially improved data analytics and visualizations.
- **Ease of adoption and configuration:** There is a rapid implementation program for NetSuite called SuiteSuccess, which takes a prebuilt template approach to implementation. It enables an organization to quickly adopt and start using NetSuite, and then perform follow-on configuration changes. Users of Gartner's client inquiry service have praised the configurability and extensibility of NetSuite when customization was required.
- **Continuous improvement:** NetSuite offers industry-specific research, benchmarking and performance improvements. With more than 30,000 customers running NetSuite, Oracle has a substantial set of benchmarking data that it has incorporated into leading practices by function and industry.

Cautions

- **Midmarket focus:** Oracle's NetSuite marketing and sales activities target small and midsize organizations (for larger organizations, Oracle offers Oracle Fusion Cloud ERP). Although NetSuite has SaaS ERP capabilities for large enterprises, the percentage of organizations with over \$1 billion in annual revenue that use it as their primary ERP suite is smaller as a percentage of its total customer base.
- **Adoption by complex- and process-manufacturing customers:** Although it provides new capabilities for process manufacturing, NetSuite has limited adoption within large enterprises that pursue process-oriented and multimode styles of manufacturing.
- **Pricing:** Oracle's NetSuite pricing for large numbers of users is relatively high for its target market of midsize enterprises. Oracle offers various NetSuite licensing schemes for different sizes, infrastructure and support levels. Although this approach provides some flexibility for customers, it may also result in higher costs.

Plex Systems

Plex Systems, a Rockwell Automation company, is a Niche Player in this Magic Quadrant. The product evaluated is the Plex Smart Manufacturing Platform, which is delivered in a multitenant cloud environment. Plex's top industries include automotive, food and beverage, precision metal forming, plastics and rubber, industrial manufacturing, technology and electronics, and aerospace. Future innovations are expected to include product expansion to serve global enterprises better. Plex is also likely to broaden its ecosystem, extend the manufacturing modes it supports, and take fuller advantage of its recent acquisition by Rockwell Automation. Plex should be considered by midsize enterprises that focus on discrete and batch process manufacturing, as well as larger enterprises looking to optimize plant operations.

Strengths

- **Cloud delivery:** Plex has a long history of providing operational ERP via a multitenant cloud delivery model. Gartner's interactions with Plex customers indicate a high degree of satisfaction with its ability to support cloud ERP.
- **Manufacturing capabilities:** Plex offers manufacturing execution system capabilities as part of its integrated ERP suite. Midsize manufacturing customers may benefit from this single-instance approach.
- **Product life cycle management:** Plex's ERP suite has demonstrated native strength in PLM. Its platform also integrates with third-party product life cycle applications.

Cautions

- **Footprint outside North America:** Although Plex has grown recently in EMEA and Asia/Pacific, the largest segment of its customer base is in North America. Plex does, however, expect to use its recent acquisition by Rockwell Automation, a global vendor, to accelerate its entry into international markets.

- **Highly regulated manufacturing:** Plex has not achieved significant adoption by highly regulated manufacturing organizations beyond the industries it focuses on.
- **Large-enterprise adoption:** Large enterprises that use Plex as their primary enterprise ERP suite represent only a very small percentage of Plex's customer base. The vast majority of Plex's customers are small or midsize organizations. Larger enterprises typically use Plex in a two-tier, multivendor ERP landscape environment.

Priority

Priority is a Niche Player in this Magic Quadrant. The product evaluated is Priority Cloud ERP, which offers general administrative and mixed-model operational ERP capabilities. Priority has mostly been successful with small and midsize enterprises in EMEA, although it also has a sales office in the U.S. Priority appeals to businesses that may be wary of the cost and complexity of a large vendor's system. Midsize manufacturing customers should consider Priority when looking for a single SaaS ERP suite with strong operational capabilities that complement administrative capabilities. Planned innovations include further enhancements to automated system configurations with industry best practices, an automation hub and improvements to analytics.

