

The Aragon Research Globe™ for Video Conferencing, 2021

The Post-Pandemic Race to Intelligent Video Platforms

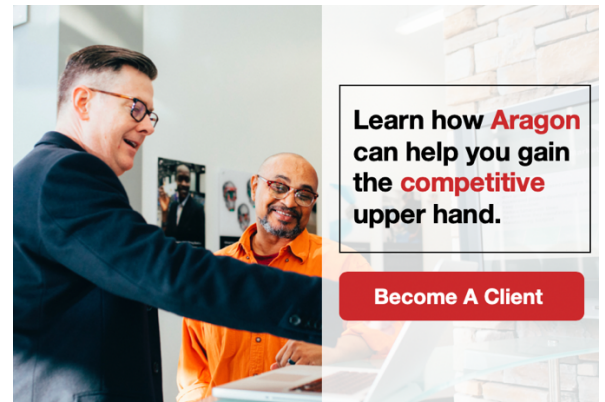
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Topic: Video Conferencing

Issue: Who are the providers of video conferencing and how will they evolve?



SUMMARY

The 2021 Aragon Research Globe™ for Video Conferencing examines 21 major providers in a market that has become one of the most sought-after technologies to enable hybrid work. As demand for video conferencing grows, it is also a market that is in a transition. The new focus is on intelligent video platforms.

Key Findings:

- Video conferencing may be purchased standalone, or as part of a digital work hub or as a component of a unified communications and collaboration platform.
- The market is shifting to intelligent video platforms. Sound management, voice analytics, auto transcription, and meeting notes are quickly becoming standard features.
- **Prediction:** By YE 2022, the team collaboration and web meetings markets will converge (70% probability).
- **Prediction:** By YE 2023, 50% of video conferencing providers will offer a telehealth offering.

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Introduction

2020 will be remembered as the year that video conferencing overtook audio conferencing as the preferred communications interface for people to connect and meet. The pandemic is the catalyst that caused this, but now there's no going back. For enterprises, the great news is that nearly every provider of video conferencing enhanced their offering, which makes the market more competitive than it was before and means there's more strong product offerings to select from than before.

With hybrid work becoming the new normal, many associates will always work remotely. Due to this, web and video conferencing has a bright future, and we expect many enterprises to leverage multiple products, given the sheer number of internal and external meetings that need to take place. In this eighth edition of the Aragon Research Globe for Video Conferencing, we overview 21 major providers in the market that is in a transition to what Aragon calls intelligent video platforms.

The Debate Is Over—Video Meetings Are Here to Stay

Over the last ten years there has been a debate about the value of video meetings. Given the COVID pandemic and the forced nature of remote work, that debate is over. Video meetings are here to stay. The challenge is to continually make them more seamless, more automated, and with better overall quality.

The workplace truly did become digital in 2020, and while demand for all forms of communication and collaboration increased, it was video meetings that kept teams on track, kept customer engagement moving, and kept the enterprise operating. Aragon has espoused the benefits of video conferencing for years—but now it is mandatory.

There is better recall from a video conference and Aragon believes that video meetings are now 50% more effective as opposed to traditional audio conferences.

Not only do video conferencing providers need to provide a seamless experience, but they also need to do it across devices. While conference rooms took a back seat in 2020, the fact remains that users have different ways of connecting to a meeting and providers are responding with better ways to do that.

The Hybrid Workplace and the Need for Video Meetings 24/7

Given the shift to hybrid work and the fact that we now live in a global economy, people need to interact from home and from around the world in different time zones. Hybrid work is here to stay, and this creates an even more pressing need for the ability to do video conferencing at all hours of the day.

Enterprises will need to reevaluate their infrastructure and their conference rooms as people return to the office, which is going to happen during 2021. In many cases, while laptops are fine, more efficiency can be gained from leveraging video endpoints in conference rooms. Aragon expects to see significant investment in conference room technology for video endpoints.

The State of Video Quality: Increased Demand Means Lower Resolution

Because of the huge surge in demand during the pandemic many video conferencing providers lowered the initial quality of the video service from 720P to 360P. This is noticeable to some but not to all. It is important to understand that the quality of the video during a video conference does impact the overall perception of the meeting. 720P and 1080P are both highly desired over standard 360P.

The Race to HD Video: 1080P Slowly Comes Online

Video quality does make a difference for a small or a large event. Video resolution should be a buying criterion that plays into which service is selected. Users still prefer 1080P over 720P, and vendors that can provide higher quality generally can win more business than those that can't.

One of the issues with higher resolution video has to do with compression and codecs. While H.264 has been one of the standards for 1080P, new compression algorithms have come online, such as NVIDIA's Maxine platform. Maxine offers the ability to offer both lower and higher resolution offerings without needing more bandwidth. Avaya Spaces is currently one of the few providers that is leveraging NVIDIA Maxine in its offering.

4K Video Is Still a Desired State

4K video for the enterprise remains a desired capability, but one that most enterprises are not leveraging. We feel that things such as NVIDIA Maxine offer potential to enable this to happen faster. To date, Avaya, Cisco, Google, Haivision, and Lifesize offer true 4K support. Besides NVIDIA Maxine, the secure reliable transport (SRT) standard, pioneered by Haivision, enables better encoding and compression and has more providers supporting it.

Intelligent Video Platforms Get Smarter

While we have discussed the need for intelligent video platforms in the past, there has been a bigger shift in the market since the pandemic began. There is no doubt that there is a shift taking place from traditional standard video conferencing to intelligent platforms that do more for users than just record the session. Some of these capabilities are game changers such as meeting assistants that can take over some of the mundane tasks such as taking notes during

the meeting itself. Some of the new capabilities of intelligent video conferencing platforms include:

- Automated Note Taking
- Real-time Translation
- Action Items
- Speaker Tracking and Speaker identity
- Background Noise Suppression

Table 1 provides the complete list of what we think comprises an intelligent video platform. Enterprises should evaluate providers carefully to see which of these features their list of providers can meet now and in the future.

Capability	Intelligent Video Platforms	Traditional Video
Sound Management	Yes	Optional
Auto Transcription	Yes	Optional
Virtual Agent for Note taking & Action Items	Yes	No
Auto Language Translation	Yes	No
Gesture Control	Yes	No
Intelligent Cameras	Yes	Yes
Speaker Track	Yes	Optional
HD Video	1080P and higher	360P and higher
HD Content Sharing	Yes	Standard Resolution
Integrated Hardware and Software	Yes	Optional
Digital White Board	Yes	Optional
APIs and Integrations	Advanced	Basic
People and Meeting Analytics	Advanced	Basic

Table 1: Intelligent video platforms offer a more comprehensive feature set.

Rooms and Preparing for the Return to the Office

With the return to the office coming, we expect a flurry of investments to take place to digitize all conference rooms with a first-class video conferencing experience. Leading providers have offered video room solutions that are intelligent and make the meeting experience more immersive and high quality through the use of HD video with auto-zoom and HD Audio with auto-muting of background noise.

Airplaying the video meeting experience from a laptop to a large screen is not the same as a full immersive room system. Room offerings do vary and enterprises should do evaluations before making a volume purchase. We do expect a shortage of these room systems as demand will surge. Given the popularity of conference rooms, notification devices are becoming a must-have for the exterior of all conference rooms.

Video Conferencing Takes the Lead in Collaboration and Communications

The biggest shift that has happened in the last year is that video conferencing is the single most important part of a communications and collaboration technology platform. The unified communications (voice) market is still larger, but we've seen tremendous growth in collaboration and video conferencing is in larger demand than team collaboration, which has also been growing at a fast rate.

This has put significant pressure on nearly every vendor to enhance and improve their product offering to keep up with the demand. New features, better reliability, and new ways of collaborating over video are just some of the things that vendors have done to make their platform more appealing.

