



The Aragon Research Globe™ for Web and Video Conferencing, 2020

Driving Better Outcomes with Better Meetings

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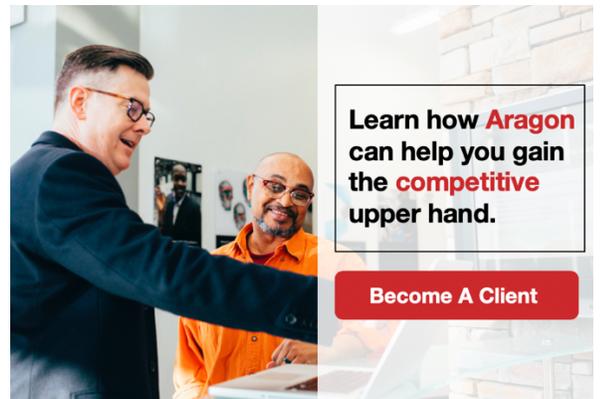
Topic: Web and Video Conferencing

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

SUMMARY

The 2020 Aragon Research Globe™ for Web and Video Conferencing examines 19 major providers in a market that continues to evolve as video becomes ubiquitous in the enterprise. With intelligence and automation as themes, video meetings are becoming more seamless to enhance both employee and customer experiences.

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Key Findings

- Web and video conferencing may be purchased standalone, or as part of a digital work hub or a unified communications and collaboration platform.
- Voice analytics and transcription are quickly becoming standard features.
- **Prediction:** *By YE 2022, the team collaboration and web meetings markets will converge (70% probability).*

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Introduction

The digital enterprise is about breaking barriers to get to the desired outcome as quickly and seamlessly as possible. Video-based meeting providers have been growing in part because they are easier to set up, more reliable, and because people are more comfortable with the medium. When remote collaborators can see each other in a meeting via video, it helps come to consensus faster and more seamlessly than a traditional, voice-based conference call.

Video meetings are part of the customer engagement playbook; when you can see a person, there is a better connection. In the workplace, video meetings have become a digital work mainstay. The nature of the conference room is evolving to meet this new situation, too. Automating meetings in the conference room is a key way to increase productivity and employee engagement. In this seventh edition of the Aragon Research Globe for Web and Video Conferencing, we overview 19 major providers in the market and the major use cases they support.

The Digital Workplace Is Increasingly About Video Meetings

The era of digital work is here, and automation and productivity are tied together. So too is getting more out the workday. This means meetings need to be effective—and leveraging video is a key part of this collaborative experience. Thanks to the consumer focus of providers like Apple (Facetime), people at work are used to the idea of turning on their video camera. In fact, Aragon believes that meetings are 40% more effective when conducted by video as opposed to voice alone.

A seamless collaboration experience also extends to meeting rooms. When IT is not needed to configure a meeting room, productivity increases. The expectation is that providers need to support mobile, desktop, and room devices for meetings and allow seamless switching between devices and vendors. Some providers are offering their own room systems (Avaya, Cisco, Google, Highfive, and Microsoft) and are making them intelligent. Others are accomplishing this by partnering with providers such as Logitech and Poly.

Seamless Video and the End of the Projector Era

Today, WVC software and hardware is becoming much more of an experience story and part of the people-centric collaboration theme. As mentioned above, the standard today is to start a meeting with video on and the requirement is to have a room system that can automatically start without assistance from IT. In 2019, the market shifted to an integrated approach, with new room kits and video bars that have lower price points. This means we have reached the end of the projector era in the conference room. Video endpoints are now more provider-

independent, but in many cases, the complete integrated experience from one provider offers the most seamless user experience.

The Evolution of Meetings to Full UCC Platforms

The best-of-breed market is still growing, but vendors that have done well have also expanded their overall set of UCC capabilities. While established providers such as Avaya, Cisco, Fuze, LogMeIn, and Microsoft have a full UCC Platform, over the last year, Zoom added voice capabilities.

The providers that offer more of a UCC platform are also leading the charge toward a digital work hub (the digital work hub is an emerging category of enterprise-grade software that facilitates and manages the creation, curation, and communication of business content from the individual to ecosystem level).

Why Room Meeting Experience Matters: Intelligent Video Platforms

While the race is on to digitize buildings, it is happening in the conference room first. Video meetings need to be automated and intelligent. Intelligent video rooms leverage AI-based analytics to understand what is going on with the active meeting, and the devices and users who are involved. Many leading providers have taken significant steps to make their video room offerings intelligent and to make the meeting experience more personal through the use of HD video with auto-zoom and HD Audio with auto-muting of background noise.

Capability	Intelligent Video Platforms	Traditional Video
Auto Connect	Yes	Partial
Sound Management	Yes	Yes
Intelligent Cameras	Yes	Yes
Speaker Track	Yes	No
3rd Party Integration	Auto	Partial
HD Video	4K and 1080P	720P
HD Content Sharing	Yes	No
Digital Whiteboard	Yes	No

Figure 1: Today, intelligent video platforms are going further.

Enterprises need to realize that there is a difference when it comes to these room offerings. Classic offerings are unintelligent and provide basic video meeting capabilities, requiring people to ensure that the meeting starts and ends.

