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MarketScope for Group Video Systems

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VIEW SUMMARY

The introduction of personal and mobile endpoints is dramatically reshaping the landscape for group video collaboration. IT leaders should align their video portfolios for maximum utilization and strategic fit with their related investments in collaboration and unified communications.

What You Need to Know

The group video market continues to evolve and adapt to user preferences, with a growing emphasis on bringing a broader range of personal endpoints into the meeting experience. This shift has partially been a byproduct of the bring your own device (BYOD) mindset, and has been fueled by the growing market presence of service providers focused on enabling any-to-any videoconferences through virtual meeting rooms. These approaches focus on being endpoint- and network-agnostic, and they drive video to a reservationless model similar to audioconferencing. This focus on more flexible options for participants and a broader choice of endpoints is also influenced by enterprises seeking greater utilization of their video investments, which currently average less than 10% of the business day. Continued attachment of video to unified communications (UC) has invigorated the interest in personal video of all types and has caused enterprises to think more broadly about enabling seamless experiences from the desktop to the boardroom.

Room video deployments remain a mainstay in group videoconferencing designs, but the role of these systems is changing. More modular form factors, lower price points and innovative camera technology continue to enable enterprises to gain many of the benefits of immersive telepresence without a fully dedicated system complete with furniture and lighting at a fraction of the cost. As the endpoint mix evolves, enterprises are becoming more prescriptive about their video architecture, demanding greater interoperability between rooms and personal endpoints without an outsized dependence on intermediate infrastructure, such as multipoint control units (MCUs) and border elements.

The core attributes of group video systems that relate specifically to this MarketScope include:

- Multicodec immersive endpoint products accommodating three to four screens of HD video and content sharing, with a minimum resolution of 720 progressive (p) at 30 frames per second (fps).

- Single-screen and dual-screen group video endpoints that interoperate natively with each other and with other multicodec systems.

- Personal video endpoints for mobile and desktop environments that can be used to create and participate in videoconferences that may include room systems.

- Simplified UIs that facilitate call production, content sharing and the management of video layouts during calls among multiple locations.

Additional related, but not necessary, elements include endpoint management, scheduling integration with calendaring and scheduling tools, and the ability to interwork with UC investments.

In 2013, most group video vendors have placed a growing emphasis on transitioning components from the video infrastructure to software and, in some cases, to virtualized instances. This growing shift to software is foundational to the support of personal endpoints in group meetings, since these video systems generate ad hoc demand that is challenging to support at scale with an all-hardware approach. Greater performance and bandwidth efficiency continue to drive innovation in the group video market, with most group video vendors in the market now supporting or planning to support Scalable Video Coding (SVC) by year-end 2013.

Key vertical markets for group video include financial services, retail, manufacturing and the public sector.

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MarketScope

Unit growth in the group video and single-screen endpoint market globally will have a compound annual growth rate (CAGR) of 11.3% through 2016, on a base of approximately 344,000 in 2013. With increasing competition, new form factors and a general shift in preference to single-screen systems, multicodec system revenue will decline at approximately 9.7% over the same period. This decline will be more than offset by revenue growth in single-screen and personal appliance video.

While enterprises increasingly expect growing interoperability among all their video investments, varying refresh cycles, different useful lives and constant innovation in codec technology makes this an elusive proposition. Enterprises are undergoing a transition from a static, managed endpoint mix for scheduled conferences to a much larger portfolio of personal and group video endpoints with more dynamic usage profiles. This change engenders new and innovative use cases, and makes video accessible to a broader audience.

The primary uses of group video technology are for:

- Senior leadership meetings, strategy sessions and other meetings with long hold times.



VENDORS ADDED OR DROPPED

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

GARTNER MARKETSCOPE DEFINED

Gartner's MarketScope provides specific guidance for users who are deploying, or have deployed, products or services. A Gartner MarketScope rating does not imply that the vendor meets all, few or none of the evaluation criteria. The Gartner MarketScope evaluation is based on a weighted evaluation of a vendor's products in comparison with the evaluation criteria. Consider Gartner's criteria as they apply to your specific requirements. Contact Gartner to discuss how this evaluation may affect your specific needs.