The Automation of Meetings: Assistants, Notes, and Actions are Just the Start

Over the past year, many providers have added automatic transcription to their platform (BlueJeans, Cisco, LogMeIn, Microsoft, and Zoom). It isn't just about transcription; it is about translation. Microsoft started this trend in 2019, and currently supports about 36 languages that can be translated at the desktop. Cisco recently upped the game, and now supports up to 100 different languages being translated during a single meeting. This now means that global audiences can listen to and understand a live meeting in their native language with no translators required.

Note taking is also not new, but more providers enable automated note taking during a meeting. Some providers such as BlueJeans and Cisco now allow action items to be shared. Many providers partner for such capabilities but more of them are adding it in as a native capability, which is truly shifting the video conferencing category into what Aragon refers to as intelligent video conferencing.

The final part of the automation play is adding virtual agents or assistants to the mix. Conversational AI is starting to come online in many use cases such as internal help desk and customer support. To date, Cisco is still one of the only vendors that has an integrated virtual assistant that will take commands from humans and do actions such as document action items and then distribute them.

Video Conferencing Use Cases and Marketplaces

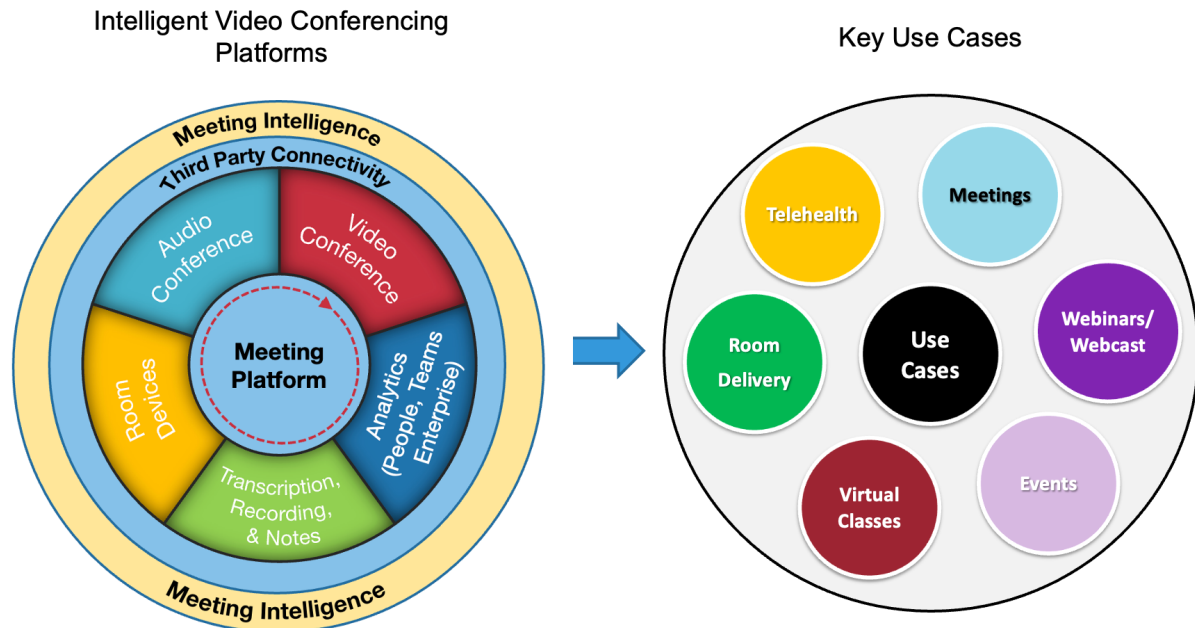


Figure 1: Video conferencing is now the must-have technology for hybrid work and key use cases.

As we said last year, meetings are no longer an isolated activity. While vendors are making them part of a larger UCC platform, they are also opening up the meeting capability to enable third-party applications to integrate directly with the meeting platform. The other reason for opening up the meeting platform is to allow new innovation. Both Cisco and Microsoft have allowed new innovations to be built on top of their respective products. Examples include:

- Microsoft's new Viva employee engagement solution uses Teams extensively for engagement and training.
- Cisco's new Webex Legislate offering is a unique meeting solution for local, state, and federal legislatures, which was built entirely using APIs by a Cisco partner.

We continue to feel that partner marketplaces are viable for an enterprise to extend its video conferencing capabilities. Cisco, Fuze, Google, Microsoft, Pexip, and Zoom have done significant work here with their partner marketplaces.

Video Conferencing: Market Expansion and Packaging

The VC market is evolving at a fast pace and it reflects the level of investment being made. At the end of the day, enterprise buyers need to realize that, given needs in the enterprise, it will not be uncommon to have two to three different providers.

Consolidation Part I: Video Conferencing and Team Collaboration Consolidate

One of the first things enterprises need to realize is that video conferencing is not just a best-of-breed capability anymore. Most offerings today come with built in team collaboration or the option to add it. Nearly every major provider today offers team collaboration. In fact, Aragon has predicted that by year end 2022 video conferencing and team collaboration will essentially merge and become one collaboration market category (See more in Aragon's Visual Forecast for Collaboration).

Team collaboration is on a collision course with email. With its ability to immediately ping a user via their mobile device, it is a clear threat to email's dominance as the primary collaboration form today.

Because a chat session can often shift into to a meeting, we are predicting that meetings and team collaboration will be offered as a bundle. Functionality needs to be separate. Users don't want to have a meeting just so they can chat, but the need to offer both capabilities is necessary for the enterprise—and having two different products, particularly internally, doesn't make sense.

Prediction: *By YE 2022, the team collaboration and web meetings markets will converge (70% probability).*

Consolidation Part II: Video Conferencing as Part of Unified Communications and Collaboration

While for many years there's been two distinct categories between communications and collaboration, we think that phase two of consolidation is video conferencing providers offering a full UC&C stack that includes voice calling, video conferencing, and team collaboration. Today, many small enterprises buy each of these as a best-of-breed capability, and this is promoted by many venture VC firms, but the value of an integrated UC&C platform is that communication channels can be switched more seamlessly, which becomes important during times of remote work and pandemics.

UC&C Providers as Communication-Focused Digital Work Hubs

Many VC providers have evolved their offering to do more than just meetings and messaging. These communications-led capabilities are becoming part of a digital work hub—where

meetings are part of the overall platform. Avaya, Cisco, Google, Microsoft, and RingCentral are all offering communications-led work hubs.

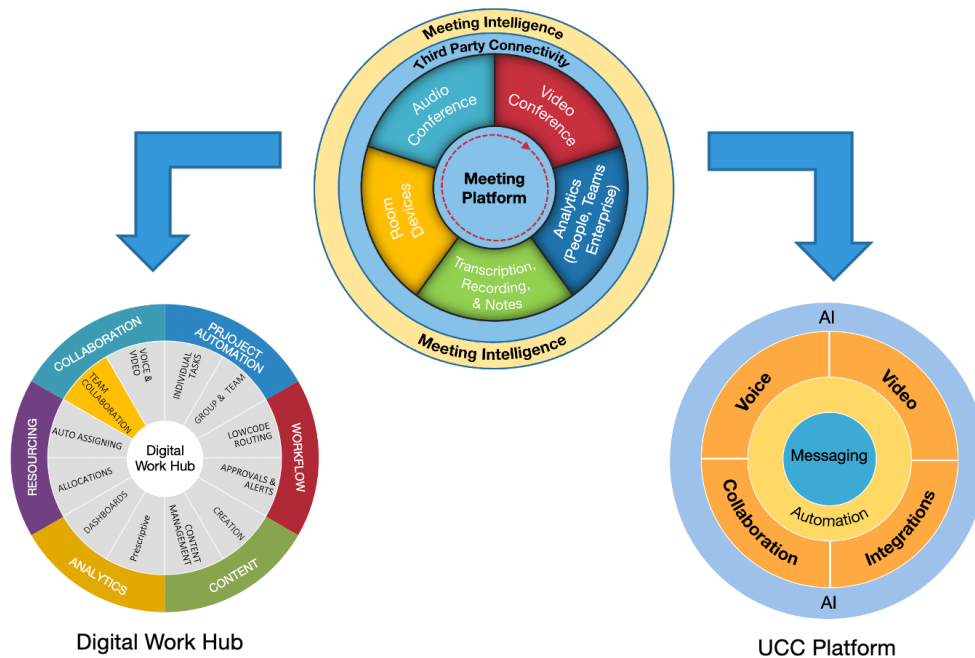


Figure 2: Web and video conferencing is shifting from best-of-breed to being part of a digital work hub or a UCC platform.