The increasing trend is to digitize not only conference rooms, but also open workspaces and smaller huddle areas. Because of cloud and lower hardware prices, Aragon is seeing a fivefold growth in video-enabled conference rooms from 2019 to 2023. Increasingly, digital work hubs will include video meetings as a key requirement that offers seamless integration with day-to-day work applications (e.g. chat, mail, calendar, and CRM).

Transcription and Voice Analytics Become the New Normal

In 2020, intelligent content analytics will become more integrated into web and video conferencing. For example, in 2019, Cisco acquired Voicea and has already incorporated its voice analytics engine into Cisco Webex. Content analytics refers to the use of analytics to derive insights from content where the concepts in the input source—higher level abstractions of the meaning or intent of the source—have been extracted and organized in a model that can be mechanically processed.

The ability to transcribe what is being said in a meeting means that meetings become more valuable. Voice commands, transcription, note taking, and even meeting actions are now being offered by a number of providers, including BlueJeans, Cisco, LogMeIn, Microsoft, and Zoom. With some being able to capture action items, the value of meetings is sure to increase, since this level of automation takes pressure off of meeting organizers to create meeting summaries.

Web and Video Conferencing Integration Capabilities

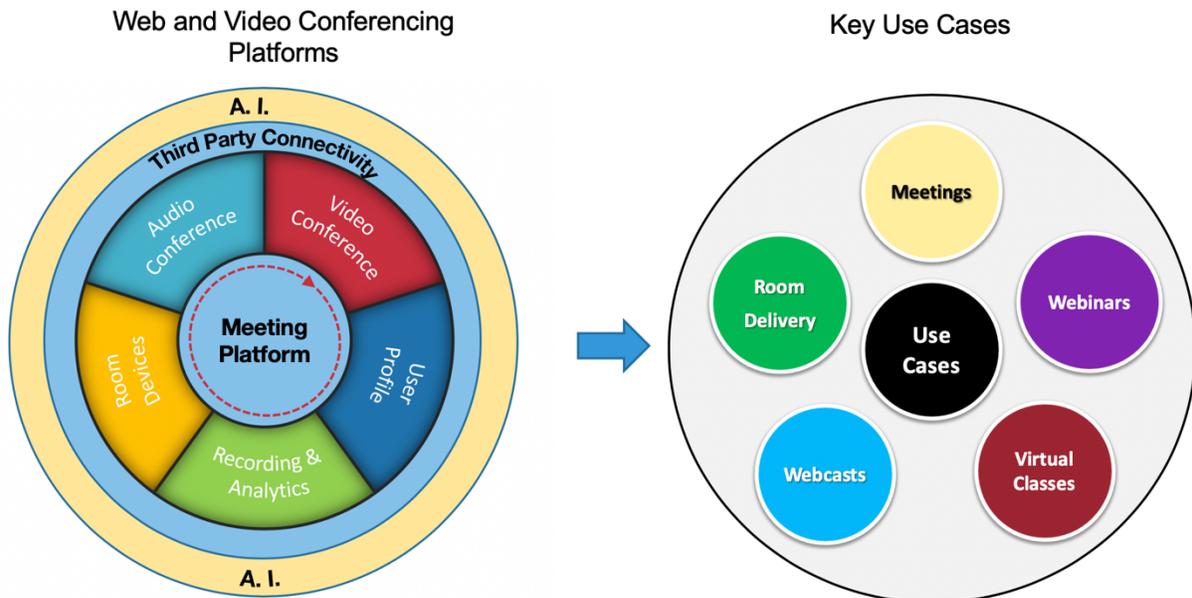


Figure 2: Web and video conferencing focuses on regular office work as well as key use cases.

Meetings are no longer an isolated activity. From a platform perspective, more providers are integrating their WVC capabilities with third-party applications. They might integrate with Microsoft Teams or Salesforce Sales and Service Cloud, like Cisco and Microsoft do.

Partner marketplaces are the clear indicator that a WVC provider has opened up their architecture and has enough demand that others want to integrate with them. For example, webinars need to be integrated with marketing automation platforms. Some do that with a lightweight connector, while others have a deeper integration.

Web and Video Conferencing: Three Evolutionary Approaches

The WVC 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.

First, the horizontal providers have been investing in their meeting solutions, as well as the broader unified communications and collaboration (UCC) portfolio. While voice has been a critical area of investment, so has meeting room integration. Horizontal providers have also begun to integrate WVC with team collaboration.

Second, many WVC 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.