In the below table, the various ratings are defined:

MarketScope Rating Framework

Strong Positive

Is viewed as a provider of strategic products, services or solutions:

- Customers: Continue with planned investments.
- Potential customers: Consider this vendor a strong choice for strategic investments.

Positive

Demonstrates strength in specific areas, but execution in one or more areas may still be developing or inconsistent with other areas of performance:

- Customers: Continue planned investments.
- Potential customers: Consider this vendor a viable choice for strategic or tactical investments, while planning for known limitations.

Promising

Shows potential in specific areas; however, execution is inconsistent:

- Customers: Consider the short- and long-term impact of possible changes in status.
- Potential customers: Plan for and be aware of issues and opportunities related to the evolution and maturity of this vendor.

Caution

Faces challenges in one or more areas.

- Customers: Understand challenges in relevant areas, and develop contingency plans based on risk tolerance and possible business impact.
- Potential customers: Account for the vendor's challenges as part of due diligence.

Strong Negative

Has difficulty responding to problems in multiple areas.

- Customers: Execute risk mitigation plans and contingency options.
- Potential customers: Consider this vendor only for tactical investment with short-term, rapid payback.

Meetings with primarily global and virtual teams that otherwise have limited opportunities for personal interaction.

Virtual presence scenarios, where always-on video is used to stimulate more natural interaction among distributed workgroups.

Use cases that include external participants such as job interviews, remote expert and remote training.

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Market/Market Segment Description

Multiscreen Immersive Telepresence Suites: At the high end of the group video market are multiscreen immersive telepresence suites, often costing more than \$100,000 per system. These are tailored environments in which the lighting, acoustics, decor and furniture on both sides of the video are tightly controlled (and often identical), giving conference participants from different locations the appearance of being in the same room, thus the "immersive" description. While averaging only 5% of the market compared with past years, this segment remains essential for garnering executive sponsorship and sustaining investment in the greater video ecosystem.

Group Video Endpoints: These systems are leading the move to modularity, often by allowing flexible deployment of codecs, displays and peripherals in a manner that can accommodate a variety of room configurations. This makes group video endpoints ideal for everything from smaller shared conferences to use cases that are similar to immersive telepresence. Group video endpoints can deliver high resolution and frame rates, and can include embedded conferencing capabilities for self-contained conferencing. For enterprises that need rapid deployment and less customization, this segment offers free-standing form factors in a range of sizes, now costing less than \$2,000.

Personal Video Endpoints: Accommodating individual participants via video in group videoconferences is emerging as an essential component of a video portfolio. These solutions can range from desktop appliances for executives to mobile and desktop solutions that offer more engaging participation than simple audio add-on. Enterprises with UC investments often want to leverage UC video for chat and conferencing, while other enterprises may be more selective about enabling personal video due to WAN capacity constraints.

Relative Bandwidth Consumption: All group video systems, whether immersive systems or the collective impact of personal endpoints, make high demands on the network, with high-quality, three-screen HD video and collaboration consuming as much as 20 Mbps of dedicated bandwidth. The bandwidth requirements for group video endpoints vary by solution, but range from 2 Mbps to 6 Mbps, while most desktop video implementations average 500 Kbps to 700 Kbps. Enterprises continue to run group video and telepresence over dedicated Multiprotocol Label Switching (MPLS) or Ethernet networks to ensure the highest possible video quality, with private Internet Protocol (IP) implementations outpacing Internet-based connectivity by a ratio of 10-to-1.

Gartner's ratings are based primarily on interactions with vendors, clients and customers that have engaged vendors in the sales cycle and can provide insight into a range of group video sales practices, features, capabilities and end-user satisfaction.