Why Digital Work Hubs?

The need to do high-quality work has never been more important as we are starting to enter the post-pandemic era. The digital work hub market is evolving and shifting as more enterprises are looking for more integrated work environments to allow people to get their work done even when they're not together.

There are still many approaches to the feature set of digital work hubs. This is not a bad thing because there are still many different types of work approaches and we're in an era of early adoption so users will be the ultimate decisionmaker on the features they like and the products they end up selecting.

Small and large providers alike have made significant inroads in enhancing their offerings this year. We have certainly seen that many providers have continued to lean on their core functionality as a way for a team to get started with their product / service. Tasks,

as well as team collaboration, have proven to be good starting points for work hub offerings.

In 2021, team collaboration adoption has grown due to the fact that it has become one of the go-to applications for remote work. While a number of work hub providers have team collaboration, many others do not. They offset that by allowing people to collaborate on an object that they are working on or discussing. Team collaboration, which focuses on messaging at the center, is challenging email and is poised to take on more of the communication workload. As bots come online in messaging platforms to do more of the work that humans used to have to do, mobile collaboration providers want to become the hub where work gets done.

The Return of Events—Going Beyond Webinars

During the pandemic, nearly all conferences had to go virtual, and this has created a demand for virtual event capabilities that is being met both by providers in this report, as well as traditional event providers that scaled up their offering to support limited or full-scale video.

Podcasts and webcasting are both proven ways to communicate with a large number of people internally and externally. In many cases, webcasting can be a more effective delivery environment, and providers such as Cisco, Fuze, MediaPlatform, Panopto, Qumu, uStudio, and Vbrick have strong webcasting offerings.

Enterprises that do large scale events need to select a webcasting provider with a proven track record. Global delivery is not for the faint of heart and vendor capabilities should be validated. Also, part of the reason that enterprise video providers are in this report is because they offer a robust portal-based experience platform that makes it easy to experience and record meetings and events.

Telehealth: A New Use Case to Watch

Telehealth, which leverages video conferencing for doctor-to-patient virtual visits is expected to grow over 20% a year, which is slightly ahead of Aragon's new forecast for overall collaboration.

Telehealth represents a new use case for video conferencing. Verizon Business just announced that it is now offering a new service called BlueJeans Telehealth to healthcare providers. Aragon expects that more video conferencing providers will enter the Telehealth space, For now Verizon will compete with providers such as Cigna, which just announced the acquisition of MDLive on February 26th and others such as Teladoc.

Prediction: *By YE 2023, 50% of video conferencing providers will offer a telehealth offering.*

Larger enterprises will want to look at connectivity that goes to all locations and this means that they need to look closely at their needs and where meeting locations will be. The stronger providers do this with global voice and video delivery.

Security Is Critical in an Age of Cyber Warfare

Given the SolarWinds hack in 2020, if security wasn't important then, it's now front and center as one of the most critical aspects of enterprise viability. This includes video conferencing and unified communications and collaboration.

Enterprises need to revalidate all of their video conferencing and collaboration providers to ensure that both access during live meetings, the transmission of meetings, and the access to recordings after the fact are both secure and wrapped with the right levels of encryption. Some enterprises may need to go further and have proof of penetration testing that is provided by the vendor. See Note 1 for some of the security requirements to verify that vendors offer.

How to Use This Globe

From a buyer's perspective, this Globe represents a wide assortment of vendors that have expertise in different parts of the WVC spectrum. Within this converged market, there are different levels of convergence. At one level, web and video converge on desktops and mobile devices, as evidenced by web conferencing offerings, such as Cisco, Adobe Connect, LogMeIn, and Zoom.

At another level, convergence has happened where traditional room-based video conferencing providers include the necessary content, application, and screen-sharing capabilities in conjunction with HD quality video room systems and multiple endpoints, including desktop and

Note 1. Three Key Security Parameters to Verify Before Purchasing a VC Offering:

Encryption

- All media should be encrypted, both the session itself and the content.
- Encryption keys: some vendors offer encryption keys for advanced management.

Role Permissions:

- Attendee permissions: the meeting organizer should be able to change settings so attendees cannot take control of a meeting by default.
- Admins and hosts need to have more robust permissions.

Data Center Security

- Understand the security of the data centers being provided by the provider.
- Locations: understand where meetings will be initiated from and where meeting recordings will be stored. Enterprises may want to execute a service level agreement.

mobile. Still others are focusing on large scale webcasting or the smaller and more engaging webinars.

Our advice to enterprise buyers is to first consider what your core requirements are in regard to VC. We encourage buyers to go beyond just the positions on the Globe graph: consider which capabilities and products best fit the required use cases that pertain to your enterprise or buying center. For example, if the requirements are for external audience sharing, then a provider that offers webcasting or webinars may be the best fit.

The table below segments the providers in this report by the key use cases they support:

Vendor	Video Meetings	Room-based Video Conferencing	Webcasting	Webinars	Breakout Rooms
Adobe	✓			✓	✓
Avaya	✓	✓	✓	✓	✓
BlueJeans	✓	✓	✓	✓	✓
Cisco	✓	✓	✓	✓	✓
Fuze	✓	✓	✓	✓	
Google	✓	✓	✓		✓
Dialpad	✓	✓			
Lifesize	✓	✓	✓	✓	✓
LogMeIn	✓	✓	✓	✓	✓
MediaPlatform	✓		✓	✓	
Microsoft	✓	✓	✓	✓	✓
Panopto	✓		✓	✓	✓
Pexip	✓	✓			
PGi	✓	✓	✓	✓	
Poly	✓	✓			
Qumu	✓		✓	✓	
RingCentral	✓	✓		✓	✓
TrueConf	✓	✓	✓		
uStudio	✓		✓		
Vbrick	✓		✓	✓	
Zoom	✓	✓	✓	✓	✓

Table 2: Comparing the capabilities of the different providers.

As market convergence continues with VC, we are seeing buyers increasingly look for solutions that integrate high quality video with content sharing capabilities. This will bode well for those providers who can offer a converged experience. While use cases such as webinars

are still in the expertise and domain of specialist video conferencing and online meetings providers, we will see those capabilities increasingly become part of converged VC offerings.

The Aragon Research Globe™ for Video Conferencing, 2021 (As of May 5, 2021)

