

Magic Quadrant for Cloud Infrastructure and Platform Services

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Initiatives: [Cloud and Edge Infrastructure](#)

I&O leaders must weave through a perilous environment consisting of increasingly aggressive cloud providers further complicated by rising inflation, competition for cloud talent, regulatory mandates, and security and downtime incidents. Use this research to make strategic cloud provider selections.

This Magic Quadrant is related to other research:

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Market Definition/Description

Cloud computing is a style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service using internet technologies. Gartner defines the cloud infrastructure and platform services (CIPS) market as standardized, highly automated offerings, in which infrastructure resources (e.g., compute, networking and storage) are complemented by integrated platform services. These include managed application, database and functions as-a-service offerings. The resources are scalable and elastic in near real time and are metered by use. Self-service interfaces, including a web-based user interface (UI) and an API, are exposed directly to the customer. The resources may be single-tenant or multitenant, and can be hosted by a service provider or on-premises in the customer's data center.

The scope of the Magic Quadrant for CIPS includes infrastructure as a service (IaaS) and integrated platform as a service (PaaS) offerings. These include application PaaS (aPaaS), functions as a service (FaaS), database PaaS (dbPaaS), application developer PaaS (adPaaS) and industrialized distributed cloud offerings that are often deployed in enterprise data centers.

Magic Quadrant

Figure 1: Magic Quadrant for Cloud Infrastructure and Platform Services



Vendor Strengths and Cautions

Alibaba Cloud

Alibaba Cloud (also known as Aliyun in Chinese) is a Visionary in this Magic Quadrant. This Magic Quadrant evaluation is focused on Alibaba Cloud's international business, which is headquartered in Singapore, and our technical assessment was performed using the international service.

Alibaba Cloud is a good fit for cloud-first digital business workloads for customers that are based in China or Southeast Asia. These customers either wish to leverage Alibaba Cloud's technology to support their ecosystem or need to locate cloud infrastructure in China or Southeast Asia. Alibaba Cloud is focused on expanding its successes in Asia in addition to advancing use of ARM processors and database PaaS offerings.

Strengths

- **Regional and engineering leadership:** Alibaba Cloud continues to have a leadership position in China and the broader Sinosphere, and has a meaningful impact in surrounding countries in terms of market share and capabilities. Alibaba Cloud's engineering talent is on par with any other cloud provider, which shows in its efforts such as sustainable data center initiatives with low PUE values, custom silicon and operating systems.
- **ISV partnerships:** Alibaba Cloud has a rich array of ISV partnerships, including with SAP, VMware, IBM and Salesforce, in addition to strategic Asia-focused ERP providers like Yonyou and Kingdee. Further, Alibaba Cloud's ISV integration accelerator program offers easy provisioning of complex ISV configurations into customer environments.
- **Digital channels:** Enterprises often view Alibaba Cloud as a pathway to digital transformation and commerce capabilities. This is based on Alibaba Cloud's big data and analytics capabilities and its parent company.

Cautions

- **Regulatory and competitive pressure:** Alibaba Cloud's success has been hampered by a perception of influence from the Chinese authorities, which has created an environment whereby more government-affiliated cloud providers have growing favor, particularly among public sector enterprises. Regulatory influence combined with highly active Chinese competitors such as Huawei and Tencent challenge Alibaba Cloud's current lead in terms of market share.

- **MSP ecosystem:** Alibaba Cloud lacks a rich MSP ecosystem that a global enterprise would require. Alibaba Cloud has a rather uneven managed service provider partnership program in China and a limited supply of qualified partners outside of Asia.
- **Consistency and transparency:** Alibaba Cloud is not as consistent, transparent or predictable with respect to discounting and pricing relative to international competitors. Gartner clients frequently complain about the disproportional pricing between basic and premier security offerings and professional services costs. Alibaba Cloud also lacks an element of transparency from the perspective of technical details of service implementations. Further, Alibaba Cloud continues to have significant differences in consistency with respect to functionality between its offerings in China, which has far greater capabilities compared with its international regions.

Amazon Web Services

Amazon Web Services (AWS), a subsidiary of Amazon, is a Leader in this Magic Quadrant. AWS is focused on being a broad-based provider of IT services, ranging from cloud-native and edge to ERP and mission-critical workloads.

AWS has a future focus on expanding the size of the market it serves by moving into new territory such as private 5G and partnerships with telecoms. AWS's operations are global. Its customers have diverse profiles, spanning sizes, industries and locales.

