Magic Quadrant for Hyperconverged Infrastructure Software

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Initiatives: Data Center Infrastructure; Cloud and Edge Infrastructure

HCI software stacks support infrastructure that spans compute, storage, networking and management. I&O leaders should regard HCI software as a technology that addresses requirements related to the cloud-native, edge, hybrid cloud and virtual desktop infrastructure use cases.

This Magic Quadrant is related to other research:

Critical Capabilities for Hyperconverged Infrastructure Software

View All Magic Quadrants and Critical Capabilities

Additional Perspectives

 Invest Implications: Magic Quadrant for Hyperconverged Infrastructure Software (19 November 2021)

Market Definition/Description

Hyperconverged infrastructure (HCI) software provides virtualized compute, storage and networking from a single instantiation running on server hardware. Initial HCl solutions were sold primarily as appliances by a single hardware vendor — what Gartner defined as hyperconverged integrated systems (HCIS; see Market Definitions and Methodology: Integrated Systems). As the market has evolved, there has been a distinct bifurcation, with HCIS being the direction driven by hardware providers, and HCl software being driven by software providers. The latter is the focus of this analysis and is distinct from the former, because it supports and is deployed to server hardware solutions from multiple server providers. This HCl software has become the mechanism for driving solutions that are focused on specific use-case or geographic niches, as well as solutions that are focused broadly on more cloud-related functionality.

Core capabilities for HCI software are virtual compute, storage and networking, using a scale-out, shared-nothing architecture combined with unified, "single pane of glass" management for these virtual resources. Additional core capabilities include local, direct-attached storage (DAS) in each node; enterprise-grade, high availability (HA) and mobility, for both compute and storage; enterprise-grade data services (e.g., deduplication, compression and erasure coding); and some level of choice in server and network hardware. Optionally, although network management is required, it can be enabled through integrated, third-party software by the HCI software provider. Another option includes the management of cloud-native applications through the support of both software containers as well as Kubernetes. An additional optional capability has been to extend the use of HCI software tools to manage applications in a number of the largest public cloud provider environments such as Alibaba Cloud, Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform and Oracle Cloud.

Magic Quadrant

Figure 1: Magic Quadrant for Hyperconverged Infrastructure Software



Source: Gartner (November 2021)

Vendor Strengths and Cautions

Huayun Data Group

Huayun Data Group is a Niche Player in this Magic Quadrant. Its Archer OS and Maxta HCl software solutions are focused mainly on hybrid cloud, edge and virtual desktop infrastructure (VDI) use cases. The vendor's operations are focused mainly in China, and its clients tend to be small and midsize businesses (SMBs) in the banking/securities, education, healthcare, manufacturing and government sectors. Huayun Data Group's HCl software solution has been enhanced with ArIQ, which provides automated operational monitoring service and analytics.

Strengths

- Huayun Data Group has extended HCl offerings that include backup to Huayun's cloud, a VDI solution with multiple graphics processing unit (GPU) modes, ArlQ for automated operational monitoring and the Archer CloudManager cloud management platform.
- Huayun Data Group sells its HCl software solutions as one-time perpetual licenses requiring no additional payments for license renewal.
- When bundled with Archer CloudManager, the vendor's HCl enables the management of VMs and Kubernetes running on a private server cluster, in a public cloud, on secondary storage or bare metal.

Cautions

- Huayun Data Group currently has a limited installed base outside of China, which results in support capabilities that vary by geography.
- Huayun Data Group's use of both the Archer OS and Maxta HCl brands for different countries may be confusing for IT leaders seeking a common solution across multiple geographies.
- The vendor has limited channel and sales partnerships outside of China.

Microsoft

Microsoft is a Visionary in this Magic Quadrant. Azure Stack HCl is focused on providing a hybrid cloud solution that integrates on-premises and edge, VMs, and container services into the Azure cloud. The vendor's operations are geographically diversified, and its clients tend to be midsize to large enterprises. Azure Stack HCl is offered as a subscription-based, cloud-managed solution, and it's based on the version of Hyper-V and HCl stack used in the Azure cloud.

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Strengths

- Microsoft provides organizations with a comprehensive edge, core data center and cloud portfolio, with many common components and familiar management tools.
- This product offers common management with the Azure cloud platform and the ability to use Azure cloud services, such as Azure Site Recovery, Azure Backup and Azure Kubernetes Service.
- Microsoft's Azure Stack HCI is supported on a broad range of vendor hardware and is available through Microsoft's rich selection of partners and system integrators (SIs).