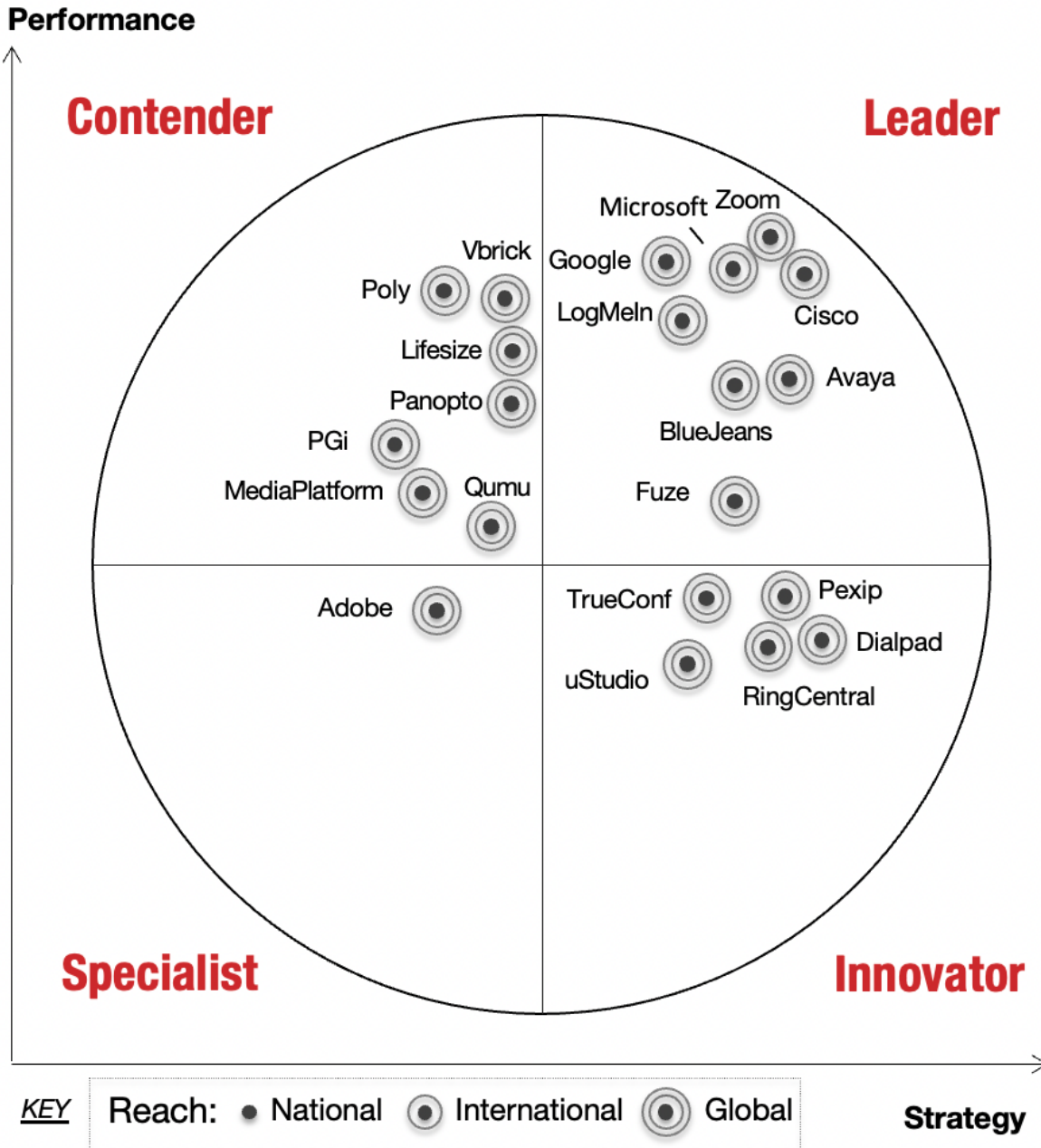


Figure 3: The Aragon Research Globe™ for Video Conferencing, 2021.

Leaders

Avaya

Avaya continued to invest and innovate in collaboration in 2020. The Avaya Collaboration Platform lead offerings are Avaya Spaces and Workplace. Avaya made a number of moves in 2020 to strengthen its overall portfolio. This included launching its Avaya Spaces platform, which blends meetings with team collaboration. Avaya Spaces is an intelligent video meeting platform that is integrated with team collaboration. It supports the ability to connect via any device—desktop, mobile, and huddle rooms. Spaces is built on a modular CPaaS architecture, for composable and customizable experiences, enabling organizations to quickly build the experience they need for verticals or workflows. Additionally, Avaya Workplace provides a complete UCC solution with meetings, messaging, and telephony backed by both its enterprise and midmarket platforms.

Avaya enhanced its Spaces offering with a partnership with NVIDIA that features enhanced, AI-powered video capabilities for both low bandwidth and high-quality, more engaging meetings. Avaya is first to market with these upgraded capabilities and offers a smoother, immersive video experience that is noticeable to users.

Avaya continues to partner with RingCentral for UCaaS and markets Avaya Cloud Office by RingCentral to its large install base. Avaya is of the few providers whose room-based systems support 4K video. Avaya also integrates with Apple, Google, Microsoft Teams and Office, and Salesforce/Slack. Avaya has made AI part of its overall UCC focus and its partnership with NVIDIA is a move that others will most likely emulate. With the shift to a focus on video meetings, Avaya is well positioned to meet the needs of enterprises with its growing portfolio of intelligent video offerings.

Strengths

- H.265 HD video, high quality content sharing with room systems, desktop, and mobile clients
- Video user experience
- Extensive video interoperability with Cisco, Poly, Lifesize, and Microsoft
- UCC platform
- Partner network and ecosystem

Challenges

- Migrating large install base to new offerings

BlueJeans

BlueJeans, which was acquired by Verizon in April 2020, has continued to win over enterprises with a dual approach for both meetings and events. The BlueJeans Smart Meetings includes the ability to capture action items during a meeting and to tag important discussion points for later recall in a recording. BlueJeans continues to partner with Dolby, which powers BlueJeans rooms. In 2020, BlueJeans added support for Dolby Voice Rooms.

In April 2021, Verizon Business announced BlueJeans Telehealth, its new offering for virtual healthcare visits with a doctor or caregiver. BlueJeans Telehealth will be powered by the BlueJeans mobile and desktop browser experience and will offer per visit pricing plans for healthcare providers.

Even before the pandemic, BlueJeans Events was gaining traction. Having powered large conferences with high quality video helps to separate BlueJeans from many virtual events offerings that have lower quality video. BlueJeans also offers virtual class capabilities via its breakout rooms feature. BlueJeans now also offers interoperability with other providers including Cisco, Microsoft Teams, and Zoom. BlueJeans also integrates with third party solutions such as Google Suite, Microsoft Office, Slack, Workplace by Facebook, and other applications.

Strengths

- Dolby voice audio technology
- HD video and content sharing
- Room-as-a-service
- Broad range of third-party solutions and integrations
- Microsoft Teams Integration
- Growing focus on events
- Telehealth use case

Challenges

- Deployment options, besides cloud

Cisco Webex

Cisco, which transitioned the leadership of the Collaboration group to Javed Khan in 2020, released a completely new Webex App experience that allows people to focus on work. The new Webex App features new meeting modalities and new automation and intelligence features including people insights, which positions Webex as an intelligent video conferencing provider. One of the highlights is the new Webex Assistant, which can take notes, and assign action items. Combined with people insights from Webex, with gesture recognition, built-in noise reduction, and new secure ways of joining meetings and better audio and video quality, it is a different Webex offering than it was at the beginning of 2020. Additionally, in 2021, Webex released real-time translation support for more than 100 languages. It also added an immersive sharing capability that allows the presenter to be seen in front of the presentation.

The Webex Graph has come to life. It now offers people, team and organizational insights, all with the right level of privacy controls.

This AI focus has allowed Webex to up its game with an intelligent meeting service and intelligent meeting room devices. The all-new set of hardware offerings are designed for hybrid work. They include the Webex Desk Series, The Webex Board Series, the Webex Room and Room Kit Series offers enterprises a complete choice of solutions for the home office or the conference room. For remote work, the new Webex Desk Camera which supports 4K resolution will help meet the growing demand for high quality video

Cisco has continued to invest in security across its Collaboration portfolio. This includes support for privacy, encryption, data loss prevention, mobile security, and legal hold. Finally, the growing support for both global SaaS cloud delivery and hybrid options, gives enterprises choices when it comes to deployment.

Strengths

- Cisco and Webex brands
- Platform approach covering all collaboration workloads
- High quality video across devices, including mobile
- Intelligent video rooms and endpoints
- Webex Assistant for Notes and Action Items
- Support for multiple use cases
- Cisco Webex Mobile Platform
- FedRAMP certification for Webex
- Interoperability
- Advanced audience engagement capabilities
- Integrations with popular 3rd party tools (e.g., Salesforce)

Challenges

- Balancing focus on collaboration vs. networking and security

Fuze

Fuze has continued to offer its flagship UCC Platform that features its robust video meeting platform, Fuze Meetings. In February 2021, Fuze CEO Brian Day announced that its revenues were now over \$100 Million annually and also that industry veteran Chris Jones was joining as Chief Revenue Officer. Fuze leverages its platform at the user level with voice, HD video, and chat all integrated into one easy-to-use client. In March 2021, Fuze announced native meeting integrations between Fuze Meeting and Cisco Webex, Logmein GoToMeeting, Google Meet, Microsoft Teams, and Zoom.