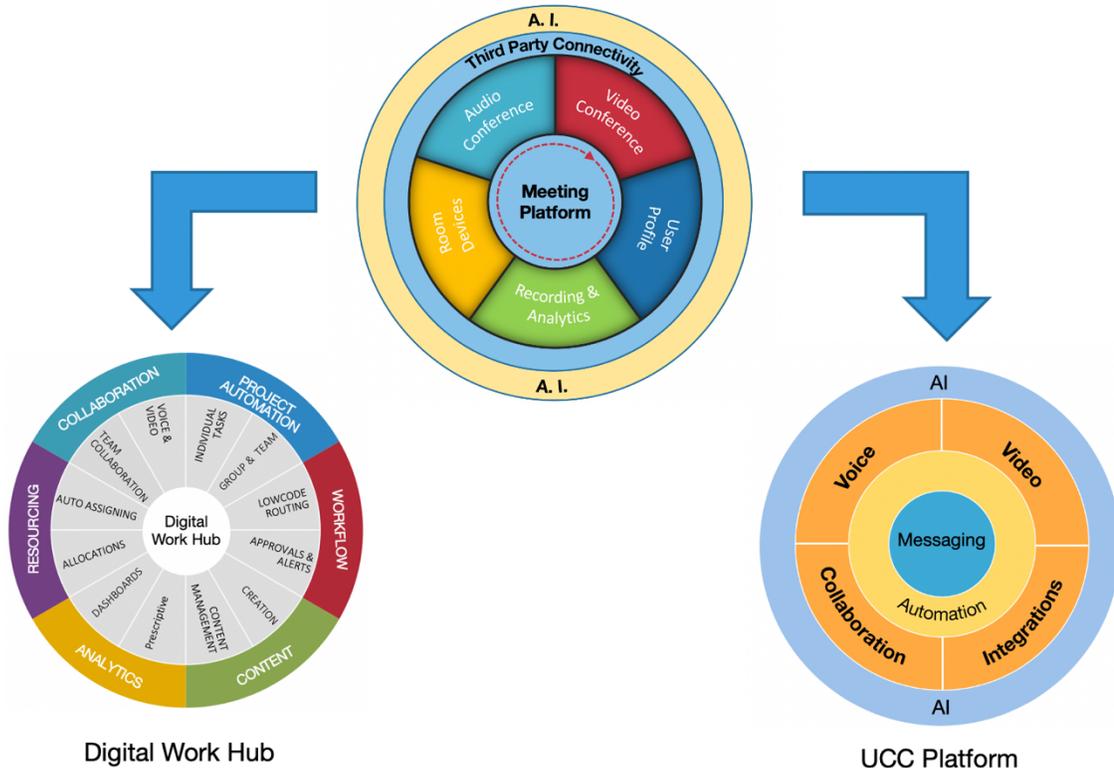


Figure 3: Web and video conferencing is shifting from best of breed to being part of a digital work hub or a UCC platform.

Third, some WVC providers specialize in a particular use case such as virtual classrooms, webcasts, or webinars. Enterprise video platform providers such as Kaltura, Panopto, Qumu, uStudio, and Vbrick specialize in webcasting and rich video portals. These providers can also archive recordings from many of the leading WVC providers.

Why Digital Work Hubs

We communicate knowledge, goals, and intent through business content, which ranges from very structured data (database records) to text files, images, and audio or video files. Managing corporate knowledge that is stored as documents—or as a meeting recording—is a daunting task.

When the tools for each channel and data type are developed independently without a cohesive plan or understanding of the changing nature of how people work, it quickly leads to a set of tools that can't be integrated, and that require far too much attention from employees, partners, and customers. That is, the current state in many mid to large

businesses, and the subsequent loss of productivity, is driving interest in a unifying digital work hub that simplifies content sharing/access and communications at all levels.

The full set of capabilities required for such a platform is dictated by the use case, and may differ by industry, role, or business function. The core capabilities outlined in this report may be augmented by use case specific add-ons that integrate with the platform via APIs.

This digitization is giving rise to more integrated workplace platforms, demanding more video collaboration. Real-time collaboration tools like video bring geographically dispersed teams together visually, which improves the collaboration experience and impacts work for the better.

Communications and collaboration-led work hubs typically have email or messaging (team collaboration) at the core of the offering. Microsoft Office and Google G Suite are prime examples and they are hedging the shift in the market by leading with email but aggressively pushing team collaboration as the future.

Many others that have UCC offerings are leading with team collaboration. Examples include Avaya, Cisco, Fuze, Google, Microsoft, and more.

HD Video: 1080P Quietly Challenges 720P

Business users are demanding rich, immersive video. More providers can now deliver both 720P and 1080P video reliably, with some requirement for MPLS connectivity between campuses. Aragon recommends that enterprises insist on product roadmaps that support a minimum video resolution of 1080P.

The Race to 4K Video

Of all the providers, iPhone manufacturer Apple has pushed the envelope on 4K video. In the enterprise, the delivery of 4K video is still only available from a handful of providers. To date, Avaya, Cisco, Google, Haivision, and Lifesize offer true 4K support. Of these providers, Lifesize introduced a new service in 2019 with new 4K video on an end-to-end basis. The secure reliable transport (SRT) standard, pioneered by Haivision, enables better encoding and compression and has more providers supporting it.

Balancing the Need for Public, Private, and Hybrid Cloud

The WVC market has grown because of the ease of creating a scalable SaaS offering. In 2019, many vendors made it easier to connect with third party devices that are on-premise.

The need to understand how providers enable their real-time cloud on a national and global basis also means that the expense of enabling on-premise systems can often be mitigated.

Enterprises need to look at the cloud architecture of providers and understand how each of them plans to expand their cloud data centers. However, some enterprises may still want or need to leverage private cloud implementation of a WVC service.