Strengths

- **Breadth of functionality:** AWS continues to have the greatest breadth and depth of capabilities of any provider in the market for CIPS. AWS has served as a guiding force in the overall market by setting accepted standards, developing technologies and establishing methodologies that are often copied in whole by competing cloud providers. The often poor facsimiles made by the cloud providers commonly lack the data, reasoning and customer adoption that AWS uses to underpin the offering.
- **Current market-share lead:** AWS's revenue makes it the current market-share leader in the CIPS market, exceeding Microsoft Azure, its closest competitor, by two times. Further, AWS is one of the few vendors in this market that does not exaggerate its business performance to customers based upon the sale of offerings that are well outside the periphery of what is reasonably considered to be cloud. Examples of such extraneous padding by other vendors include the sale of licenses for operating systems and databases on other cloud providers, and on-premises deployed PaaS platforms that make up significant portions of "cloud" revenue.

- **Vibrant and prosperous ecosystem:** AWS is a magnet for ecosystem partners, given its market share and momentum. ISV partners often have an “AWS first” prioritization in terms of which cloud providers to support initially, then the others follow. Partners include SAP, Splunk and VMware.

Cautions

- **Eroding customer relationships:** Gartner client inquiry surfaces that AWS often optimizes for the short term when dealing with customers, particularly at the time of contract renewal, resulting in eroding customer relationships. This, along with executive management changes, changing customer priorities, provider preferences in various regions and well-heeled competition, paint a challenging picture for AWS ahead.
- **Multicloud and sovereign strategy:** AWS, the leading provider in this market by market share, has a relatively weak strategy to support customers seeking sovereign and multicloud solutions. AWS shows little incentive or interest in pursuing meaningful multicloud strategies on behalf of its customers, despite the fact that many of its customers also use other cloud providers. Additionally, AWS has a fairly timid approach to sovereign clouds in Europe, where its competitors are being more innovative.
- **Regional dependencies and communication:** AWS’s operational incident of 7 December 2021 revealed some multiregion dependencies on the internal AWS network, which is hosted in us-east-1. Because us-east-1 also hosts support ticketing for North America, AWS customers also had difficulty communicating with technical support during the incident. Compounding this was AWS’s failure to communicate adequately in a timely fashion about the outages as they occurred and the confoundingly inaccurate Health Dashboard reporting, resulting in customers being left in the dark about outages.

Google

Google is a Leader in this Magic Quadrant. Google Cloud Platform (GCP) is strong in nearly all use cases and has made significant progress in improving its edge capabilities. Google continues to invest in being a broad-based provider of IaaS and PaaS by expanding its capabilities as well as the size and reach of its go-to-market operations. Its operations are geographically diversified, and its clients tend to be startups to large enterprises.

Strengths

- **Revenue and capabilities gains:** GCP had both the highest percentage of revenue gains and improvements across Gartner's Critical Capabilities for CIPS of any cloud provider in this market. This is largely the result of increased field sales, co-selling with partners and a commitment to offering a competitive platform from the perspective of capabilities.
- **Sales execution:** GCP's consistent enterprise focus and shift to selling to business executives (rather than to technical teams) is having very noticeable results, in terms of both adoption and enterprise mind share. This is in contrast to a short few years ago when most enterprises would be unlikely to consider Google as a supplier of enterprise IT solutions.
- **Sovereign cloud:** GCP has a more flexible partnering stance outside its core regions. It is willing to partner with in-country operators to create sovereign cloud alternatives in key regions and to partner with OEM providers for deployment of Google Anthos in private data center and edge locations.

Cautions

- **Increasing prices:** Google has historically attracted clients with aggressive pricing relative to its competition, but clients should be warned that the prices may not stay low forever. Google recently increased prices by 100% for some aspects of its storage services, for example. While Google is honoring existing customer commitments, this event is notable for being the first significant increase of published pricing by a provider in this market.
- **Strategic confusion:** Although Google maintains customer enablement programs for both its Rapid Assessment & Migration Program (RAMP) and Cloud App Modernization Program (CAMP), Gartner finds RAMP to be more prevalent in the market, and we rarely hear about CAMP from clients. Further, Google publicly promotes 39 specialized RAMP partners but maintains no equivalent public list of CAMP partners.
- **Financial losses:** Despite its revenue gains, GCP is the only CIPS provider with significant market share that continues to currently operate at a large financial loss. Further, GCP's success erodes Google's overall healthy gross margins, and the cloud division is a minor part of the parent company's overall revenue.