The Fuze Platform has continued to push the envelope on ease of use, leveraging its wholly owned IP for audio, video, and chat, and this is why it has continued to win large enterprise deals. In 2021, Fuze also made screen sharing more immersive, which builds on its ability to support many unique use cases, such as first line workers that need full functionality on a mobile device.

Fuze offers a full room experience in addition to optional webcasting, supporting up to 25,000 participants. In 2021, Fuze announced that it was partnering with Big Marker for webinars and virtual events. Given its overall capabilities in unified communications and collaboration, and its market growth, Fuze can meet the needs of small and large enterprises for video meetings and the complete UCC portfolio.

Strengths

- UCC platform
- Integrated client
- Meeting and call quality
- Video rooms offering
- Webcast support
- Video conferencing integration options

Challenges

- Balancing focus on UCaaS vs. meetings

Google

Google under the leadership of VP and GM Javier Soltero has been executing the transition from G Suite to the improved Google Workspace. Part of the focus has been a makeover of Google Meet, its flagship video conferencing platform, in 2020. By launching a series of new features and tighter integrations within Google Workspace, Google Meet grew its customer base substantially. New features in Google Meet include background noise suppression, new user backgrounds, and auto transcription of the conversation. Google Meet also works with Google Chat and Google Voice globally, making Google a complete UCC platform provider.

Google Meet continues to have one of the most seamless join experiences— accessible from any major browser without download, or from its mobile apps. Google Meet is also seamlessly integrated with the broader family of Google Workspace collaboration offerings, which allows users to launch straight into a full Meet video call from Calendar, Gmail, and Chat. Google Meet and the full Google UCC offerings work on a global basis making global calls a no-brainer.

Google provides a number of meeting devices in a variety of form factors including the latest, AI enabled Series One room kits, the huddle room focused Acer Chromebase, and 55” Jamboard digital whiteboard with Google Meet built in. Its partnership with Pexip enables users to join Google Meet from Microsoft, Cisco, or Poly devices. Google integrates all of the management capabilities into Google Workspace admin dashboard to allow multiple Jamboard and Meet devices to be managed from a console. Besides its ease of scheduling meeting capabilities on a global basis, Google has continued to invest in its UCC portfolio.

Strengths

- Enterprise penetration with Google Workspace
- Real-time collaboration in meetings
- Video room offerings
- Video quality
- Ease of use
- Meeting scheduling ease of use
- Seamless join experiences

Challenges

- Balancing focus on Workspace vs Google Meet, Voice and Chat

LogMeIn

In August 2020, LogMeIn completed its \$4.3 billion sale to Francisco Partners and Evergreen Coast Capital Corporation. LogMeIn's full UC&C platform is powered by its flagship GoToMeeting video conferencing offering. In 2020, LogMeIn launched its long-awaited new interface that includes the GoToMeeting hub that is used for scheduling, viewing, and recording content. GoToMeeting also offers built-in transcription capabilities. A significant focus for GoToMeeting over the last year was enhancing its partnerships with room providers and device providers such as Dolby, Logitech, Facebook, and Poly.

Besides GoToMeeting the GoTo family of products includes GoToConnect, GoToRoom, GoToTraining, GoToWebinar, and OpenVoice. GoToMeeting also features built-in note taking, transcription, and enhanced audio connection capabilities to optimize quality even during times with reduced network bandwidth.

LogMeIn is a complete UC&C provider due to its expanded footprint with both GoToConnect and OpenVoice. LogMeIn also offers instant messaging, which enables the enterprise to chat with coworkers as well as externally. In webinars, LogMeIn continues to lead with its GoToWebinar offering that is easy to configure and easy to operate, which is something others should look to emulate.

Strengths

- Freemium to premium model
- Automation of meeting scheduling
- Ease of use
- Mobility support
- Phone bridge integration
- Webinar use case

Challenges

- Overlapping product branding

Microsoft

Microsoft made significant enhancements to Microsoft Teams in 2020 to make it a reliable offering for video conferencing across multiple platforms. Besides Meetings, Microsoft Teams is the primary work hub for all voice and messaging-based communications. As part of the Microsoft 365 and Office 365 bundles, Microsoft Teams has become the lead interface for collaboration, overtaking Outlook, which now can run as a tab inside Teams. Microsoft 365 adoption has been growing, because it is a full digital work hub with a set of independent applications that increasingly are integrated together.

One of the areas of innovation for Microsoft Teams has been Together Mode. Popularized first on NBA basketball game televised events, Together Mode allows users to interact in different view mode than a traditional panel of video conferencing users. Microsoft Teams Room Systems continues to partner with certified providers that include Crestron, Lenovo, Logitech, HP, Yealink, and Poly.

Microsoft Teams has continued to focus on front-line workers and that has helped to position Teams as both a communications platform and a digital work hub. With all of the enhancements to Microsoft Teams, it has become a first-class video meeting experience. Existing Microsoft customers can take advantage of this, since many have had the licenses for teams and have now started to use them.

Strengths

- Microsoft brand
- Office 365 integration
- Third Party Integrations
- HD video quality on point-to-point calls
- Global PSTN conferencing coverage

Challenges

- Requires separate licenses for audio conferencing (phone dial-in)

Zoom

Zoom took advantage of the shift to remote work in 2020 and saw significant growth, making it one of the fastest growth firms in any industry with revenues growing to over \$2.65 Billion. Zoom has continued to innovate its flagship video meetings offering and in 2020 it helped hundreds of thousands of schools move to remote learning by removing any limitation on class size and meeting (class) duration. In addition, Zoom's webinar and virtual events offering helped to fuel its growth. Despite its rapid growth, Zoom was still able to release over 400 features across its platform.

Zoom also made breakout rooms a must-have capability and its pre-COVID pandemic availability of those capabilities allowed it to gain a dominant position in elementary, high school, and college markets—as well as traditional business markets. Zoom also made significant investments in security and now offers full encryption.

With Zoom Phone, which has continued to see increased growth, Zoom has evolved into a complete unified communications and collaboration provider. Zoom continues to leverage its growing partner marketplace (over 1,300 apps), which includes voice AI offerings such as Chorus, Gong, and Otter.ai for analytics and live transcription (already native in Zoom). Other partner apps include scheduling bots and more. Zoom Room kits are now available from distributors including Ingram Micro Inc., Starin, and Tech Data.

Strengths

- Scalable HD video conferencing and webinars
- Webinars and Live Events
- Software-based video room systems
- Mobile apps
- Webinars
- App marketplace
- UCaaS offering
- Innovation

Challenges

- Balancing focus on meetings vs. full UCC platform

Contenders

Lifesize

Lifesize, which named industry veteran Kim Niederman as CEO in February 2021, has continued to offer its 4K-enabled video conferencing platform, as well as expand into other UC&C markets such as contact center. The Lifesize video conferencing platform is one of few that offers true 4K resolution support. Lifesize also made a series of additions to its platform in 2020, including new layouts, raise hand capabilities, meeting security and moderator control enhancements, and digital whiteboarding and physical whiteboard capture capabilities via its acquisition of Kaptiveo.

Lifesize makes its own 4K room systems, with the family of offerings including the Lifesize Icon 300, Icon 500, and Icon 700. In addition to the Lifesize cloud service, these systems may also be used with third-party cloud video services through interoperability or with the new Lifesize Connect solution for BYOD. New room system features for 2020 included remote upgrade management for admins and an intelligent, hands-free meeting integration with AWS Alexa for Business.

Lifesize is also offering cloud contact center solutions and is leading the native video support use case, which leverages the Lifesize video conferencing platform.