Cautions

- Many organizations are unaware of Azure Stack HCl and confuse it with Azure Stack Hub.
- The subscription pricing mechanism for Azure Stack HCI may not be suitable for all organizations. The nonsubscription version requires a full Windows Server Enterprise Edition license to be purchased, which may not be cost-effective.
- The tight integration with the Azure cloud requires a commitment to Microsoft as both an on-premises and a public cloud vendor.

Nutanix

Nutanix is a Leader in this Magic Quadrant. Nutanix provides HCl software and data services for on-premises and public cloud. Its operations are geographically diversified, and clients tend to be midsize and large enterprises, and service providers. Nutanix has enhanced its HCl solution to include application life cycle automation, cost governance, health monitoring and Al-driven operations. It expanded its unified storage capabilities to include ransomware signatures, data age analytics and tiering to S3-compatible object storage, and added disaster recovery (DR) replication of file shares. Nutanix software is supported on Nutanix NX and specific Dell, Hewlett Packard Enterprise (HPE), Lenovo, and Fujitsu hardware offerings, as well as on third-party servers and bare-metal Amazon EC2 instances.

Strengths

 Gartner clients continually express high satisfaction with the breadth and depth of Nutanix HCl software, as well as with the consistency of support services, which results in customer loyalty and a 92 Net Promoter Score (NPS).

- Nutanix offers hybrid cloud infrastructure with unified management, consistent tooling, and application, data and license portability between the edge, data center, as-a-service (through partners) and public cloud (Nutanix Clusters) deployments.
- Nutanix provides a unified platform for multiple workloads and data services. Databases are deployed with Era, Kubernetes applications with Karbon and Red Hat OpenShift Integration, while unstructured and structured data services, disaster recovery (DR), and backup are delivered through Files, Objects, Volumes, Leap and Mine services.

Cautions

- As a premium product, Nutanix HCl might not be a cost-effective solution for deployments that do not require advanced functionalities or are not leveraging the Nutanix Acropolis hypervisor.
- While Nutanix invests in hybrid and multicloud product capabilities, the customer traction for Nutanix Clusters public cloud is still modest and currently only available in AWS.
- Nutanix customers still require the use of CLI for some advanced functionality or troubleshooting capabilities that are not incorporated in the GUI.

Quantum

Quantum (formerly Pivot3) is a Niche Player in this Magic Quadrant. Quantum Acuity HCl software is targeted primarily for hybrid cloud, edge and VDI use cases. Its operations are global, and its clients tend to be large enterprises in the transportation, utilities and government vertical markets. The vendor has enhanced its Quantum Acuity HCl software platform with a number of additional capabilities, including Automated Upgrade Orchestration, a Health and Best Practices Analyzer, and intelligence and automation capabilities in Quick Drive Rebuild and Self-Healing feature sets.

Strengths

- Quantum Acuity HCl's automation and intelligence features make it both resilient and simple to manage at scale.
- Quantum Acuity HCl is well-suited to meet the large-scale, mission-critical requirements typically associated with security and surveillance use cases in public spaces such as airports and university campuses.
- Quantum Acuity HCl has a high level of satisfaction among its existing customers.

Cautions

- Quantum is not yet recognized globally as an HCl software provider; therefore, for customers seeking only HCl software with the highest global brand recognition, Quantum may not be invited to compete.
- Because Quantum did not retain any key executives when it purchased Pivot3, infrastructure and operations (I&O) leaders should closely monitor the future direction of the Quantum Acuity HCI product.
- Quantum's Acuity HCl software solution may be less compelling than less expensive solutions for use cases that are not deemed to be mission-critical or those that are smaller in scale.

Sangfor Technologies

Sangfor Technologies is a Niche Player in this Magic Quadrant. Sangfor's HCl software solution is designed for cloud transformation, VDI, and backup and DR. Sangfor has a long-established security business with a presence in EMEA and the Asia/Pacific region. Sangfor HCl integrates security functions, which is attractive to SMBs. The vendor's operations are still focused around China (where more than 80% of Sangfor HCl sales occur). Clients tend to be midsize to large enterprises in the core verticals of manufacturing, government, healthcare and education. In particular, 2021 has focused on end-to-end continued security, support for ARM, as well as x86 platforms for private and managed public cloud infrastructure expanding to edge cloud deployments.

Strengths

- With its own hypervisor Kernel-based Virtual Machine (KVM), Sangfor's HCl provides a secure, managed, cost-competitive alternative for midsize enterprises (MSEs) around hybrid cloud.
- Organizations in China benefit from a mature support organization. This can meet client needs in the local market, leveraging expansion and contact across the Asia/Pacific region and EMEA.
- Sangfor Technologies has developed an industry vertical approach to the market. It creates partnerships with independent software vendors (ISVs), deploying sales teams and developing knowledge of regulations to meet the needs of organizations across China and elsewhere.