Huawei Cloud

Huawei Cloud is a Niche Player in this Magic Quadrant. Huawei Cloud's operations are mostly focused in China, though it also has meaningful efforts in Latin America and Africa. Its clients tend to be large and midsize enterprises. Huawei Cloud has an investment focus that includes building out its cloud services to new regions and matching the capabilities of its more direct Chinese competitors.

Strengths

- **Market share in China:** Huawei Cloud overtook Tencent Cloud to become the second largest cloud provider in China by market share in 2021 and is now just behind Alibaba Cloud. Huawei Cloud is also continuously exploring the global market, especially in Latin America, Southeast Asia and Africa where it has existing customer relationships and is amenable to catering to local market preferences such as billing in local currency.
- **On-premises and edge expertise:** Huawei's roots in enterprise IT are in delivering on-premises and edge infrastructure for customers. As such, Huawei is able to deliver both public cloud and private cloud solutions to give customers flexibility in deployment.
- **Enterprise pedigree:** Huawei Cloud has an edge on the competition with its differentiated enterprise pedigree and customer reach as it relates to telecom customers. This advantage, particularly over its main competitors based in China, positions it for the advent of more telco-cloud provider partnerships, which are developing around the world.

Cautions

- **International sanctions:** International sanctions have had a massive impact on Huawei's overall revenue, sinking by one-third and complicating Huawei Cloud's access to markets and components. Further, the success of Huawei Cloud's business can be hard to gauge, at times offering conflicting statements around financial performance of its cloud offerings.
- **PaaS immaturity:** The majority of Huawei Cloud's revenue outside of China comes from the sale of IaaS. Its PaaS offerings should be considered immature until it sees greater adoption from a wider base of Huawei Cloud's customers.

- **Nascent consulting partner ecosystem:** Huawei Cloud has a limited number of consulting and channel partners, which are mostly focused on Asia. Huawei Cloud's online marketplace of third-party offerings has a very limited selection, most of which are paid nonevaluation SKUs.

IBM

IBM is a Niche Player in this Magic Quadrant. IBM Cloud's operations are geographically diversified and mostly focused on lift-and-shift and extended enterprise use cases. Its clients tend to be large and midsize enterprises. IBM has an investment focus that includes hybrid and distributed cloud, quantum computing, regulated industries and industry-focused cloud services.

Strengths

- **Focused strategy:** IBM has chosen to focus its strategy on regulated industries. For example, it has built a distinct reference architecture and partner validation around the financial services industry (FSI). Further, IBM has developed innovative retail solutions based upon IBM Cloud's confidential computing technology.
- **Modernization vision:** IBM has a differentiated vision for modernizing enterprise workloads, such as those that run on IBM Power systems and IBM zSystems, to derive the agility benefits of cloud. IBM is one of the few providers with the assets and know-how to bring mainframe workloads focused on testing and development into modern environments.
- **Container management:** OpenShift is the dominant on-premises container management software in the market and is offered as a fully managed service, extended to distributed cloud environments via IBM Cloud Satellite. As such, Red Hat and OpenShift are core to IBM's cloud strategy and serve as the foundation for delivering IBM software on providers such as AWS and Microsoft Azure through the jointly branded offerings.

Cautions

- **Historic reliability:** IBM had major incidents in 2021, some of which had global impact and widespread multiservice disruption. Reliability has improved significantly in 2022, but IBM will need to maintain these improvements and ensure continuously available critical services to retain customer confidence.

- **Market responsiveness:** IBM Cloud has not yet found its competitive identity when compared with other providers in the market for CIPS. IBM is still in the process of integrating its traditional assets (Z, Power, Db2) with newly acquired platform technologies from Red Hat into a more cohesive “Gen2” hybrid and multicloud offering. This new IBM Cloud, while promising in vision and scope, is not yet fully competitive with the Leaders in this Magic Quadrant.
- **Sovereign cloud:** IBM Cloud’s sovereign cloud strategy is less comprehensive relative to some other providers in this market. Sovereign cloud capabilities are dependent upon legal ownership and authority within geographies as well as the physical location of infrastructure and data/processing residency. While IBM can deliver on some of these dependencies, it lacks core cloud capabilities demonstrated by market leaders. IBM must bolster sovereign and core capabilities, independent of its penetration of regulated industries, to deliver success with its sovereign strategy.