Lifesize offers numerous connectivity options, including integrations to Google and Slack and interoperability with Poly and Microsoft Teams. Lifesize is also focusing efforts on video-enabling business applications and revenue-generating activities in key verticals, such as healthcare and professional services. The complete focus on cloud, along with its 4K video conferencing capabilities, will enable Lifesize to reach new audiences.

Strengths

- Ability to integrate disparate systems
- Hybrid capabilities that pair a cloud-based service with conference room hardware
- Room system offerings, now including Kaptiveo whiteboard collaboration
- 4K video
- Overall video quality and ease of use

Challenges

- Breakout room functionality

MediaPlatform

MediaPlatform offers a complete video platform that includes webcasting, virtual events, video delivery, video content management, and analytics. In September 2020, MediaPlatform announced improvements to its flagship webcasting platform, MediaPlatform Broadcaster, geared to supporting virtual events in a post-pandemic world. Its offering features an intuitive interface that makes it easy to manage large scale internal town halls and conference type events. New amongst its capabilities are more integrations with other meeting platforms that make the sign-up process more seamless for users. Besides its own edge eCDN and its SmartPath network overlay technology, MediaPlatform also partners with peer-to-peer eCDN providers Hive, Kollektive Peering, and its new relationship with Peer5.

MediaPlatform also offers its video business intelligence platform (VBI) to let enterprises know the quality of the experience for all participants. In October 2020, MediaPlatform announced expanded support for meeting platform integration. Now Google Meet, as well as Cisco Webex, Microsoft Teams, and Zoom all can be integrated into MediaPlatform Broadcaster for production-grade TV events. Finally, MediaPlatform continues to offer enterprises cloud flexibility with its flexible SaaS and hybrid deployment models.

Strengths

- Webcasting and “enterprise YouTube” capabilities
- Web conferencing integrations
- Video conferencing gateway
- Video analytics
- Event management and archiving

Challenges

- Awareness outside of North America

Panopto

Panopto added new capabilities in 2020, growing its meeting recording and broader meeting intelligence offerings. In 2020 it expanded its popular Zoom integration capabilities and now offers sophisticated administrative options to determine how meeting recordings are imported and routed. Panopto recently introduced a new integration for Webex Meetings, and will have a Microsoft Teams integration this summer. One of the most innovative features Panopto deployed for web conferencing is “Smart Chapters,” which automatically detects slides shown in any recording to build a visual index of the meeting. It continues to offer recording support for Pexip, BlueJeans, and LogMeIn.

Beyond meeting recording, Panopto offers secure video portal, CMS, lecture capture, and live and recorded video and analytics. Panopto also added new browser based video recording capabilities, a completely refreshed mobile app and enhanced analytics. Panopto continues its focus on both the higher education and corporate markets, and it has seen growth in both due to its full platform. Panopto now offers automatic transcription into 20 languages, which is ideal for global deployments. One of the growing use cases that Panopto supports is live video, which also has support for multi-camera HTML5 live streaming as well as live event analytics. Its platform is also a strong choice in corporate learning with many LMS integrations, including Cornerstone and Saba, as well as enterprise integrations for Salesforce and Slack.

Strengths

- Corporate and higher ed use cases
- Ease of use
- Good analytics capabilities
- Video search
- “Smart Chapters” meeting indexing
- Meeting recording administrative options
- LMS integration

Challenges

- Gaining awareness in corporate markets

PGi

PGi, a Siris Capital portfolio company, appointed Rick Mace as CEO in July 2020. PGi continues to offer GlobalMeet Collaboration for video conferencing services. PGi also offers GlobalMeet Webcast and GlobalMeet Audio Conferencing, which positions it to offer more services to its existing customer base. PGi also offers Dolby Voice for improved audio during meetings. In 2020, PGi announced that it has partnered with HCL for increased focus on the PGi product road map.

GlobalMeet offers a huddle room connector and supports integration with Microsoft Teams, but it charges separately for that integration. In 2020, PGi updated Global Meet Webcast, which now offers higher quality video, improved audio, and screen sharing, which can all be accessed via web browser with no downloads. One of the strengths of PGi is its global cloud that offers voice and video capabilities in all three hemispheres.

Strengths

- Service provider expertise
- GlobalMeet brand
- Global audio network
- HD audio solutions

Challenges

- Continued R&D investment in a competitive market

Poly

Poly announced Dave Shull as its CEO in September 2020. Shull is the former CEO of TiVO and the Weather Channel. Poly offers a number of leading-edge video and audio endpoints as well as cloud-based insights and management. In early 2021, Poly launched its new Poly Studio P Series, its range of personal video conferencing devices, including the Studio P5 Webcam, P15 Personal Video Bar, the P21 Personal Meeting Display, and the Poly Studio P5 Kit, allowing customers to combine the Studio P5 Webcam with a Poly speakerphone or headset.

Poly's range of video conferencing endpoints includes the Poly Studio X30 video bar (smaller meeting spaces) the Poly Studio X50 video bar (mid-size meeting spaces), and the Poly G7500. The Poly Studio X family features Poly Meeting AI capabilities for breakthrough audio and video experiences built on machine learning and artificial intelligence. The Poly Studio X family currently ships with native Poly Microsoft and Zoom modes. The Poly G7500 for mid- to large-sized conference rooms combines content collaboration and video conferencing capabilities in one device, integrating advanced audio features, wireless content sharing, and 4K UHD video.

In addition to video conferencing endpoints, Poly also offers Poly Lens, its cloud-based insights and management tool and service including for its video conferencing endpoints. This was expanded in February 2021 with the launch of Poly+, Poly's device support service that includes 24/7 tech support and an extended 3-year product replacement.

The Poly Group Series offerings include a number of capabilities that make these offerings true intelligent video platforms. These include facial tracking (Eagle Eye Director), sound management, and more. With these new solutions, Poly now has an even more compelling end-to-end story for enterprise collaboration—especially for an increasingly mobile and global workforce.

Strengths

- High-quality video and audio
- Video innovation
- Video interoperability
- Microsoft interoperability
- Zoom interoperability

Challenges

- Migration of legacy install endpoint base to new Poly solutions

Qumu

Qumu's enterprise video platform enables recording, storage, and comprehensive management and analytics of live video and video on demand (VOD), and has extensibility to scale video conference meetings and capture them as video on demand (VOD) assets, securely and for large numbers of simultaneous users. Qumu built its reputation on secure delivery and management of video for enterprises, live streaming 100,000+ simultaneous viewers and scaling video on demand to improve the effectiveness of video for driving business outcomes. It has a reliable and stable platform, trusted for many of the large business video meetings and events that happen around the globe each day. Qumu focuses its enterprise video platform on employee and customer engagement through live and on-demand content management, distribution and advanced analytics for consumption, usage, and quality of service.

In late 2020, also announced the Qumu Cloud 'Stream, Record, and Manage' App for Zoom that makes it easy to broadcast Zoom-based events to audiences of any size with comprehensive video management, on-demand distribution and enterprise-grade security.

In the fall of 2020, Qumu reported that traffic through its cloud offering increased to more than 400% from the beginning of 2020, and a 42% total increase in quarterly usage over the previous quarter, noting the shift to a greater usage of video for synchronous and asynchronous for employee, customer, and partner engagement as a result of the pandemic. Qumu's Pathfinder offering, an intelligent content distribution engine, enables cloud customers to utilize its software and hardware endpoints within the customer's network, enabling edge-based, peer-to-peer, and hybrid delivery.

Strengths

- End-to-end video conference streaming
- Team-to-many webcasting
- Cloud, hybrid, and on-premises offering
- Open architecture for extensibility
- Video editing
- Video analytics (user and network)

Challenges

- Diversifying its partner ecosystem

Vbrick

Vbrick continues to enhance its flagship Rev Enterprise Video Platform with a series of enhancements during 2020 that have helped propel its growth. Vbrick Rev offers video capture, video content management, live video streaming, and distribution, AI based analytics, and video conferencing integration. In October 2020, Vbrick announced that it was adding Live Transcription from 8 spoken languages and live translation in over 21 languages to Vbrick Rev. Vbrick also offers Rev IQ that adds an AI layer to Rev that enables facial recognition, live transcription, translation, and an enhanced viewing experience called Pulse. Vbrick's Rev Connect offers a peer-assisted content delivery solution to its distribution solution portfolio. Vbrick Multicast (VBM) offers multicast distribution capabilities that replace Adobe's upcoming end of life for Flash and Flash Multicast.