Strengths

- **General-purpose operational capabilities for a range of manufacturing styles:** Priority offers a single tenant SaaS solution with capabilities for managing discrete manufacturing, process manufacturing, distribution and project-based manufacturing.
- **Performance for SMBs in EMEA:** Priority has executed well in winning cost-conscious SMB manufacturing customers in EMEA, the region in which it has headquarters. Its customers report high levels of satisfaction with the value for money delivered by its SaaS suite.
- **Integration of suite:** Priority's suite includes administrative and operational capabilities on a single code line, along with the flexibility to integrate third-party applications. Priority has demonstrated integrated workstreams for small and midsize manufacturing enterprises that favor a single-suite approach.

Cautions

- **Support:** Users of Gartner's client inquiry service indicate that Priority's documentation updates and customer support, particularly for new features and technical issues, can be inconsistent.
- **Implementation partners:** Priority pursues a channel-driven sales strategy. Although Priority does provide implementation services, most customers choose to engage with its channel partners when buying and implementing its product. The channel partners supply additional capabilities for, but also add cost to, Priority's product.
- **Localizations:** Compared with other vendors in this Magic Quadrant, Priority has the smallest number of comprehensive localizations native to a SaaS product. Priority depends on channel partners to provide specific localization capabilities — an approach that may hinder customers that need to operate beyond its home region.

QAD

QAD is a Visionary in this Magic Quadrant. The QAD Adaptive ERP product suite provides administrative and operational ERP capabilities in a single platform, with analytics delivered via a partnership with Logi Analytics. QAD primarily targets six manufacturing sectors: automotive, consumer products, food and beverage, high tech, industrial, and life sciences. Midsize manufacturing organizations (including those with a global footprint) in those sectors should consider QAD Adaptive ERP. QAD was acquired by Thoma Bravo in November 2021, at which point QAD ceased to be a publicly listed company. Innovations on QAD's roadmap focus on integrating recent acquisitions and maintaining the solution's composability.

Strengths

- **Industry-specific manufacturing capabilities:** QAD Adaptive ERP contains unique industry-specific planning and execution capabilities for automotive, consumer product, food and beverage, and high-tech manufacturing organizations. Customers in those industries confirm that the manufacturing capabilities delivered by QAD provide value.
- **Straightforward deployment and ease of customization:** Users of Gartner's client inquiry service indicate that QAD Adaptive ERP is easy to deploy, due to its modular architecture, which requires minimal training. They also factor the solution's ease of configuration and extension into their selection decisions.
- **Integration:** QAD Adaptive ERP enables a high degree of integration with iPaaS platforms, third-party applications, devices and data sources in order to compose workflows and capabilities. QAD offers an option to host its solution on leading public cloud services, such as those of AWS, IBM (IBM Cloud) and Google (Google Cloud Platform), which should further enhance its integration capabilities.

Cautions

- **Capabilities for nondiscrete manufacturers:** With QAD Adaptive ERP being aimed at only six industries, it has relatively few capabilities for, and very low adoption by, customers looking to support project- or asset-intensive manufacturing in a single ERP suite.
- **Adoption outside North America and EMEA:** Although QAD has localized its offering for 66 countries, only a very low percentage of its cloud revenue comes from customers in Latin America and Asia/Pacific.
- **Administrative ERP capabilities:** Although QAD has strong operational ERP and manufacturing capabilities, its HCM (for workforce management) and finance capabilities, while robust, are not as capable as those of other leading ERP vendors.

SAP

SAP is a Leader in this Magic Quadrant. There are several deployment models for SAP S/4HANA, but for this Magic Quadrant we evaluated only SAP S/4HANA Cloud (other deployment options, not evaluated here, include SAP S/4HANA Cloud, private edition and the on-premises version of SAP S/4HANA). SAP S/4HANA Cloud has a different feature set, compared with the other SAP ERP versions. SAP S/4HANA Cloud is suitable for organizations that need a comprehensive set of capabilities for complex supply chain, manufacturing and finance business processes. Future innovations are expected to include ongoing improvements to supply chain and production capabilities, and the embedding of sustainability capabilities within the solution.