Cautions

- Local support resources may be limited outside of China and may not qualify for consideration across the rest of the Asia/Pacific region and EMEA.
- Sangfor has limited stack integration with ecosystem partners outside of China, when compared with its larger international competitors.
- The vendor has not been proven in edge locations with its offerings.

Scale Computing

Scale Computing is a Niche Player in this Magic Quadrant. Its HC3 product is primarily focused on the edge and VDI use cases. Its operations are primarily focused in the U.S. and EMEA, with some penetration in Asia. Clients tend to be SMBs in retail, industrial, education, local government and healthcare. During the past 12 months, Scale Computing has expanded its support for zero-touch provisioning and video surveillance solutions.

Strengths

- Scale Computing offers extremely low-cost solutions that require limited hardware investment for edge locations. It provides resource-efficient, full-stack software, including its own KVM-based hypervisor.
- The vendor is highly rated in peer reviews in Gartner Peer Insights in the areas of product capabilities as well as sales, deployment and support experiences.
- Scale Computing continues to invest in ease of use and zero-touch management to enable customers to manage widely distributed infrastructure and applications.

Cautions

- Scale Computing uses its own KVM-based hypervisor solution, so existing skills and licenses are not transferable.
- The vendor has limited brand recognition. Customers that require a global brand may not include Scale Computing in their evaluations.
- Scale Computing provides a core-to-edge-to-cloud solution that utilizes containers across multiple public clouds, but its hybrid cloud solution for VMs is limited to a single cloud vendor.

StarWind

StarWind is a Niche Player in this Magic Quadrant. The StarWind HyperConverged Appliance (HCA) is primarily focused on reduced node count for hybrid cloud and edge use cases and distributed data centers. While its operations are global, with a focus on North America and Europe, its clients tend to be SMBs in the education, government and healthcare sectors. Recently, the vendor has modernized its codebase for increased performance, and dedupe and compression with integration to ZFS.

Strengths

- The vendor has good HCl and storage expertise, and its full-featured product can address most use-case scenarios.
- StarWind has strong overall customer satisfaction.
- StarWind has introduced innovation in the hardware and software HCI layers, which makes it an attractive price/performance option for SMBs for edge and cloud.

Cautions

- StarWind is one of the smaller vendors in this research in terms of revenue and geographic coverage, which limits its ability to gain traction in the global enterprise market.
- StarWind HCl deployments tend to be smaller in node count than those of its competitors, because the vendor has been focusing on midmarket enterprise needs.
- The vendor does not offer "preintegrated" HCl bundling by major server OEMs.

StorMagic

StorMagic is a Visionary in this Magic Quadrant. Its SvSAN product is primarily focused on edge and mission-critical use cases for distributed data centers. Its operations are geographically diversified, with a focus on North America and Europe, and its clients tend to be midsize to large enterprises in the retail, manufacturing and government sectors, as well as service providers with edge deployments. StorMagic is now available as a service through HPE GreenLake Central and via an added OEM agreement with Hivecell edge servers. Recently, StorMagic introduced the SvSAN Witness as-a-service capability for remote quorum and added SvSAN Container Storage Interface (CSI) for Kubernetes. StorMagic has recently added the ARQvault digital asset management capability based on its acquisition of the SoleraTec video management company.

Strengths

- StorMagic HCl capabilities are designed specifically to the unique requirements of the edge or distributed data centers.
- StorMagic SvSAN customers highlight product ease of use, high reliability and costefficiency.
- StorMagic is gaining global traction through its relationship with HPE, including HPE
 Complete and the HPE GreenLake as-a-service program.

Cautions

- I&O leaders often lack familiarity with StorMagic products as the vendor's marketing and sales resources are significantly less extensive compared to market leaders.
- StorMagic SvSAN clusters are optimized for two- or three-node clusters, and the product lacks advanced services such as data deduplication, compression, snapshots, remote replication, hybrid cloud integration and AI operations functions.
- Some Gartner clients would prefer StorMagic sales and support personnel to be more responsive to their inquiries and provide faster problem resolutions.

VMware

VMware is a Leader in this Magic Quadrant. Its VMware HCI offering is broadly focused on hybrid cloud, cloud-native, VDI and edge use cases. Its operations are geographically diversified, and its clients tend to be midsize to large enterprises. VMware has expanded the capabilities of HCI Mesh, its software-defined approach to compute and storage disaggregation, to enable shared capacity from HCI clusters to non-HCI clusters.