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.

Making the Case for Large Scale Events (Podcasts, Webcasts, and Town Halls)

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.

The Consolidation of Meetings and Team Collaboration

The need to collaborate and then meet on-the-fly is increasingly becoming a common workplace use case. This is one of the reasons that team collaboration is becoming so popular—due to the speed and guaranteed delivery to the other party. With communications and collaboration more intertwined together, it makes more sense to use one provider for both messaging and meetings.

Market Implications of This Consolidation Phase

Meetings and team collaboration have been on a collision course for a long time. While the importance of online meetings has grown thanks to better video experiences, so has the demand for faster communications—enter team 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).*

Security Is Critical in an Age of Cyber Warfare

Enterprises cannot overlook security in web and video conferencing. While in other markets, security has become front and center, WVC users often give their vendor a pass, only to learn that information they shared—due to recordings—was at risk in the data center of the WVC provider.

Enterprises need to look carefully at their providers and understand some of the basic and more advanced security features. Because of some requirements, enterprises may choose to keep their meetings and their recordings in locations they choose, including their own data center. Some of the security requirements to inspect vendors for include the following:

Encryption:

- 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.

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 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 WVC. 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	Virtual Classroom
Adobe	✓			✓	✓
Avaya	✓	✓	✓		
BlueJeans	✓	✓	✓	✓	✓
Cisco	✓	✓	✓	✓	✓
Fuze	✓	✓	✓	✓	
Google	✓	✓	✓		
Highfive	✓	✓			
Lifesize	✓	✓	✓	✓	✓
LogMeIn	✓	✓	✓	✓	✓
MediaPlatform	✓		✓	✓	
Microsoft	✓	✓	✓	✓	
Panopto	✓		✓	✓	✓
Pexip	✓	✓			
PGi	✓	✓	✓	✓	
Poly	✓	✓	✓		
Qumu	✓		✓	✓	
uStudio	✓		✓		
Vbrick	✓		✓	✓	
Zoom	✓	✓	✓	✓	✓

Table 1: Comparing the capabilities of the different providers.

As market convergence continues with WVC, 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 web conferencing and online meetings providers, we will see those capabilities increasingly become part of converged WVC offerings.

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?
- **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 web and video conferencing and unified communications and collaboration. It will help clients navigate the intersection of web, video meetings, and UCC to look at the overall set of capabilities that support critical business use cases.

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 web conferencing or 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 2020

Inclusions:

- No new vendors added.

Notable Providers not included in this report:

- **Vidyo** – due to sale of firm

The Aragon Research Globe™ for Web and Video Conferencing, 2020
(As of March 3, 2020)



Figure 4: The Aragon Research Globe™ for Web and Video Conferencing, 2020.

Leaders

BlueJeans

BlueJeans, under the leadership of CEO Quentin Gallivan, has continued to grow powered by its high-quality video meeting service. In October 2019, BlueJeans launched Smart Meetings which includes the ability to capture action items during a meeting and to tag important discussion points for later recall in a recording. These advanced features can enable higher forms of team productivity. BlueJeans continues to partner with Dolby and added support for Dolby Voice Rooms. 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.

BlueJeans Rooms, powered by Dolby, provides an accessible and easy-to-use in-room video meeting solution to easily modernize workspaces. BlueJeans also offers a robust events offering for townhalls as well as for virtual classes. Its virtual class capability also now supports breakout rooms, an important part of virtual instruction. Video meetings now includes Dolby Voice, which was upgraded in 2018 to focus on a premium voice experience that enables 360-degree voice pickup from meeting room participants. The BlueJeans Events offering was one of the first to offer integration and management of a Facebook Live event.

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
- Event support for Facebook Live
- WebRTC support

Challenges

- Deployment options, besides cloud

Cisco

Cisco Collaboration, under the leadership of executive vice president & general manager Amy Chang, spent the last year modernizing and revamping its Webex Portfolio. Webex Meetings had a refresh and is now fully integrated with Webex Teams—its leading team collaboration offering. Cisco is also one of the few providers investing in both cloud, hybrid, and private cloud offerings—and in 2019 it added a new unified client experience, which brings together the call, meet, message, and devices offerings into one common client experience. In 2019, Cisco announced its AI offering—Cognitive Collaboration—by adding contextual profiles from its Accompany acquisition and built-in transcription and notetaking via its Voicea acquisition. This AI focus has allowed Cisco to up its game with an intelligent meeting service and intelligent meeting room devices.

The Cisco Webex portfolio of room devices are some of the broadest in the industry and span from the huddle space to boardroom solutions. The Webex Room Kit offerings in particular have been copied by others. The Cisco Room Kit offerings—referred to as the Webex Room Series—includes Room Kit, Room Kit Mini, Room Kit Plus, and Room Kit Pro, integrated solutions (Room 55, Room 55 Dual, and Room 70 G2), and a family of new huddle space solutions for sharing, communicating, and co-creating (Webex Share, Webex Room Kit Mini, and Webex Board). Cisco offers its Webex Board series which includes a 55, a 70, and a new 85-inch device, as well as the new desktop Webex Desk Pro and DX80 and Webex Room Panorama immersive video systems (IX systems for on-premises deployments only). The Cisco Webex Edge Services allow for higher quality voice and video calls, by leveraging on-premises and Cisco infrastructure. This is something that larger enterprises will like, as it holds the promise for higher quality meetings. Cisco is also one of the few vendors that supports H.265 on some of its offerings in addition to SVC technologies that optimize bandwidth while delivering ultra HD resolution.