Strengths

- **Enterprise and industry expertise:** SAP's experience with global enterprise- and industry-specific solutions has carried over into SAP S/4HANA Cloud. SAP recently launched its Industry Cloud offering, which will provide a variety of SAP and partner-delivered capabilities for specific industries that work in conjunction with SAP S/4HANA Cloud.
- **Technology platform capabilities:** SAP S/4HANA Cloud is used in conjunction with SAP's Business Technology Platform, which provides a variety of services, such as data analytics, AI/ML, process automation and application development.
- **Analytics:** SAP S/4HANA Cloud has integrated analytics capabilities, both within its ERP solution and within ancillary solutions such as SAP Integrated Business Planning for supply chain planning and SAP Analytics Cloud for data visualization and extended planning and analysis.

Cautions

- **Multiple deployment options:** Customer adoption rates for SAP S/4HANA Cloud are low, compared with the other deployment options available. Customers may be confused about the best approach to adopting SAP ERP, particularly given that SAP S/4HANA Cloud has different capabilities and its more streamlined feature set is meant for "greenfield" customer implementations, whereas the other SAP ERP deployment options, including the SAP S/4HANA Cloud, private edition, is more flexible and typically meant for SAP's current installed customer base. These deployment options come with a variety of different licensing and pricing variations, which makes it difficult to determine comparable costs.
- **Business case challenges for existing customers:** A significant number of established SAP ERP customers are still waiting to decide whether to migrate to SAP S/4HANA. SAP S/4HANA Cloud has been adopted only for "greenfield" implementations by customers that are looking to execute substantial digital transformation programs. But for those that want to keep their existing data and general business processes intact, the business case for adopting SAP S/4HANA Cloud could be challenging (similar issues also confront customers of other vendors, however).
- **Vendor interaction and support:** Users of Gartner's client inquiry service generally give SAP comparatively low ratings for its overall service and the quality of its technical support and overall contract negotiations. Gartner clients see SAP as an expensive vendor that requires complex management and oversight, and comparatively few of those with whom Gartner has had dealings are willing to recommend it to others.

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

- **IFS:** Enough live ERP customers use IFS's public cloud model for it to meet the qualifying criteria for inclusion in this Magic Quadrant.

Dropped

- **Acumatica:** Acumatica did not meet the inclusion criteria for revenues and customers.

Inclusion and Exclusion Criteria

For Gartner clients, Magic Quadrants, and associated Critical Capabilities reports, identify and analyze the most relevant vendors and products in a market. By default, Gartner sets an upper limit of 20 providers in order to focus our analysis. On specific occasions, this upper limit may be raised, when the intended research's value to clients would otherwise be diminished. The inclusion criteria represent the specific attributes that Gartner analysts considered necessary for inclusion in this research.

To qualify for inclusion, vendors had to fulfill the following criteria.

Product Capabilities

Each vendor had to deliver a suite of cloud-based, product-centric ERP applications that included the following capabilities:

- **Operational ERP:** Supply chain and manufacturing-related functionality, such as demand management, order management, material requirements planning, inventory management, supply chain/direct procurement, manufacturing control capabilities (shop floor) and distribution/logistics.
- **Financial management:** General ledger, accounts payable, accounts receivable, fixed assets, project accounting and financial planning and analysis (FP&A) or extended planning and analysis (xP&A).

Optional capabilities could include:

- Purchasing capabilities focused on indirect goods, services and capital equipment.
- Human capital management (HCM) capabilities for cost management, as well as for staffing for operational resources.
- Specialized, industry-specific modules or applications, including, but not limited to, modules such as those used for configure-to-order (CTO), make-to-order (MTO) and field service management (FMS), and broader application solutions, such as those used for enterprise asset management (EAM) and product life cycle management (PLM).