Microsoft

Microsoft is a Leader in this Magic Quadrant. Microsoft Azure is strong in all use cases, which include extended cloud and edge computing. Azure is particularly well-suited for Microsoft-centric organizations. Microsoft has an investment focus on hybrid and multicloud, and making architectural and security improvements to the Azure platform. Its operations are geographically diversified, and its clients tend to be midsize and large enterprises.

Strengths

- **Market share:** Microsoft Azure continues to make year-over-year progress in closing the gap in market share with AWS, Microsoft’s strongest competitor. With Azure’s current pace, the worldwide gap with AWS will significantly shrink within the foreseeable future and is already happening in Europe.
- **Solutions-oriented:** Microsoft Azure has an impressive solutions orientation with a broad range of Microsoft cloud capabilities and complementary ecosystem partners to satisfy customer use cases. Microsoft has an early, differentiated position in broad segments such as telecom, healthcare, manufacturing, retail and financial services.

- **Hybrid and multicloud:** Microsoft's vision for this market is underpinned by a committed belief that most enterprises will remain hybrid and multicloud, and that simplified operations and governance are required to operate such diverse environments securely and effectively. Microsoft is offering this through the set of technologies known as Azure Arc, which attempts to address these needs but has nascent adoption thus far.

Cautions

- **Security issues and lack of innovation:** Despite Microsoft Azure's market share gains, 2021 was a relatively unremarkable year for Microsoft Azure as it relates to novel innovations in the market for cloud infrastructure and platform services. Gartner interprets this as time largely spent by Microsoft on the reliability and security issues Azure customers faced after a continuous stream of incidents. Lastly, Microsoft's competitors such as Google and Oracle are not standing still and will likely match and even exceed Azure's capabilities on some dimensions in time.
- **Opaque costs:** Many Gartner clients report frustration with watching their Azure costs increase over time without knowing why. Critical enterprise features are often only in the most premium tier. Azure's native cost management capabilities lag behind some competitors in maturity and completeness, meeting only half the "required" criteria Gartner uses to evaluate cloud provider cost management capabilities. In addition, Microsoft CSP partners are very uneven in their knowledge of and support for cloud cost optimization practices. Lastly, the complexity of Microsoft licensing and support costs extends to Azure: Customers find it difficult to consolidate their spend and negotiate private discounts in a simple and predictable way.
- **Punitive licensing:** Microsoft plans to adhere to Fair Software Licensing Principles. However, Microsoft is using licensing for its products, such as Windows and SQL Server, punitively against competitive cloud providers by making it more expensive to deploy Windows workloads anywhere other than Azure. There are also restrictions with the use of Microsoft licensing on Azure itself that are often not communicated to customers. For example, customers are not told about restrictive rules under Azure Hybrid Use Benefits in Azure multitenant environments.

Oracle

Oracle was a Niche Player in last year's Magic Quadrant and is now a Visionary. Oracle Cloud Infrastructure (OCI) is mainly focused on lift and shift, hybrid and multicloud, and HPC, though OCI endeavors to have broad capabilities outside of Oracle-focused applications. Oracle has a future focus on offering sovereign cloud capabilities (largely outside of North America) and multicloud offerings on Azure and AWS.

Strengths

- **Business model innovation:** Oracle is out-innovating the market with respect to emerging enterprise needs such as sovereign clouds. This is particularly valuable to customers in countries with stringent regulatory and data privacy requirements as mandated by law. Allowing third parties to private label OCI and operate completely isolated regions is highly differentiated in the market for CIPS. This also helps promote the sovereign cloud needs in regions such as Europe and the Middle East.
- **Multicloud architectures:** Oracle is building compelling multicloud offerings leveraging its heritage in mission-critical database and data warehousing technology. Multicloud architectures, where one workload spans multiple cloud providers, are central to OCI's vision and its future offerings that live within and alongside providers such as AWS and Azure. These approaches to deploying and operating workloads in the cloud are unique critical capabilities for providers in this market.
- **Market responsiveness:** Oracle continues an impressive year-over-year pace of feature velocity that brings it closer to the market leaders in terms of hyperscale cloud capabilities. If the pace continues, Oracle will meet or exceed some of the providers in the Leaders quadrant in terms of capabilities within the foreseeable future.