Strengths

- Cisco and Webex brands
- Platform approach covering all collaboration workloads
- High quality video across devices, including mobile
- Intelligent video rooms and endpoints
- Consistent UI across platform
- Support for multiple use cases
- Cisco Webex Mobile Platform
- FedRAMP certification for Webex
- Interoperability

Challenges

- Balancing focus on collaboration vs. networking and security

Google

Google has continued to evolve Hangouts Meet as its flagship video conferencing platform, part of the G Suite bundle for enterprises. Google Hangouts Meet has one of the most seamless join experiences—accessible from any major browser without download, or from its mobile apps. In 2019, Google launched the enterprise version of Google Voice on a global basis which makes Google G Suite a full UCC Platform. Hangouts Meet is part of the family of collaboration offerings that include Gmail, Calendar, and Hangouts Chat, which allows users to launch straight into a full Meet video call from a Chat session. The addition of Google Voice makes G Suite a complete communication suite for its customers.

Google also offers a Hangouts Meet hardware option and whiteboarding via its Jamboard through BenQ, which means Google has a complete portfolio of room options. Its partnership with Pexip enables it to integrate third-party devices into a meeting, including Microsoft, Cisco, or Poly devices. Google integrates all of the management capabilities into G Suite admin dashboard to allow multiple Jamboard and Hangouts Meet devices to be managed from a console. The seamless experience for users means video calls are automatically added to Calendar events. With G Suite, the ease and speed of shifting from messaging to a full meeting is one of the advantages of Hangouts and fosters enhanced and seamless collaboration between users.

Strengths

- Enterprise penetration with G Suite
- Real-time collaboration in meetings
- Video room offerings
- Video quality
- Ease of use

Challenges

- Brand awareness of Hangouts

Lifesize

Lifesize made a major innovation move in 2019 by making its video meetings fully 4K-enabled. The Lifesize 4K-based video conferencing platform offers quality levels only seen on higher end systems. Lifesize also makes its own 4K cameras that feature a family of offerings including the Lifesize Icon 300, Icon 500, and Icon 700 series. These offerings help to power its huddle room offerings, including Dash. Lifesize also launched its own Lifesize Share for wirelessly sharing multiple types of media from any device without requiring specialty connectors or software downloads.

Lifesize is making it easy for new buyers to get started with their free offering, called Lifesize Go. It also offers solid configuration options for boardrooms that should make it a popular choice in the SMB segment. Lifesize offers connectivity with Poly, Slack, and Microsoft Teams. Lifesize is also focusing efforts on video-enabling business applications in key verticals, such as healthcare and manufacturing. The complete focus on cloud, along with its new 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
- Huddle room offering
- 4K video
- Overall video quality

Challenges

- Balancing hardware and software solutions

LogMeIn

LogMeIn, which is in the process of being taken private in a \$4.3 billion deal by Francisco Partners and Evergreen Coast Capital Corporation, offers a full UCC Suite, powered by its GoTo family of products, including GoToMeeting, GoToTraining, and GoToWebinar. In 2019, GoToMeeting was updated and refreshed with a new video-first experience that works across devices. GoToMeeting also features built-in note taking, transcription, and enhanced audio connection capabilities to optimize quality even during times with reduced network bandwidth. LogMeIn also offers GoToRoom, an all-in-one hardware/software solution for in room meetings. GoToRoom partners with providers including Dolby, Logitech, and Poly.

The LogMeIn portfolio is broader now with its GoToConnect- and Jive-based voice offerings and its business chat. This allows LogMeIn to be a complete provider of meetings, UCaaS, and messaging. It offers all of the key use cases and now has more intelligence in its offering thanks to the new notetaking and transcription capabilities. LogMeIn still offers join.me, which had been one of the fastest growing offerings on the market. 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

Poly

Poly (formerly Plantronics and Polycom) offers a growing number of leading-edge video and audio endpoints as well as cloud-based insights and management. In 2019, Poly unveiled its Poly Studio X family of purpose-built all-in-one video bars. The Poly Studio X family features Poly Meeting AI capabilities for breakthrough audio and video experiences built on machine learning and artificial intelligence. The product family consists of Poly Studio X30, ideal for small offices or huddle rooms and the Poly Studio X50, the larger of the two solutions, which boasts even greater pickup range and high-quality speakers to suit the needs of mid-size conference rooms. The Poly Studio X family currently ships with native Poly and Zoom mode and soon with Microsoft Teams mode as well. Poly has announced that the Poly Studio X family will be available for Microsoft Teams in 1H2020.

The Poly Studio X family is part of Poly's reimagined video portfolio which includes Poly G7500 for mid-to large-sized conference rooms. Poly G7500 also runs the Zoom Rooms app natively and 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 announced its Poly Lens offering, a cloud-based insights and management service. Poly Lens combines seamless management and updating tools with insight into how Poly devices are actually being used.