Market Presence

- Each vendor had to have at least 150 customer organizations, with annual revenue (for commercial organizations), expenditure (for nonprofit organizations) or funding of more than \$150 million (for startup organizations), that use its ERP cloud service in production environments. Each of these organizations had to be live with at least three of the vendor's operational ERP components (modules) and at least the general ledger, accounts payable and accounts receivable capabilities. Each vendor had to be prepared to provide evidence of sufficient in-production customers. If a vendor chose not to disclose this information, Gartner may have used its own market research, as well as insights from public sources, to judge that vendor's viability and eligibility for inclusion.
- The 150 organizations had to be managing at least \$150 million annually through the ERP suite. The annual revenue of a parent organization could not be used when only a smaller subsidiary used the cloud service as a lower-tier ERP solution.
- Each vendor had to actively sell and market its cloud service (and have live users of this service in the qualifying revenue ranges) outside its home region. Gartner defined regions as the following: Americas, EMEA and Asia/Pacific. At least 25% of the cloud service revenue had to come from outside the vendor's home region.
- Each vendor had to have at least \$35 million in booked subscription and support revenue for its ERP suite cloud service only (that is, excluding any revenue from on-premises, hosted, managed cloud service or other deployment models) from January 2021 through December 2021 (or whichever 12-month accounting period most closely aligned with that period). Unrealized recurring revenue could not be included. If a vendor chose not to disclose revenue information, Gartner may have used its own market research, as well as insights from public sources, to judge that vendor's viability and eligibility for inclusion.

Cloud Service Attributes

Each vendor's ERP suite had to be deployed as a cloud service, in accordance with the following attribute definitions:

- **Responsibility:**
 - The vendor had to manage all technology infrastructure either in its own data centers or in third-party data centers.
 - The vendor itself had to implement upgrades as part of the cloud service, not use a third party or managed service provider for this purpose.
- **Licensing and technology:**
 - The cloud service had to be licensed on a subscription or metered pay-for-use basis.
 - Users could not have a contract specific only to them (except for minor adjustments), nor could they be provided with a version different from that offered to other cloud customers.
 - The cloud service had to use internet technologies. Use of internet files, formats and identifiers is necessary for delivery of cloud service interfaces.
 - The computing resources used to support the cloud service had to be scalable and elastic in near real time, rather than based on dedicated hardware/infrastructure.
- **Customization:**
 - Modification of source code should not be possible. Configuration via citizen developer tools and extension via a platform as a service (PaaS) — by partner, vendor or user — was allowed.
- **Pace of change:**
 - A single code line had to be used for all customers of the cloud service to enable rapid deployment of new functionality by the vendor.
 - The vendor had to deliver at least two upgrades containing new functionality per annum to all users of the cloud service, and control the pace of the update cycle. All customers had to be operating on the current updated version before the release of the next updated version.
 - The vendor had to offer self-provisioning capabilities for the service (at least for development and test instances) without involvement of its own staff.
 - The technology used to deliver the service had to be shared by multiple customers in order to create a pool of resources from which elasticity could be delivered.

All of the above inclusion criteria relate to a cloud service based on a single code line with a unique UI and data model. For vendors offering multiple cloud ERP suites, each with its own code line, each suite had to meet the inclusion criteria above; for example, each cloud ERP suite had to have at least 150 organizations using the suite in a production environment.

This Magic Quadrant reflects Gartner’s definition of “composable ERP.” We define composable ERP as an adaptive technology strategy that enables the foundational administrative and operational digital capabilities required for an enterprise to keep up with the pace of business change. This strategy delivers a core of composable applications and, as a service, software platforms that are highly configurable, interoperable, and flexible, in order to adapt to future technology.