Strengths

- VMware has jointly engineered hybrid cloud and multicloud support with public cloud providers, including AWS, Microsoft Azure, Google Cloud Platform, Oracle Cloud and IBM Cloud, to support HCl deployments in those public cloud environments and utilize a service consumption model.
- VMware's significant software installed base ensures that there is a large I&O talent pool with skills from which to hire.
- VMware is a \$12 billion, profitable company (based on its FY21 results). It has a global reach, so long-term support risks related to corporate viability are relatively low, compared with smaller providers.

Cautions

- VMware's HCl offerings are among the most expensive in the market, so they are less price-competitive when cost is a heavily weighted part of the vendor selection process.
- Because of the multiple storage design considerations that must be taken into account, the configuration of vSAN software can be challenging.
- While other hypervisors can use vSAN storage through SAN iSCSI and file services,
 VMware vSAN itself does not support other hypervisors beyond ESX.

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

Quantum was added because it purchased Pivot3.

Dropped

- DataCore Software was dropped because it was unable to meet the inclusion criteria.
- Pivot3 was dropped because the vendor was purchased by Quantum.

Inclusion and Exclusion Criteria

The inclusion criteria represent the specific attributes that analysts believe are necessary for inclusion in this research. To qualify for inclusion, vendors need to meet the following criteria.

Functional Criteria

Included HCI software vendors must:

- Provide an integrated software stack, which includes unified management and software-defined compute, storage and, optionally, networking.
- Combine virtual machine (VM) and software-defined storage resources, both running on the same physical servers, as the primary deployment method.
- Virtualize local, internal and direct-attached storage, rather than shared, networked storage, such as a SAN and/or network-attached storage (NAS).
- Provide a mechanism to pool internal and direct-attached primary storage across servers into logical, abstracted virtual storage.
- Develop the storage and data management services integrated in the offering.

Business Criteria

Eligible HCI software vendors must:

- Provide evidence for each product to be evaluated of a minimum of 50 production customers brought to revenue, with at least 25 in each of at least two of the major geographies (the Americas, EMEA and the Asia/Pacific/Japan region) in the 12 months ending 30 June 2021.
- Deliver complete Level 1 (call center/service desk) and Level 2 (escalation) support either directly or through a contracted service provider to facilitate quick and easy problem resolution. However, Level 3 (engineering) support can be delivered separately, based on the vendor's engineering partnerships.
- Deliver solutions that meet user requirements in at least three of the use cases identified in Critical Capabilities for Hyperconverged Infrastructure.
- Have delivered the product or products evaluated in the companion Critical Capabilities research in general availability by 30 June 2021.
- Provide HCI software that is portable to, sold within the past year to, and supported and qualified on branded x86 server hardware of at least two server providers beyond any white-box or server hardware branded and badged with the HCI software provider's logo. At least one of those two server providers must be one of the top 10 x86-based server OEMs worldwide, based on server vendor revenue estimates for 2021 published by Gartner. Those providers are Dell, HPE, Inspur, Lenovo, Cisco, Huawei, Super Micro Computer, H3C, Fujitsu and Oracle.

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Evaluation Criteria

Ability to Execute

Product or Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills, etc., whether offered natively or through OEM agreements/partnerships, as defined in the Market Definition/Description section and detailed in the subcriteria.

Overall Viability: An assessment of the overall organization's financial health, and the financial and practical success of the business unit. Viability also involves the likelihood that the individual business unit will continue offering and investing in the product, and advancing the state of the art in 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: The 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, and promote the brand and business. This also involves increasing awareness of the products, and establishing 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 or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, SLAs, etc.

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

Table 1: Ability to Execute Evaluation Criteria

| Evaluation Criteria \downarrow | Weighting ↓ |
|----------------------------------|-------------|
| Product or Service | High |
| Overall Viability | High |
| Sales Execution/Pricing | Medium |
| Market Responsiveness/Record | High |
| Marketing Execution | Medium |
| Customer Experience | High |
| Operations | Low |
| | |

Source: Gartner (November 2021)

Completeness of Vision

Market Understanding: The ability of the vendor to understand buyers' wants and needs and to translate them 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 them 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, and defensive or preemptive 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.

Table 2: Completeness of Vision Evaluation Criteria

| Evaluation Criteria \downarrow | Weighting ↓ |
|----------------------------------|-------------|
| Market Understanding | High |
| Marketing Strategy | Medium |
| Sales Strategy | Medium |
| Offering (Product) Strategy | High |
| Business Model | Medium |
| Vertical/Industry Strategy | Medium |
| Innovation | High |
| Geographic Strategy | Medium |
| | |

Source: Gartner (November 2021)

Quadrant Descriptions

Leaders

Leaders will typically be able to execute strongly across multiple geographies, verticals, use cases and deployment models. They will have a support and channel organization that ensures a high-quality customer experience, regardless of whether the solution is purchased directly or through resellers, integration partners, or OEMs.