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. Besides Group Video Series, G7500, and Poly Studio X family, Poly also offers a number of other endpoints for audio, video, and content sharing, such as the Poly Trio 8500 and 8800, Centro, Debut, Pano as well as its desk phones. Poly audio and video quality has always been one of the highest in the industry. Its new family of offerings should allow it to offer upgrade paths to its significant install base. 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

Zoom

Zoom completed its IPO in 2019 and with revenues in excess of \$331 million, this makes it one of the fastest growing web and video conferencing providers. Zoom has continued to leverage its flagship meetings offering that is complimented by its room offering, which is powered by partner hardware offerings, including Logitech, Neat, and Poly. Neat's purpose-built Zoom Rooms Appliance, Neat Bar, can be purchased and shipped globally from their website, neat.no. In 2019, Zoom shipped its Zoom Phone which expands its addressable market. Zoom has strong ease of use across its meetings and voice portfolio.

Zoom continues to leverage its growing partner marketplace, which includes voice AI offerings such as Chorus and Gong for analytics and transcription. Other partner apps include scheduling bots and more. Zoom Room kits are now available from distributors including Ingram Micro Inc., Starin, and Tech Data. Zoom is also gaining traction with its webinar offering.

Strengths

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

Challenges

- Market awareness outside of the U.S.

Contenders

MediaPlatform

MediaPlatform, led by CEO Mike Newman, offers a complete video platform that is focused on large scale events that it calls business broadcasting, as well as video content management. In June 2019, MediaPlatform redesigned its Webcaster product introducing its next-generation webcasting platform MediaPlatform Broadcaster, which features an intuitive interface that makes it easy to manage large scale internal town halls and conference type events. MediaPlatform offers a video distribution offering comprising its own Edge eCDN and its own Smartpath network overlay technology, which allows companies to use third-party peering and multicast service providers in a vendor-agnostic and redundant fabric. MediaPlatform also offers optional event services capabilities to support clients for webinars, town hall meetings, and training.

In 2019, MediaPlatform also made available its event success dashboard (ESD), which allows broadcasters to monitor the success of an event in real time. ESD includes analytics such as sentiment analysis. MediaPlatform's video business intelligence, combined with ESD, will help clients understand event success by leveraging its built-in prescriptive analytics. MediaPlatform continues to offer enterprises cloud flexibility with its flexible SaaS and hybrid deployment models. Its advanced analytics uniquely allow business leaders to measure viewer quality of experience and engagement, as well as network QoS, in a single view.

Strengths

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

Challenges

- Awareness outside of North America

Microsoft

Microsoft has made Microsoft Teams the primary work hub for all voice-, video-, and messaging-based communications. Microsoft Teams is part of the larger Microsoft 365 and Office 365 bundles. Office 365 adoption has been growing, in particular because of all the capabilities it offers besides Teams, including email, content management, workflow, and communities. Skype for Business is still offered as an on-premises offering and some enterprises will continue to leverage that option due to security and data residency options.

While the Teams port from Skype for Business Online is complete, for some enterprises the meeting tab in Teams does not always show up. Also, there is still optimization for video settings that are needed in Chrome and Chromium-based Edge browsers. Microsoft Teams Room Systems continues to partner with certified providers that include Crestron, Lenovo, Logitech, HP, Yealink, and Poly. While Teams is the most promoted client within Office 365, users may find that they need to balance the time they spend in Outlook for email and calendar vs. Teams.

Strengths

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

Challenges

- Balancing focus on email and messaging vs. meetings

Panopto

Panopto continues to execute in both the higher education and corporate markets and has seen growth in both due to its complete offerings, which include video portal, CMS, lecture capture, and live as well as recorded video. Panopto continues to offer some of the most extensive meeting recording options that include support for BlueJeans, LogMeIn, and Zoom. Its platform is also a strong choice in corporate learning, featuring integrations with Canvas and Saba.

Panopto's updated analytics suite offers software that allows a view of video content consumption and audience behavior. Panopto has expanded its data centers and now offers a Singapore-based cloud option for the Asia Pacific customer. 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 partnerships with Shuttle Computer, Seneca, and Matrox have allowed it to offer a new Panopto-certified video capture appliance—this allows the company to focus on enterprise video.

Strengths

- Ease of use
- Overall analytics capabilities
- Video meeting recording
- Video search
- LMS integration
- On-premises or hosted deployment options

Challenges

- Balancing focus on higher education and corporate markets

PGi

PGi continues to focus on its flagship offering GlobalMeet for web and video conferencing services. PGi has expanded its focus into UCaaS in addition to meetings, which could allow it to leave a larger footprint in enterprises. In December 2019, PGi announced that it had partnered with Dolby to add Dolby Voice for improved audio during meetings. PGi also redesigned its mobile experience with new apps for iOS and Android. GlobalMeet had some enhancements this year, including a huddle room connector. It also added support for integration with Microsoft Teams.