We considered several important factors when rating the group video vendors listed in this MarketScope:

- Product quality, especially in immersive multiscreen and group video endpoints
- Overall long-term viability as a company (business unit, organization, financial, strategy)
- Flexibility to offer customers a choice of in-house management or a managed service offering
- Flexibility in network transport alternatives
- Ability to facilitate reach and interoperability, including different signaling, endpoint types, video codecs and network transport
- The range, quality and innovation of collaboration tools available with the product

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Inclusion and Exclusion Criteria

To be considered for this MarketScope, vendors must have commercial offers for single-screen and multiscreen group video systems, provide suitable customer references and provide market visibility as evidenced by having shipped more than 1,000 group video endpoints to date (combination of single-screen and multiscreen configurations). Vendors must have demonstrated their ability to integrate and communicate with standards-based room videoconferencing systems, and have primary use cases and customer references that support group videoconferencing.

While having a choice of managed service and support offerings is important, managed services are not considered part of the inclusion criteria, nor are managed services considered for the ratings. We consider the enabling of video infrastructure to support interworking, transcoding and multipoint calling in the ratings, but this is not part of the inclusion criteria. The ability to extend the reach of group video systems calls to desktop, mobile and UC soft clients is considered in the ratings, but is not part of the inclusion criteria.

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Rating for Overall Market/Market Segment

Overall Market Rating: Positive

Group video remains a market with potential for organic growth, with the endpoint mix shifting from purpose-built multiscreen systems to more flexible and broadly deployed form factors (see Table 1 and Figure 1).

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Evaluation Criteria

Table 1. Evaluation Criteria

Evaluation Criteria	Comment	Weighting
Business Model	The soundness and logic of the vendor's underlying business proposition.	Low
Customer Experience	Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes how customers receive technical or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, SLAs and so on.	High
Market Responsiveness and Track 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.	High
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.	Standard
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.	High
Overall Viability (Business Unit, Financial, Strategy, Organization)	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 and offering the product, and will advance the state of the art within the organization's portfolio of products.	Standard

Source: Gartner (September 2013)

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Figure 1. MarketScope for Group Video Systems

	RATING				
	Strong Negative	Caution	Promising	Positive	Strong Positive
Avaya				X	
Cisco					X
Huawei				X	
LifeSize			X		
Polycom					X
Teliris		X			
Vidyo				X	

As of 12 September 2013

Source: Gartner (September 2013)

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Vendor Product/Service Analysis

Avaya

Since closing the acquisition of Radvision in 2012, Avaya has continued to refine a target video product portfolio while seeking synergy with the Avaya communications portfolio. A recent example is the introduction of video meeting capabilities for Avaya IP Office 8.1 that provide an 8-way virtual meeting room for any combination of fixed and mobile endpoints. Avaya has integrated its Scopia desktop video product with Avaya Session Manager for simpler dialing and video call control. Transport Layer Security (TLS) is now supported for additional security. Scopia desktop remains a pivotal part of the video story, and the ability to scale Scopia deployments is complemented by the Scopia Elite MCU 6000, a hybrid MCU supporting 60 frames per second (1080p60) video, as well as high-profile and SVC implementations of H.264. While not focused on immersive multiscreen solutions, Avaya offers a selection of room appliances ranging from the Scopia XT1200 through the Scopia XT5000. Room systems can be optioned with a 9-way MCU to avoid the need for a dedicated bridge in smaller environments. An embedded MCU is available in the Scopia XT Executive 240, a desktop endpoint that is new since the last version of our MarketScope for group video systems. Avaya has continued to cultivate service provider channels, with Orange Business Services now using Scopia as the core component of its Orange Videopresence Meeting platform.

Avaya has joined the Open Video Communications Consortium (OVCC) and added support for the Telepresence Interoperability Protocol (TIP), both of which reinforce its commitment to any-to-any conferencing inside and outside the firewall. Although the video infrastructure is shifting to software and cloud delivery, Avaya has a strong value proposition in a high density, standards-based hybrid MCU. The challenge for Avaya is to leverage its success with Scopia Desktop to create follow-on adoption of its room endpoints and infrastructure. Too many customers, including Avaya's references, remain satisfied with non-Avaya room systems, despite high levels of scale and satisfaction with Scopia Desktop. Without greater attachment of room systems, the base of Scopia endpoints will remain exposed to substitution from a range of consumer, cloud and video-as-a-service alternatives.