In August 2020, Vbrick added enhanced analytics that provide enhanced interactive search and visibility on users. The native Rev video editing abilities help to streamline post-production of live event recordings. While Cisco has been one of Vbrick's top partners, Vbrick integrates with Microsoft Teams and Zoom to enable large scale meetings, while also offering meeting archiving and management of recordings. In November 2020, Vbrick enhanced its integration with Microsoft Teams, making it easier for Teams users to access video content stored in Vbrick Rev.

Vbrick remains as one of the few enterprise video providers to be FedRamp-certified and this will help to meet the growing demand for video in the U.S. Federal Government. Vbrick's focus on innovation along with key partnerships has helped to fuel its growth, due in part to its focus on live, and on-demand video streaming, video content management, and analytics.

Strengths

- Scalability
- Extensible across a wide variety of providers
- First-party eCDN capabilities
- Cloud and on-premises options
- Highly secure video delivery
- Cisco partnership and integration

Challenges

- Awareness outside of the U.S.

Innovators

Dialpad

Dialpad acquired Highfive in August, 2020 to bolster its video conferencing capabilities. Its flagship offering, Dialpad UberConference, now has a full set of meeting room capabilities from the Highfive acquisition. Since the founding of Dialpad, UberConference has continued to be updated and innovated—ease of use, onboarding, and scalability have always been some of its most touted differentiators. UberConference now includes advanced voice transcription, which intelligently captures key moments and action items during the call for post-meeting follow up.

With Highfive, the expanded offering now includes an all-in-one bundle of web, desktop, and meeting room video conferencing. Highfive supports 720p and 1080p for video resolution with Dolby Voice integration. In March 2021, Dialpad announced a strategic integrator and GTM partnership with T-Mobile that will offer T-Mobile Collaborate powered by Dialpad as part of T-Mobile's new WFX lineup. T-Mobile Collaborate is a mobile-first UCaaS offer powered by Dialpad, featuring Dialpad Talk and UberConference that runs on T-Mobile's nationwide 4G/5G networks. This partnership gives Dialpad an important distribution channel, and also positions T-Mobile to be able to offer a high-quality video meeting service that offers HD video.

As part of the Highfive acquisition, Dialpad now has expanded distribution with channel partners such as Ingram Micro and CDW. Highfive partners with Dolby for audio and Dolby Voice is included in its high-end enterprise plus and premium offerings. Dialpad now can compete in the growing collaboration market with a robust set of software and integrated hardware offerings. It is one of the few providers with integrated hardware and software capabilities.

Strengths

- Ease of installation and onboarding
- Ease of use
- Ease of scalability via Google Cloud Platform (GCP)
- Seamless transition between any device, including "Move to TV"
- Voice Intelligence™ (AI capability)
- Pricing simplicity
- Unlimited user licenses
- HD-quality voice and video
- Simplified user management

Challenges

- Overall market awareness

Pexip

Pexip IPO'd in May 2020 and is now traded on the Oslo Norway Stock Exchange. Pexip's growth is due to its complete focus on video meetings and video meeting interoperability. Pexip has been a pioneer in video vnr/interop, gateway, and video system registration services. Pexip has a number of intelligent video features, including its AI-based adaptive composition, which can automatically frame users and adjust the screen layout in a meeting so that the video looks more natural. This feature works on any device. It also announced more meeting controls, so admins know who has joined and from what type of device.

In 2020, Pexip announced the Pexip Private Cloud, which should be a popular offering with government and healthcare focused enterprises due to its ability to protect enterprise data. Pexip also offers a self-hosted option which can be deployed in public cloud offerings including Amazon AWS, Google GCP, Microsoft Azure, and various government cloud offerings.

For enterprises with multiple providers, Pexip natively integrates with video conferencing solutions from Cisco, Poly, and Lifesize, and with any other software or hardware UC solution, such as Microsoft Teams and Google Hangouts Meet. Pexip has browser-based support for joining virtual meetings with various endpoints and communications systems.

Strengths

- Video system interoperability
- Private cloud offering
- Scalability and global reach
- Virtual meeting rooms
- Gateway services (MS Teams and Hangouts Meet)
- Microsoft and Google partnerships
- Global community of channel partners

Challenges

- Market awareness

RingCentral

In 2021, RingCentral has doubled down on videoconferencing with increased R&D focus and investment in this area. While it used to resell Zoom, RingCentral released its own videoconferencing offering called RingCentral Video in 2020, which has become the default choice for customers signing up for RingCentral. RingCentral Video is included in the overall unified communications digital work hub called RingCentral Office, which features messaging, video and phone. In addition, RingCentral has a freemium version of its video conferencing offer called RingCentral Glip which features both video and messaging and focuses on pre-, during, and after meeting collaboration. It has continued with its global expansion, which includes growth in direct sales and in partnerships that expand the distribution of RingCentral Office. Its quarterly revenue puts it at over \$1 billion in annual revenue. In October 2019, RingCentral formed a strategic partnership with Avaya that included RingCentral investing \$125 million in Avaya and Avaya becoming a reseller of RingCentral Office, Atos and Alcatel Lucent also recently announced that they would resell RingCentral Office. The RingCentral UCC platform is now available in 41 countries with its full set of capabilities—high-quality voice, video conferencing, mobile messaging, and cloud contact center capabilities.

In 2019, RingCentral updated its mobile app to consolidate all of the functionality for messaging, video, and phone in a single app. RingCentral Glip is its flagship team collaboration app, which continues to evolve. With seamless interactions with the other modalities, it makes RingCentral Office a full communications platform and a digital work hub as well. In March 2019, RingCentral announced RingCentral Persist, which will allow customers to continue communications services, including emergency calling, extension-to-extension dialing, and inbound and outbound calling even during an internet failure. In April 2020, RingCentral announced RingCentral Video, which is a homegrown, high-quality video conferencing solution included in RingCentral Office. At the time of publication, over 130 features have been added since RingCentral Video since it launched. Its video product continues to evolve, and the company is focused on “intelligent” capabilities and integrations to enable pre-, during-, post- meeting collaboration experiences. RingCentral Video is an alternative to the partner capabilities provided by Zoom. The RingCentral Open Platform is also a growing contributor to its growth—it now has over 50,000 registered developers and supports over 5,000 integrations, including Microsoft Teams, Google G Suite, NetSuite, and Salesforce. RingCentral is also fairly easy to deploy, which gives it an advantage over others, though it also offers an expanded services portfolio for full implementation support.

Strengths

- Mobile-first app
- Freemium support
- Third-party app integration
- Voice and video support
- Task management
- Third-party content sharing
- Ease of configuration and deployment
- Open platform and app gallery integrations

Challenges

- Task and project management

TrueConf

TrueConf is based in Moscow, Russia and has been growing its global footprint due to its overall approach to video conferencing and its focus on its on-premise offering that is easy to install and manage. TrueConf offers a free offering which has helped it increase its global footprint. Its paid offering offers enterprise features, such as LDAP, SIP integration, and its ultra-HD video support. This includes support for 4K video, which is important in healthcare and government use cases.

For many use cases, TrueConf is ideal due to the fact that it can operate over a private network with no internet connection required. It also offers an SDK for enterprises that want interoperability and built-in gateway to connect to existing video endpoints.

TrueConf also offers a video kiosk offering that expands the use cases it can offer. These include banking ATMs, video kiosks at airports, and various smart city use cases. TrueConf is well positioned for those enterprises that are security conscious, require high quality video or need self-service video that can run unattended.