PGi also offers webcasting and webinar capabilities although they are separate and distinct offerings from its GlobalMeet product. These include GlobalMeet Webcast and Webinar Global Meet Webinar (formerly ReadyTalk). 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
- Large live support team

Challenges

- Multiple products

Qumu

Qumu's enterprise video solution allows organizations to live stream directly from any video conferencing application, extending the effective reach of standard video conferencing technology from several dozen people to thousands or even tens of thousands of live attendees. The Qumu solution also enables recording, storage, and comprehensive management of live streaming events as video on demand (VOD) assets. In September 2019, Qumu announced a major update to its on-premises deployment offering with the release of Qumu Video Control Center (VCC) version 10, which features self-service live broadcast, hybrid and intelligent external delivery, and advanced analytics. Qumu also offers a full-featured cloud video deployment that leverages WebRTC.

In February 2020, Qumu announced a merger with Synacor, a publicly traded collaboration software company based in Buffalo, New York whose products include technologies related to email, calendaring, contact management, content sharing, chat, video conferencing, and single sign on. Qumu offers a robust viewer portal and advanced video analytics. In June 2019, it announced its partnership with CaptionHub for AI-based captioning, in which it can leverage AI to optimize inbound and outbound video using intelligent peering. Qumu's strong Pathfinder offering, an intelligent content distribution engine, enables cloud customers to utilize its software and hardware endpoints within a customer's network, enabling edge-based, peer-to-peer, and hybrid delivery. The Qumu solution can be seamlessly integrated with Cisco, Polycom, Skype for Business, Pexip WebEx CRM, Zoom, and many other video conferencing technologies.

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, based in Herndon, Virginia, continues to expand its offerings and leverage distribution via its growing partner network. 2019 saw the addition of new sales and marketing executives to continue to enable Vbrick's growth. Vbrick offers its flagship Rev Enterprise video platform that offers video conferencing integration, video capture, video content management, live video streaming, and distribution. In 2019, Vbrick added Rev Connect, a peer-assisted content delivery solution to its distribution solution portfolio. Vbrick also released Rev IQ—which adds an AI layer to Rev—that enables facial recognition, live transcription, and an enhanced viewing experience called Pulse. The native Rev video editing abilities help to streamline post-production of live event recordings.

Vbrick has continued to enhance its integrations with Cisco Webex including one click recording from Webex Teams and scheduling of broadcasting from Webex Teams. Vbrick is 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. Besides its Cisco partnership, Vbrick maintains integrations with other collaboration vendors such as Microsoft to enable viewing video on-demand content and webcasting with Microsoft Teams. Vbrick is winning with enterprises due to its focus on high quality, live, and on-demand video streaming.

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

Avaya

Avaya made a number of moves in 2019 to strengthen its overall portfolio. This included launching its Avaya Spaces, which blends meetings with team collaboration. Avaya also announced that it was partnering with RingCentral for UCaaS and that Avaya will resell Avaya Cloud Office by RingCentral to its large install base. The Avaya Collaboration Platform lead offerings are Spaces and Workplace. Avaya Spaces is a new hub that features team collaboration and meetings with the ability to connect via any device—desktop, mobile, and huddle rooms. Avaya IX Workplace provides a complete UCC solution with meetings, messaging, and telephony backed by both its enterprise and midmarket platforms.

Avaya is of the few providers whose room-based systems support 4K video. Avaya can also connect with third party room systems. Avaya also offers a growing set of integrations, including support with Apple, Google, Microsoft Teams and Office, Salesforce, and Slack. Avaya has made AI part of its overall UCC focus. This is helping Avaya to get out in front of the shift to intelligent video rooms. With the addition of team collaboration, Avaya is giving its customers a platform that goes beyond basic meetings.

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

Fuze

Fuze continues to lead with its UCC Platform that features its UCaaS offering and its meetings platform along with messaging. In December 2019, Fuze announced that its CFO Brian Day was taking over as CEO. Fuze leverages its platform at the user level with voice, HD video, and chat all integrated into one easy-to-use client. The strength of Fuze's all-in-one platform with persistence, content, and context for distributed teams is one of the reasons Fuze is winning large deals. Fuze 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 offers so many unique use cases, including enabling video or screen sharing within a voice call in the same session across desktop, mobile, and web clients.

The ability to launch a video meeting from any device and share high quality content are capabilities that make Fuze stand out. Fuze users can also fully participate in Fuze meetings (voice, video, screen share) via their Chrome browser with no download required, and only a small extension download for all other browsers. Fuze offers a full room experience in addition to optional webcasting, supporting up to 25,000 participants. Given its overall capabilities in unified communications and collaboration, Fuze is well positioned to continue to deliver voice, video, and collaboration capabilities for the enterprise.

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

Highfive

Silicon Valley-based Highfive, led by CEO Joe Manuele, helped to pioneer the video meeting as a service, providing integrated meeting room hardware and rooms-based software bundled together in a monthly subscription model. The all-in-one bundle of the web, desktop, and meeting room video conferencing is a model that others in the industry have copied. Highfive also supports 720P and 1080p for video resolution with a “like you’re there” audio experience through Dolby Voice.