Consequently, if a vendor’s cloud ERP suite consists of capabilities drawn from different code lines, that vendor would be included in the Magic Quadrant provided its solution:

- Has predefined workflow integrations
- Uses vendor-supported integration technologies
- Is positioned as a component of a broader “solution,” rather than as a stand-alone product in the vendor’s portfolio, and the vendor has users of the full solution in production environments.

Honorable Mentions

The following vendors did not qualify for inclusion in this Magic Quadrant but nevertheless offer notable, specialized value for certain industries or regions:

- **Acumatica:** The vendor offers the Acumatica Cloud ERP suite to target midsize organizations globally through a network of partners and independent software vendors (ISVs), as well as “white label” OEMs in certain locations.
- **Dassault Systèmes:** Although strong in the manufacturing ERP market for SMBs, Dassault Systèmes did not meet the inclusion criteria for this Magic Quadrant because most of its customers operate its DELMIAWorks offering on-premises or as a managed cloud solution. DELMIAWorks is part of Dassault Systèmes’ 3DEXPERIENCE Works portfolio.
- **Ramco Systems:** This vendor offers Ramco ERP on Cloud for U.S., EMEA and Asia/Pacific customers. It did not have enough cloud ERP customers with annual revenue of at least \$150 million to qualify for inclusion in this Magic Quadrant.
- **Rootstock Software:** This vendor offers Rootstock Cloud ERP built on the Salesforce platform. Its manufacturing ERP suite is aimed at midsize to large enterprises. Rootstock did not have enough cloud ERP customers with annual revenue of at least \$150 million to qualify for inclusion in this Magic Quadrant.
- **Sage:** This vendor offers product-centric ERP capabilities through its Sage Intacct and Sage X3 solutions. These solutions are primarily aimed at small and midsize enterprises. Sage did not have enough cloud ERP customers with annual revenue of at least \$150 million to qualify for inclusion in this Magic Quadrant.
- **SAP (Business ByDesign):** SAP’s Business ByDesign offering with product-centric capabilities is mainly aimed at midsize enterprises and not typically sold to larger enterprises. SAP did not have enough cloud ERP Business ByDesign customers with annual revenue of at least \$150 million to qualify for inclusion in this Magic Quadrant.
- **SYSPRO:** This vendor offers product-centric ERP capabilities through its SYSPRO Enterprise Resource Planning solution, which is aimed primarily at small and midsize enterprises in North America, EMEA and Asia/Pacific. SYSPRO had neither enough cloud ERP customers with annual revenue of at least \$150 million nor the global reach required for inclusion in this Magic Quadrant.
- **TOTVS:** This vendor is a leading provider of cloud ERP capabilities in the Latin American market. The TOTVS ERP suite had neither the adoption rates nor the global reach required for inclusion in this Magic Quadrant.

Evaluation Criteria

Ability to Execute

Gartner assesses vendors’ Ability to Execute by evaluating the products, technologies, services and operations that enable them to be competitive, efficient and effective in the market, and that positively impact their revenue, client satisfaction, client retention and general market reputation. A vendor’s Ability to Execute is judged by its success in delivering on its promises, using the criteria in Table 1.

Table 1: Ability to Execute Evaluation Criteria	
Evaluation Criteria ↓	Weighting ↓
Product or Service	High
Overall Viability	Medium
Sales Execution/Pricing	High
Market Responsiveness/Record	Medium
Marketing Execution	Low
Customer Experience	High
Operations	Medium

Source: Gartner (September 2022)

Completeness of Vision

Gartner assesses vendors’ Completeness of Vision by evaluating their ability to articulate their perspectives on the market’s current and future direction, to anticipate customers’ needs and cloud technology trends, and to address competitive forces. We also judge Completeness of Vision by vendors’ understanding and articulation of how they exploit market forces to create new opportunities for themselves and their clients. We use the criteria in Table 2.