Cautions

- **Brand reputation:** Oracle has negative brand association for many organizations, which was caused by years of tough compliance enforcement and inconsistent sales and support. As a result, many enterprises resist the thought of using Oracle technologies any more than is absolutely necessary. It is for this reason that most of OCI's success stems from top-down directives rather than bottom-up eagerness to use Oracle's platform. Private labeling OCI may just delay the inevitable, unsavory discovery by the prospective customer that Oracle is inside.

- **Non-Oracle, midmarket, small and midsize business (SMB):** OCI's sales efforts and partner network are not suited to adequately address the non-Oracle workload market, and clients do not consider Oracle to be a general-purpose solution for all enterprise workloads. Further, OCI is not positioned for adoption by midmarket enterprises and SMBs. OCI is a product aimed at large enterprises with established IT expertise.
- **MSP and partner ecosystem:** OCI has an immature ecosystem and limited commitment from MSPs, and global systems integrators that are often forced to compete with Oracle services. This leads GSIs to view Oracle services as competitive rather than complementary to its own services, which has resulted in less support for Oracle Cloud among cloud integrators compared with competing cloud platforms. Further, the number of apps in OCI's marketplace is significantly lower than those possessed by the Leaders in this Magic Quadrant.

Tencent Cloud

Tencent Cloud is a Niche Player in this Magic Quadrant. Tencent Cloud is mainly focused on serving multinationals in China or Chinese multinationals expanding overseas. Tencent is investing in network capabilities to support the low latencies required for gaming workloads along with low-code platforms, video on demand, security, database and virtual video meeting services.

Strengths

- **High-touch service:** Tencent Cloud combines a portfolio of IaaS services optimized for high-performance networking and scale-out application architecture, combined with a pricing and a support model that are customized for strategic high-value customers. This can make Tencent attractive to customers with specific workload requirements that map well to Tencent's capabilities and that are looking for an in-depth relationship.
- **Pricing incentives:** Tencent Cloud offers a zero commitment free trial of all services, with flexible private pricing with rapid decision making on exceptions and discounts for larger customers. Gaming customers are eligible to receive special incentives for use of gaming platform services in selected regions.

- **Consumer internet and low code:** For customers particularly focused on consumer internet in China, Tencent Cloud is willing to leverage its parent company's larger ecosystem of investment partnerships to offer large customers more benefits and opportunities. Further, Tencent Cloud has built a compelling cloud-native coding platform to enable enterprises to penetrate digital markets more effectively through Tencent's highly used social media platforms.

Cautions

- **Commitment to enterprises:** Upheaval among Chinese cloud providers has significantly impacted Tencent Cloud. This leads Gartner to question Tencent Cloud's commitment to serve large-enterprise customers with general-purpose IT workloads over the long term rather than returning to focus solely on workloads such as gaming. In particular, Tencent Cloud executives recently noted a shift in strategy to focus on higher-margin platform services including video on demand, security, database and collaboration based on its VooV Meeting software.
- **Scant ecosystem:** Tencent Cloud's partner programs are scant in depth and breadth. Tencent Cloud has a limited number of partner successes, and its third-party marketplace is quite minimal with fewer than 60 products, mostly from a handful of vendors, none of whom are category leaders in the worldwide software markets. Lastly, customers outside of China will find it especially difficult to find partners to work with Tencent Cloud.
- **Modest market share and innovation gains:** Tencent Cloud had very modest year-over-year gains in market share and a rather uneventful year in terms of novel innovations in the market for CIPS. These factors placed it near the bottom of all providers in this Magic Quadrant.

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

Huawei Cloud was added to this year's Magic Quadrant.

Dropped

No vendors were dropped.

Inclusion and Exclusion Criteria

For Gartner clients, Magic Quadrant and Critical Capabilities research identifies and then analyses the most relevant providers and their products in a market. Gartner uses by default an upper limit of 20 providers to support the identification of the most relevant providers in a market. On some occasions, the upper limit may be extended by Gartner Methodologies where the intended research value to our clients might otherwise be diminished. The inclusion criteria represent the specific attributes that analysts believe are necessary for inclusion in this research.

To qualify for inclusion, cloud providers need the following.

Market participation. They must sell public cloud IaaS as a stand-alone service, without the requirement to use any managed services (including guest OS management), or to bundle it with managed hosting, application development, application maintenance, or other forms of outsourcing. They may, optionally, also sell a private or hybrid offering that uses the same architecture but is single-tenant.