In 2019, Highfive again disrupted the market with its new SIP-based meeting connector, allowing Highfive customers—with just a single tap—to join any SIP-enabled system, including but not limited to BlueJeans, Cisco Webex, and Zoom meetings they’ve been invited through Highfive. Additionally, it announced a new pricing model available to SMBs, SMEs, and enterprises. Highfive’s meeting room offers (Select, Plus, and Premium), now include unlimited user licenses with free desktop software and mobile application access. Highfive claims its model provides predictable pricing—Highfive whitelists all company email domains. This gives every worker across the business the ability to host, participate, and experience greater collaboration by using Highfive meetings. With built-in PSTN functionality, Highfive fulfills a complete suite of conferencing needs.

Highfive has also been expanding its distribution and outbound go-to-market motion 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. We believe the ease of use and the all-in-one camera/microphone design, along with overall HD voice and video quality, make Highfive a good value that will continue to disrupt the current web and video conferencing market.

Strengths

- Ease of installation
- Ease of use
- Cost is relatively affordable for outfitting rooms
- HD voice and video
- Pricing simplicity
- Unlimited user licenses
- Simplified user management

Challenges

- Overall market awareness

Pexip

Pexip continues on its growth trajectory as it successfully completed the merger of Pexip and Videxio in 2019. Pexip provides both web and video conferencing services as well as interoperability. Pexip has a long history of VMR/Interop, Gateway, and video system registration services. In 2020, Pexip added its AI-based adaptive composition offering to market. Pexip can now automatically frame users in a meeting so that the video looks more natural, and intelligently arrange the screen layout to place more emphasis on rooms with more users. This feature works on any device. It also announced more meeting controls, so admins know who has joined and from what type of device.

For enterprises with multiple providers, Pexip can natively integrate with video conferencing solutions from Cisco, Polycom, and Lifesize, and with any other software or hardware UC solution, such as Microsoft Teams, Skype for Business, Google Hangouts Meet, as well as web browsers and audio callers via its virtual meeting rooms, or as a pure gateway. Pexip has continued its partnerships with Microsoft and Google to offer native video interoperability between third party conferencing services and Teams and Hangouts Meet. These capabilities are available on both Pexip Infinity (self-hosted offering) and Pexip's service offering. Pexip has browser-based support for joining virtual meetings with various endpoints and communications systems.

Strengths

- Video system interoperability
- Webcasting
- 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

uStudio

uStudio repositioned itself in 2019 to focus on the growing demand for audio and video media. In April 2019, uStudio added its Live Audio Streaming offering, an enhancement to its original Secure Podcasting Service. This feature enables one tap streaming of meetings and makes it easier for mobile employees to listen to meetings on the go. Features include: one-tap meeting join, auto reconnect, pause and play, and playback. In July of 2019, uStudio released its extension of video streaming capabilities to its podcast mobile and desktop applications. This addition of video to enterprise podcasting increases efficiency by ensuring companies can deliver media content in the format that is best suited to the message and the audience. uStudio's video-enabled podcast application utilizes the same publishing workflow, which now includes a simple toggle to select audio and video distribution. Users can also track and compare audio and video data with convenient dashboards in order to determine which medium works best for which message.

uStudio focuses on sales enablement, learning, internal communications, and audio and video streaming. The need for live and on-demand media is powering uStudio's growth due to the focus on both employee and customer engagement. uStudio can now enable customer media delivery mobile apps. This compliments uStudio's native HTML5 interactive player and player framework, which allow 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.

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 continues to market its Adobe Connect offering with the key focus on the webinar and virtual classroom use cases. Adobe Connect, which is going toward a full HTML client, offers HD video, SSO support, and an enhanced user experience. Adobe has been gradually reducing the need for Flash and with Connect 10, it has solidified this shift. In 2019, Adobe added more HTML features to Connect, including better support for recordings.

While Adobe continues to be a solid choice for webinars and virtual classrooms, it is competing for the meetings use case. Adobe Connect also has strong integration with the Adobe Experience Manager platform, and this makes Adobe a go-to choice for marketers. Adobe Connect also has a solid install base for virtual classroom due to its Class Breakout feature.

Strengths

- Webinars
- Virtual classroom
- Hosting meetings with video from mobile devices
- HD video
- Security

Challenges

- Support for broader UCC and video conferencing rooms

Aragon Advisory

- Enterprises need to evaluate web and video conferencing providers from two perspectives: the key meeting features and capabilities vs. the broader capabilities the vendor offers in overall unified communications and collaboration.
- Enterprises may need to select more than one vendor due to use cases for webinars, webcasts, and industry vertical solutions, such as healthcare.
- Enterprises should ask for detailed roadmaps from providers to ensure that they mesh with the existing enterprise technology and business direction.
- When evaluating video conferencing products, understand the national vs. international needs of the enterprise. This may require evaluating more than one provider.

Bottom Line

The web and video conferencing market is evolving and meetings are becoming a critical part of the digital workplace. At the same time, product offerings are changing as web and video conferencing can be purchased standalone or as part of a work hub or UCC platform. Experience and ease of use still matters, and security is one of the areas that enterprises need to carefully examine. With transcription becoming more automatic, meeting notes and action items are becoming automated, making the shift to more intelligent and automated meetings a reality.