Table 2: Completeness of Vision Evaluation Criteria	

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

Source: Gartner (September 2022)

Quadrant Descriptions

Leaders

Leaders demonstrate a market-defining vision of how ERP product-centric systems and processes can be supported and improved by moving them to the cloud. They couple this with a clear ability to execute their vision through products, services and go-to-market strategies. They have a strong presence in the market, and are growing their revenue and market shares. In the cloud ERP suite market, Leaders show a consistent ability to win deals with organizations of different sizes. They have a good depth of functionality across all areas of operational and administrative ERP. They have proof of multiple, successful deployments by customers. Their system integrator partners frequently use their offerings to support business transformation initiatives.

Challengers

Challengers have greater market presence than Niche Players and Visionaries. They may have developed a substantial presence in one area of the market, but they do not have a broad-enough vision to execute consistently across the wider market. They understand the evolving needs of ERP product-centric applications and processes as they move to the cloud. They have viable and proven cloud services, but focus on a specific size of organization or a specific part of an industry. They may be more focused on specific vertical capabilities or organization sizes than on developing deeper, broader functionality that is acknowledged as market-leading.

Challengers can become Leaders if their vision and focus develop in this market. Over time, ERP provider companies may move between the Challengers and Leaders quadrants as their product cycles progress and the market’s needs shift.

Visionaries

Visionaries understand how ERP is changing as applications move to the cloud. They have a good technology and functionality vision, but are limited in terms of execution or track record (or both). Their solutions are attractive to organizations wanting to move ERP product-centric systems and processes aggressively to the cloud, and they may have some areas of differentiating functional capability. They are typically limited in terms of market presence and geographical presence outside their home region. Organizations evaluating Visionaries should therefore closely evaluate these vendors’ market presence in their industry and region.

Visionaries may become Challengers or Leaders, depending on how they strengthen their go-to-market capabilities and whether they can develop partnerships that complement their strengths.

Niche Players

Casual users of Magic Quadrants often assume that Niche Players are less-capable vendors or associate them with less-capable products. This is a misconception that can lead to these vendors’ capabilities being overlooked.

Niche Players may target specific industry segments or company sizes with deeper functionality than other competitors do. For example, a Niche Player may focus on project-centric, asset-intensive or process manufacturing, and may not provide broad capabilities across manufacturing types. As such, a Niche Player may actually have the best solution for your organization, if there is a good functional match.

Niche Players offer cloud ERP capabilities, but are limited in both their Completeness of Vision and Ability to Execute. For example, Niche Players may not have a strong cloud technology vision. Instead, they may have cloud-enabled existing applications that they now deliver as a cloud service but that lack the usability of more cloud-native solutions. Alternatively, Niche Players may have very strong cloud capabilities, but adoption of their cloud solutions may be very limited.

Niche Players may have significant overall ERP market share from a large base of customers running on-premises solutions. Their public cloud ERP suites may therefore be relatively new. This may reflect a deliberate strategy to balance the needs of a large and loyal customer base against emerging demand for public cloud options. Readers should therefore consider all Niche Players in this Magic Quadrant as viable candidates for cloud ERP suite evaluation. However, it is important to understand a Niche Player’s focus and to check whether it suits your business requirements. If you like what a Niche Player offers, your evaluation should assess how well aligned it is with the market’s direction and your business objectives.

Context

A recent Gartner survey found that the majority of the participating organizations have scope to strengthen their current ERP strategy’s performance in support of increasingly complex business requirements. Nearly 70% of the respondents indicated that their organization’s current ERP strategy is not closely aligned with their business strategy. Organizations whose ERP strategy does not support business requirements struggle to adapt to changes of business strategy and support agile delivery of changes. More significant is the finding that nearly 80% of the participating organizations plan to replace or upgrade their current ERP packaged applications, with most likely to start their modernization process in the next 12 months. The most common challenge that organizations wanting to modernize their ERP applications must overcome are the need to justify the required spending on the basis of projected ROI.