Market traction and momentum. They must have ISO 27001-audited (or equivalent) data centers on at least three continents. They must have at least one public cloud IaaS offering that meets the following criteria:

- If the offering has been generally available for more than three years: A minimum of \$1 billion in 2021 public cloud IaaS/dbPaaS revenue (excluding partner operated and/or distributed/hybrid/private cloud infrastructure deployed outside of a cloud provider's data centers), excluding all managed and professional services. Additionally, \$250 million of the public cloud IaaS/dbPaaS contract revenue must come from outside of the country where greater than 50% of data centers are located.

For the sake of clarity, revenue qualification is based upon the combination of the following:

- Compute (VMs, bare metal, container services in the public cloud)
- Storage (block, file and object storage in the public cloud)

- Networking (software-defined networking that underpins operation of public cloud resources)
- Database PaaS (fully managed database services in the public cloud)

If the offering has been generally available for less than three years: A minimum of \$500 million in public cloud IaaS/dbPaaS in revenue during 2021, excluding all managed and professional services, as well as a growth rate of at least 50% exiting 2021.

Business capabilities relevant to Gartner clients. They must offer public cloud IaaS services globally (they must be purchasable outside their home region), be able to invoice, offer consolidated billing, and be willing to negotiate customized contracts. They must have 24/7 customer support (including phone support). There must be an option for English-language localization of the contract, service portal, documentation and support.

Technical capabilities relevant to Gartner clients. They must have public cloud IaaS and PaaS services that are suitable for supporting mission-critical, large-scale production workloads, whether enterprise or cloud-native. Specific generally available, first-party service features must include:

- Software-defined compute, storage and networking, with access to a web services API for these capabilities
- Cloud software infrastructure services facilitating automated management, including at a minimum, monitoring and autoscaling
- A managed database PaaS offering
- A managed FaaS offering with integrated HTTP API gateway platform whose underlying infrastructure is not exposed to the user
- Company developed, publicly available SDKs in three or more programming languages
- A distributed, continuously available control plane supporting a hyperscale architecture
- Managed CI/CD offerings to support the complete application life cycle including automated build and deployments
- A distributed cloud offering as defined by Gartner (see 'Distributed Cloud' Fixes What 'Hybrid Cloud' Breaks)

- Real-time provisioning for compute instances (small Linux VM in five minutes, 1,000 Linux VMs in one hour) and a container service that can provision Docker containers in seconds
- An allowable VM size of at least 16 vCPUs and 128 GB of RAM
- A service-level agreement for compute, with a minimum of 99.9% availability
- The ability to securely extend the customer’s data center network into the cloud environment
- The ability to support multiple users and API keys, with role-based access control

Evaluation Criteria

Ability to Execute

Table 1: Ability to Execute Evaluation Criteria

<i>Evaluation Criteria</i> ↓	<i>Weighting</i> ↓
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Medium
Customer Experience	Medium
Operations	Medium

Source: Gartner (October 2022)

Completeness of Vision

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	Medium
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Low

Source: Gartner (October 2022)

Quadrant Descriptions

Leaders

Leaders distinguish themselves by offering a service suitable for strategic adoption and having an ambitious roadmap. They can serve a broad range of use cases, although they do not excel in all areas, may not necessarily be the best providers for a specific need and may not serve some use cases at all. Leaders in this market have appreciable market share and many referenceable customers.

Challengers

Challengers are well-positioned to serve some current market needs. They deliver a good service that is targeted at a particular set of use cases, and they have a track record of successful delivery. However, they are not adapting to market challenges sufficiently quickly or do not have a broad scope of ambition.

Visionaries

Visionaries have an ambitious vision of the future and are making significant investments in the development of unique technologies. Their services are still emerging, and they have many capabilities in development that are not yet generally available. Although they may have many customers, they might not yet serve a broad range of use cases well or may have a limited geographic scope.

Niche Players

The Niche Players in the market for CIPS may be excellent providers for particular use cases or in regions in which they operate, but they should ultimately be viewed as specialist providers. They often do not serve a broad range of use cases well or have a broadly ambitious roadmap. Some may have solid leadership positions in markets adjacent to this market, but have developed only limited CIPS capabilities.