Consider Avaya's Scopia portfolio where other Avaya UC and IP products are in use, or where an alternative to Cisco and Polycom infrastructures is required.

Rating: Positive

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Cisco

Cisco remains the global market share leader in the group video market, and is adapting to the demand for more integrated and pervasive uses of the technology. While its room endpoint portfolio has not seen major product introductions in 2013, Cisco has continued to build out the ecosystem necessary to scale video to a much larger number of internal and external participants. Room-based calls can be extended with WebEx-Enabled TelePresence, while Cisco Jabber remains an option for UC video. Cisco has virtualized its TelePresence Conductor and TelePresence Server to allow for improved resource optimization of MCU ports, and has virtualized its VCS video interworking and edge firewall traversal solution, all of which can now run on Cisco Unified Computing System (UCS) or standard x86 servers. With a continued emphasis on video on any screen, Cisco has added the video-capable DX600 smart desk phone, providing another option for video telephony and extended participation in group meetings. Cisco continues to lead in infrastructure enablement for pervasive video, adding Cisco Unified Communications Manager (CUCM) redundancy for available call control.

Cisco has not moved as fast as its competitors to software MCU architectures. In June 2013, it launched the virtualized version of its TelePresence Server, which supports distributed video bridging in conjunction with its TelePresence Conductor. Cisco excels at the executive sponsorship needed to invigorate new video deployments and has the most comprehensive portfolio in the market of enterprise video products, including collaboration, signage and surveillance. As enterprises seek to grow intercompany video or simply scale internal deployments to denser levels, Cisco's infrastructure position enables it to react faster than its direct competitors. Gartner client inquiries continue to demonstrate that Cisco has a high level of account control in the group video arena as a result of its anchor position in MCUs and endpoints. With nearly continuous innovation in underlying video codec technology, Cisco's biggest challenge will be driving continued endpoint utilization while minimizing the need for intermediate infrastructure.

Consider Cisco for telepresence, group video and video as a service.

Rating: Strong Positive

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Huawei

Huawei continues to focus on growing its portfolio of group videoconferencing systems with an emphasis on value and gaining more traction outside its home region. In the single-screen category, Huawei expects to sell 25,000 HD units by year-end 2013, over double the unit volume of 2011, which outpaces the growth demonstrated by other vendors. Offers in the single-screen category include free-standing form factors such as the Huawei Room Present series RP100, which can range in screen size from 40 inches to 55 inches. For room integrators and organizations interested in design flexibility, Huawei offers the TE series of endpoints that can be augmented with nearly any display configuration. In the immersive multiscreen segment, Huawei's flagship is the TP3206, a three-screen system capable of telepresence calls at 60 frames per second (1080p60). Three other multiscreen models are available for enterprises looking for different price/performance. This growing endpoint portfolio is complimented with a family of hardware MCUs that are as large as the 168 port (1080p) VP9660. Similar to the endpoints, the Huawei MCUs now support H.264 high profile and an implementation of H.264 SVC. Huawei has not been as active in the desktop appliance segment, although it plans to introduce a 27-inch executive desktop in 2014 that will interoperate natively with other room systems and MCUs. Huawei endpoint pricing is competitive in each class of products in which it chooses to compete. Its message revolves around not only the cost of the hardware, but also the overall total cost of ownership (TCO), with an emphasis on bandwidth, power and footprint reduction compared with its competitors.