Strengths

- Video system interoperability
- Private cloud offering
- Scalability and global reach
- Virtual meeting rooms
- Interoperability with Lifesize, LogMeIn, Skype for Business, Cisco Webex, and others
- Logitech, NVIDIA partnerships
- Global community of channel partners

Challenges

- Market awareness

uStudio

uStudio continues to grow in part due to its focus on overall media use cases for the enterprise. Its flagship offering is the Enterprise Media Platform, which focuses on both enterprise video and podcasts. uStudio focuses on sales enablement, learning, internal communications, and audio and video streaming. uStudio supports audio and video podcasting and video on-demand as well as live video and audio streaming.

uStudio's private podcast application lets businesses organize and deliver corporate audio and video content in a modern, mobile-first, and Netflix-style UX—helping to reach increasingly remote and hard-to-engage employees more naturally than the corporate intranet.

One of the unique capabilities of uStudio is its white label mobile app, which can be customized with numerous channels, shows, episodes, and targeted listener playlists making it ideal for a number of use cases, including corporate town halls and sales coaching, onboarding, and learning. Key usability features of uStudio include: one-tap meeting join, auto reconnect, pause and play, push notifications, interactive features, secure download, playback, and more. Additionally, uStudio can now enable custom media delivery via mobile apps. uStudio's video-enabled podcast application utilizes the same publishing workflow, which now includes a simple toggle to select audio and video distribution.

uStudio's growth is due to the focus on both employee and customer engagement, as well as the need for live and on-demand media. uStudio's native HTML5 interactive player and player framework allows for nearly infinite customizations, including the ability to wrap any open third-party player. uStudio now has one of the largest kits of video management APIs and Lightning components built for Salesforce. uStudio's API focus on integrations for core business applications like Salesforce allows it to support more enterprise organizations such as sales, service, learning, and internal communications. uStudio is well-positioned in the market due to its security, analytic features, and mobile app focus, which is meeting user needs for audio and video consumption on mobile devices.

Strengths

- Webcasting
- Scalability
- Deliver video anywhere
- Video analytics
- Customizable video platform
- uStudio for Salesforce integration for sales enablement

Challenges

- Awareness outside of the U.S.

Specialists

Adobe

Adobe offers Adobe Connect as its main offering for meetings, webinars, and virtual classes. In October 2020, Adobe Connect launched version 11.0 with which it officially retired all dependence on Adobe Flash. This release brought a brand new user interface, several new accessibility enhancements such as embedded subtitles, multiple audio tracks, screen readers support for pdf documents and native closed captioning. This release also had improvements for breakouts, layouts, recordings, and HTML recordings editor. Subsequent 11.2 release brought new native applications for MacOS and Windows.

Adobe Connect continues to be a solid choice for webinars and virtual classrooms, as the two use cases where it offers strong functionality. Adobe Connect also has strong integration with the Adobe Experience Manager platform, and this makes Adobe an easy add-on for marketers. Adobe Connect also has a solid install base for virtual classroom due to its breakout rooms feature and its integrations with Adobe's eLearning solution suite—Adobe Captivate authoring tool and Adobe Captivate Prime LMS.

Strengths

- Webinars
- Virtual classroom
- HD video
- Security

Challenges

- Support for broader UCC and video conferencing rooms

Aragon Advisory

- Enterprises need to make video conferencing a key part of their hybrid work approach.
- Enterprises will often need multiple providers due to use cases for webinars, webcasts, and industry vertical solutions, such as government and healthcare.
- The market is quickly shifting to intelligent video platforms. Enterprises should develop exit strategies for providers who cannot show a roadmap that makes their offering intelligent.
- When evaluating video conferencing products, security capabilities cannot be overlooked. Security requirements may also limit choices.

Bottom Line

Due to the pandemic, video conferencing became a de facto standard for hybrid work. The race is on to intelligent video conferencing, and this will cause market upheaval. While video conferencing is offered standalone it is also becoming part of a work hub and overall communications and collaboration platform. Ease of use and video quality are keys to a better meeting experience and intelligence features highlighted in this research note will quickly become key provider selection criteria.

Aragon Research Globe Overview

The Aragon Research Globe graphically represents our analysis of a specific market and its component vendors. We use a rigorous analysis of each vendor using three dimensions that enable comparative evaluation of the participants in a given market.

The Aragon Research Globe looks beyond size and market share, which often dominate this type of analysis, and instead uses those as comparative factors in evaluating providers' product-oriented capabilities. Positioning in the Aragon Research Globe will reflect how complete a provider's future strategy is relative to their performance in fulfilling that strategy in the market.

A further differentiating factor is the global market reach of each vendor. This allows all vendors with similar strategy and performance to be compared regardless of their size and market share. It will improve recognition of providers with a comprehensive strategy and strong performance but limited or targeted global penetration, which will be compared more directly to others with similar perspectives.

Dimensions of Analysis

The following parameters are tracked in this analysis:

Strategy reflects the degree to which a vendor has the market understanding and strategic intent that are at the forefront of market direction. That includes providing the capabilities that customers want in the current offering and recognizing where the market is headed. The strategy evaluation includes:

- Product
- Product strategy
- Market understanding and how well product roadmaps reflect that understanding
- Marketing
- Management team, including time in the job and understanding of the market

Performance represents a vendor's effectiveness in executing its defined strategy. This includes selling and supporting the defined product offering or service. The performance evaluation includes:

- **Awareness:** Market awareness of the firm and its product.
- **Customer experience:** Feedback on the product, installs, upgrades, and overall satisfaction.
- **Viability:** Financial viability of the provider as measured by financial statements.
- **Pricing and packaging:** Is the offering priced and packaged competitively?

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- **Product:** The mix of features tied to the frequency and quality of releases and updates.
 - **R&D:** Investment in research and development as evidenced by overall architecture.

Reach is a measure of the global capability that a vendor can deliver. Reach can have one of three values: *national*, *international*, or *global*. Being able to offer products and services in one of the following three regions is the third dimension of the Globe analysis:

- **Americas** (North America and Latin America)
- **EMEA** (Europe, Middle East, and Africa)
- **APAC** (Asia Pacific: including but not limited to Australia, China, India, Japan, Korea, Russia, Singapore, etc.)

The market reach evaluation includes:

- Sales and support offices worldwide
- Time zone and location of support centers
- Support for languages
- References in respective hemispheres
- Data center locations

The Four Corners of the Globe

The Aragon Research Globe is segmented into four sectors, representing high and low on both the strategy and performance dimensions. When the analysis is complete, each vendor will be in one of four groups: *leaders*, *contenders*, *innovators*, or *specialists*. We define these as follows:

- **Leaders** have comprehensive strategies that align with industry direction and market demand and perform effectively against those strategies.
- **Contenders** have strong performance, but with more limited or less complete strategies. Their performance positions them well to challenge for leadership by expanding their strategic focus.
- **Innovators** have strong strategic understanding and objectives, but have yet to perform effectively across all elements of their strategy.
- **Specialists** fulfill their strategy well, but have a narrower or more targeted emphasis with regard to overall industry and user expectations. Specialists may excel in a certain market or vertical application.

Inclusion Criteria

This Globe looks at the overlapping categories of video conferencing and unified communications and collaboration. It will help clients navigate the intersection of video

meetings, and UCC to look at the overall set of capabilities that support critical business use cases including the need for hybrid work.

The inclusion criteria for this Aragon Research Globe are:

- *Revenue:* A minimum of \$7 million in primary revenue for web and videoconferencing, or \$15 million in revenue in a related market, such as collaboration or UCC.
- *Shipping product:* Product must be announced and available.
- *Customer references:* Vendors must provide customer references in each region where they do business.
- Support for video conferencing.
- Support for mobile devices.

Aragon Research evaluates markets and the major technology providers that participate in those markets. Aragon makes the determination about including vendors in our Aragon Research Globes with or without their participation in the Aragon Research Globe process.

Inclusions and Exclusions for 2021

Inclusions:

- RingCentral
- TrueConf

Notable Providers not included in this report:

- Brightcove
- Kaltura
- StarLeaf