Context

There are no providers in the CIPS market that do not require enterprises to accept significant trade-offs that may fall into technical or business downsides. The track record of cloud providers in terms of resiliency and security varies widely by provider. Major outages have continued to plague several cloud providers in this Magic Quadrant over the past year. In some cases, providers offered scant transparency and mitigation measures to work around provider-oriented failure. Further complicating matters is the impact on enterprises when a cloud provider has substantial, systemic dependencies on third parties that it does not control.

The nature of competitive providers beholden to public stock market investors eventually forces the providers to use aggressive measures to meet sales objectives because it's faster than attempting to win hearts and minds.

Ultimately, enterprises considering meaningful use of hyperscale cloud providers need to prioritize against the trade-offs of each provider and then develop subsequent strategies for mitigating the trade-offs.

Market Overview

The market for CIPS is changing in significant ways that have long-lasting ramifications to the future of enterprise IT. The hyperscale cloud providers are in a race to colonize enterprises in an attempt to become the primary strategic supplier of cloud services to address a broad range of IT workloads.

The efforts to colonize enterprises are at odds with most enterprise prerogatives to “be multicloud” with respect to sourcing strategies. Further complicating matters is that the “best of breed” approach historically used on-premises is treacherous in the cloud, given the dissimilarity in identity systems, resilience characteristics, network latency and general apprehension by the leading providers to work together in the interest of customers. Ultimately, multicloud architectures are still only suitable for the most sophisticated customers who can deal with the myriad challenges that await.

Once enterprises are in the dominion of a cloud provider, it is unlikely that the cloud provider remains benevolent for very long. The ultimate goal of the cloud providers is to move enterprises further up into the PaaS layer where the margins are higher and the ability to extricate workloads and processes become more difficult. But traditional workloads such as those focused on ERP become difficult to move as well due to their mission-critical nature.

The negative consequences of being in the dominion of a cloud provider are already beginning to surface. Gartner client inquiry across a broad array of worldwide regions reveals unscrupulous behavior on the part of the cloud provider once enterprises are fully locked-in.

Some cloud providers use strong-arm tactics to force enterprises into agreeing to increasingly higher committed spend levels. Others use software licensing from an entrenched base of operating system and relational database management system utilization to direct more cloud usage to their respective offerings.

Early indications are that some enterprises are fiercely resisting and are making significant plans for IT supplier diversification as a result. But the complexity and overhead of managing multiple cloud providers, combined with lower discounts due to lower provider commitments, often result in a multicloud strategy increasing TCO, rather than lowering it as desired.

The market for cloud infrastructure and platform service is in play again.

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.

Document Revision History

[Magic Quadrant for Cloud Infrastructure and Platform Services - 27 July 2021](#)

[Magic Quadrant for Cloud Infrastructure and Platform Services - 1 September 2020](#)

[Magic Quadrant for Cloud Infrastructure as a Service, Worldwide - 16 July 2019](#)

[Magic Quadrant for Cloud Infrastructure as a Service, Worldwide - 23 May 2018](#)

[Magic Quadrant for Cloud Infrastructure as a Service, Worldwide - 15 June 2017](#)

[Magic Quadrant for Cloud Infrastructure as a Service, Worldwide - 3 August 2016](#)

[Magic Quadrant for Cloud Infrastructure as a Service, Worldwide - 18 May 2015](#)

[Magic Quadrant for Cloud Infrastructure as a Service - 28 May 2014](#)

[Magic Quadrant for Cloud Infrastructure as a Service - 19 August 2013](#)

[Magic Quadrant for Cloud Infrastructure as a Service - 18 October 2012](#)

[Magic Quadrant for Public Cloud Infrastructure as a Service - 8 December 2011](#)

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[How Markets and Vendors Are Evaluated in Gartner Magic Quadrants](#)

[Critical Capabilities for Cloud Infrastructure and Platform Services](#)

[The Evolution of Cloud Infrastructure as a Service to CIPS](#)

[Market Guide for Cloud Infrastructure as a Service, China](#)

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Table 1: Ability to Execute Evaluation Criteria

<i>Evaluation Criteria</i> ↓	<i>Weighting</i> ↓
Product or Service	High
Overall Viability	High
Sales Execution/Pricing	Medium
Market Responsiveness/Record	High
Marketing Execution	Medium
Customer Experience	Medium
Operations	Medium

Source: Gartner (October 2022)

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	Medium
Vertical/Industry Strategy	Low
Innovation	High
Geographic Strategy	Low

Source: Gartner (October 2022)