While Huawei is well-positioned for enterprises seeking traditional appliance solutions for group video, it has several challenges as the market evolves. Its MCU products have only just begun to support Microsoft Real Time Video (RTV), limiting an enterprise's ability to make HD video calls with Microsoft Lync, a use case that is gaining interest with Microsoft's introduction of Lync Room System. Its emphasis on hardware MCUs will also limit its customers' ability to grow endpoint volumes, since video implementations don't aggressively oversubscribe bridge ports. Huawei recognizes the industry move to software, but it trails competitors in this initiative, with a planned transition to software and virtualization in the 2014 to 2015 time frame. As was the case in 2012, Huawei still significantly lacks visibility in the U.S. market for group video, a key buying center.

Consider Huawei where a combination of group systems and telepresence is required, or where Huawei enterprise or service provider infrastructures can be leveraged (the latter as part of a managed service offering).

Rating: Positive

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LifeSize

LifeSize started the year with some headwinds, with the CEO of its parent company, Logitech, unsure of its long-term commitment to LifeSize. While this issue has since been resolved, it contributed to erosion of market share in the first half of 2013. Like several other vendors in this MarketScope, LifeSize has a comprehensive set of solutions, including endpoints, infrastructure and cloud services, while continuing to underscore ease of use, scalability and value. The centerpiece for this philosophy is LifeSize Icon, an endpoint that lists for \$2,999 and features one of the industry's cleanest and most intuitive UIs. LifeSize Icon can be paired with the LifeSize UVC Video Center to add recording and streaming, and with UVC Multipoint to add group conferencing capability. Additional support for more than 50 mobile endpoints is available via LifeSize ClearSea, and, like all the LifeSize UVC products, it is optimized for VMware and Hyper-V. LifeSize is positioned for Microsoft Lync 2013 deployments with the introduction of its LRS1000, a room endpoint solution that is developed to work natively with other Lync endpoints.

LifeSize gets high marks from its references and Gartner clients for sales support and responsiveness to product feedback. In 2013, Gartner has seen growing evidence of LifeSize gaining consideration in midsize enterprise opportunities primarily as a result of price and interest in ClearSea to support new use cases for group video. While LifeSize has an established presence in public sector and several midsize verticals, it lacks a significant presence in larger enterprise deployments of group video. The diameter of new deployments remains small, with LifeSize customers, including its own references, not demonstrating strong interest in adding endpoints. While Gartner clients give LifeSize consideration for new deployments, global customers remain tentative on the ability of LifeSize and its partners to meet their expectations for postsales support.

Consider LifeSize when seeking modular solutions for group video or where affordability is a key decision driver.

Rating: Promising

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Polycom

Polycom remains the second largest provider of group video endpoints globally, having spent 2013 delivering components of its new architecture announced in late 2012. The endpoint range now includes the RealPresence Group Series, a set of modular room endpoints with a new UI that supports video and content sharing at 1080p60, and supports Polycom SmartPairing with mobile devices to add additional control for users. Enabling infrastructure now includes the RealPresence Collaboration Server 800s, a virtualized MCU platform that can mix Advanced Video Coding (AVC) and SVC and runs on standard servers. In addition to these offers, Polycom has moved into the video-as-a-service market with its RealPresence CloudAxis Suite for Enterprise. Working in conjunction with Polycom's RealPresence Platform infrastructure, CloudAxis enables users to view presence information and establish ad hoc video calls with others on Facebook, Google Talk and Skype, as well as traditional standards-based video endpoints. While interesting for enterprises, CloudAxis will have a stronger impact in a service provider edition, which Polycom plans to release in the second half of 2013.

Polycom has extended its service provider relationships with an additional role supplying infrastructure to AT&T. These partnerships are critical to legitimizing the video-as-a-service model, especially for mobile endpoints, and, like CloudAxis, allow more nontraditional customers to experience video and potentially drive adoption. The biggest challenge for Polycom remains continuity in senior leadership. Following the departure of product lead Sudhakar Ramakrishnan in early 2013, the organization faced the resignation of CEO Andy Miller. This leadership disruption comes at a critical time for the company, as it launches its Lync Room System — its second purpose-built room solution for Microsoft Lync and a key differentiator for the company. To sustain its market position in an industry that is undergoing profound changes, Polycom will need to act decisively to attract and empower new leadership with enterprise software experience, particularly as its window of opportunity in having the best integration with Microsoft Lync is unlikely to last forever.