Gartner’s client inquiry data indicates interest in cloud ERP suites is increasing significantly. However, we also often see clients who are looking to move to a cloud ERP suite falling victim to the myths that surround SaaS. Many think that moving to the cloud will enable them to quickly and easily overcome the challenges they face with on-premises ERP suites, such as cumbersome UIs, too much customization and expensive, hard-to-manage upgrades. Although all the solutions assessed in this Magic Quadrant offer the potential to address some or all of these challenges, applications and software engineering leaders need to be prepared for issues with regard to the following when moving to the cloud:

- The pace of updates, as most vendors release significant new functionality at least twice per year.

- The lack of ability to “customize” cloud ERP suites (cloud delivery models usually allow “extension” through a PaaS).
- A change in the technology skills required to support cloud ERP suites, with more involvement needed from the end-user community.
- Changes to governance, support and funding models.

Market Overview

ERP is one of the largest categories of enterprise software revenue. It grew by nearly 11% from 2020 to 2021 to a worldwide total of \$44.4 billion. Gartner estimates that 47% of this came from on-premises ERP offerings and 53% from cloud ERP offerings, and we forecast a split of 42% on-premises and 58% cloud by 2024. Although ERP is one of the top application categories to move to the cloud, product-centric organizations have been lagging behind service-centric organizations in terms of cloud ERP migration due to the higher levels of business process complexity and change management involved. Revenue in the subcategory of manufacturing and operations ERP components grew by only 5% in 2021. Accordingly, we still consider product-centric cloud ERP an emerging market.

Product-centric organizations continue to move ERP platforms to the cloud as vendors’ cloud offerings are often superior to legacy, on-premises solutions. Vendors are also differentiating themselves through functional innovation and integration to increase customers’ digital dexterity. Innovations include substantially improved AI-powered analytics, process automation and modern UXs with built-in workflow, team messaging, task management and data analytics that enable more productive use.

Evidence

2021 Gartner ERP, Procurement, HCM and Finance Survey

This survey was conducted to understand the performance and drivers of ERP strategy and applications in supporting the growing complexities of business requirements. It also aimed to understand organizations’ approach to vendor strategy, modernization and cloud adoption plans, and the challenges associated with each.

The survey was conducted online from September through November 2021 among 245 respondents from North America (n = 114), Western Europe (n = 81) and Latin America (n = 50). Respondents were screened to be managers or above, and to be responsible for ERP decision making at organizations with \$50 million or more in worldwide revenue. These organizations came from all industries.

Disclaimer: Results of this survey do not represent global findings or the market as a whole, but reflect the sentiments of the respondents and companies surveyed.

In addition, Gartner used several sources of information for the inclusion criteria, market definition and evaluations in this Magic Quadrant. The primary sources were:

- Interactions with over 2,300 end-user clients about their ERP strategy from January 2021 through May 2022.
- Over 5,700 customer inquiries from January 2021 through May 2022 on the subject of ERP applications.
- Peer Insights survey data received through May 2022, blended with insights from vendor product demonstrations.

Note 1: Types of Cloud Service

We identified four types of cloud service that met the inclusion criteria for this Magic Quadrant:

- **“Born in the cloud” solutions:** Architected from the outset only as cloud services, these typically have a multitenant application architecture.
- **New-generation solutions:** Architected for multiple deployment models (typically, public cloud, private cloud and on-premises), these solutions often support multitenancy at the database or operating system level, though sometimes not at the application level. They also make use of virtualization techniques to enforce a single code line, while keeping data secured.
- **Existing solutions rearchitected as cloud services:** These are similar to new-generation solutions as they also support multiple deployment models (public cloud, private cloud and on-premises), but, rather than start from scratch, vendors have invested in substantial changes to the underlying architecture of existing applications to support public cloud deployment.
- **Existing solutions delivered as public cloud SaaS:** The underlying architecture of these solutions has not changed significantly, but the vendor has developed an infrastructure provisioning layer to deliver them in public clouds.

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.

© 2023 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by [Gartner's Usage Policy](#). Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "[Guiding Principles on Independence and Objectivity](#)."