Challengers

Challengers are typically vendors with achievements that, although significant, are based on a narrower subset of the market, having gaps in geographic coverage, product portfolios and use cases. These vendors have the potential to establish themselves across the broader, global market, but have not yet done so.

Visionaries

Visionaries are typically vendors that are focusing on strong innovation and product differentiation, with the potential to significantly disrupt the market if execution improves. These may be smaller vendors with limited reach or achievement to date, or larger vendors with innovation programs that are still unproven.

Niche Players

Niche Players are typically vendors with market programs focused on a limited set of geographic locations, deployment models, customer segments or use cases. These vendors have met the inclusion criteria and may address their specific market category effectively.

Context

HCI software is not limited to a system (hardware appliance) deployment model. Software-only/bring-your-own-server, reference architectures, cloud and as-a-service deployments are growing. Vendors with HCI software often rely on OEM partnerships and server certifications to provide greater choice and an improved support experience.

As HCl software has evolved, the integrated support of orchestration tools such as Kubernetes has increased across many providers. The intent is to provide an interface that goes beyond HCl itself to facilitate the automated deployment of containerized applications. The actual use of these orchestration tools supported by HCl software appears to be in an early phase, but it has become a requirement for some customers that expect to leverage that container management capability in the near future.

Simplified management capabilities for infrastructure running — whether it is in enterprise data centers, at a colocation facility, at the edge or in the public cloud — is one of the broader goals that leading HCl software providers are looking to meet.

Market Overview

The HCl software market is demonstrating increasing maturity. Indications of this are some vendor consolidation and slowing growth. An additional factor is the rationalization of the most predominant use cases now to four: cloud-native, edge, hybrid cloud and VDI. It should be noted that VDI may not have remained as a predominant use case if it was not for the impact of COVID-19 in the form of an ongoing need for many organizations to support remote working.

Some HCI software vendors continue to expand their deployment options to include more cloud providers, such as Amazon, Google and Microsoft, with the intent to be a turnkey private/hybrid cloud. For those HCI software providers, this emphasizes a focus on tools and capabilities to monitor, secure, manage, optimize and govern diverse on-premises, cloud and edge deployments. Other HCI software vendors look to provide specific usecase advantages or high-touch, regionally appealing solutions in an attempt to establish an effective niche approach in alignment with HCI software market trends.

Many partners in the HCl software market are also competitors, and I&O leaders must remain cognizant of the sometimes conflicting priorities and incentives of HCl software vendors and their partners, as well as rapidly expanding HCl software partner networks. Full-stack infrastructure software suppliers, such as Microsoft, Nutanix and VMware, pose interesting partnership challenges, because each has significant HCl software opportunities in a substantial installed base of customers.

Vendors that have more hypervisor-neutral — or at least hypervisor-flexible — offerings may have advantages for customers that want to avoid hypervisor lock-in. I&O leaders pursuing multihypervisor strategies should carefully evaluate the ability of solution providers to deliver simplicity at the management layer.

Potential HCI Market Disruption

Cloud providers Amazon, Google, Microsoft and Oracle could ultimately disrupt the entire HCI software market. They are further extending their cloud offerings to on-premises infrastructure with offerings such as AWS Outposts, Google Anthos, Azure Stack Hub and Oracle Cloud Infrastructure. Meanwhile, I&O leaders will have an alternative to public cloud and private data centers by leveraging laaS providers that use simpler-to-manage HCI software for their own infrastructures.

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.

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Recommended by the Authors

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How Markets and Vendors Are Evaluated in Gartner Magic Quadrants

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Gartner Peer Insights 'Voice of the Customer': Hyperconverged Infrastructure Software

Market Definitions and Methodology: Integrated Systems

Market Guide for Integrated Systems

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Source: Gartner (November 2021)

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Table 2: Completeness of Vision Evaluation Criteria

| Evaluation Criteria \downarrow | Weighting \downarrow |
|----------------------------------|------------------------|
| Market Understanding | High |
| Marketing Strategy | Medium |
| Sales Strategy | Medium |
| Offering (Product) Strategy | High |
| Business Model | Medium |
| Vertical/Industry Strategy | Medium |
| Innovation | High |
| Geographic Strategy | Medium |

Source: Gartner (November 2021)

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