Consider Polycom video endpoints to extend existing room deployments, complement initiatives to video-enable Microsoft Lync 2013 or to create a full system solution for new builds.

Rating: Strong Positive

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Teliris

Teliris views managed services as a linchpin for driving endpoint utilization, and has productized accordingly. Rather than focusing on a proliferation of endpoint form factors, Teliris looks to drive video investment by delivering the necessary components that foster sustained utilization. In the multiscreen immersive space, its Virtual Live and Express systems can be configured to include up to four 65-inch HD screens. For smaller and shared meeting rooms, its StartPoint system can accommodate one or two displays, and can interoperate directly with its telepresence offers. Desktop participants can use the @nywhere client, which supports Mac and PC calling, with additional support for mobile participants delivered through a partnership with FuzeBox Meeting. Teliris can provide overlay network connectivity where desired using its Infinet virtual network, and provides value-added services through its cloud-based platform. Known as Lentaris, it provides element management, call production, infrastructure services and management reporting on utilization. While Teliris contends that utilization is highest with a vertically integrated approach, it also supports interoperability with standards-based video from other vendors. Its transition to a more software-centric architecture highlighted with the expected introduction of its video softswitch later this year will be an important addition to its solution set.

By offering a fully integrated suite of managed services and focusing on the increasingly popular virtual meeting room model, Teliris is positioned to drive business value from targeted Teliris deployments. Unfortunately, many client environments still have the asset inertia from earlier video implementations, and are more focused on scalable integration with UC. Teliris has had some limited success penetrating these mixed environments, but still struggles from lack of brand awareness, having the lowest number of Gartner client inquiries of any vendor in this MarketScope. Teliris intends to build out its indirect channels, but will have to contend with a growing number of competitors that are equally innovative.

Consider Teliris where immersive needs extend to in-room collaboration, or where a cloud-based infrastructure solution is attractive.

Rating: Caution

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Vidyo

An early proponent of scalable video coding and a software-oriented model for videoconferencing, Vidyo continues to deliver strong differentiation and a high level of brand awareness as observed during Gartner client inquiries. Vidyo continues to be innovative, having already demonstrated an early version of its implementation of H.265 SVC, a codec that will improve bandwidth efficiency over current H.264 solutions of comparable video quality. Its room system portfolio includes several smaller form factors for shared spaces, and will soon add the HD40, a modular room endpoint based on the Intel Next Unit of Computing (NUC) that it plans to debut at under \$1,000 (excluding the monitor). Vidyo has revamped its Vidyo Panorama immersive system, now supporting up to six screens at 1080p60. Nonimmersive rooms can opt for the HD-110 and HD-220 systems, while small shared spaces can choose the HD-50 or HD-100. Vidyo room systems can communicate with other standards-based systems using the VidyoWay gateway service instead of purchasing an MCU.

Vidyo has deployments exceeding 20,000 active endpoints — mostly soft clients running on personal devices, such as PCs and tablets — with its architecture engendering a steady stream of new use cases in areas like healthcare. With Joint Interoperability Test Command (JITC) certification complete, Vidyo is well positioned for several very large opportunities in the defense sector. Its channel partners have succeeded in positioning Vidyo's products in the midsize business segment. Large enterprises remain the only segment where Vidyo is challenged to find significant traction, as evidenced by Gartner client inquiries, largely because of the asset inertia of endpoints and infrastructure from other vendors. These organizations also value UC interoperability, and have yet to embrace Vidyo's Lync integration strategy

to the same extent they have with Polycom and Cisco. Video-as-a-service vendors, while potential partners of Vidyo, will introduce more competition as their capabilities are often viewed as substitutes for Vidyo's cross-device BYOD video capabilities.

Consider Vidyo when seeking distributed group and personal video communication that balances reach with quality on a broad range of devices, regardless of the size of your enterprise.

Rating: Positive

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