The Aragon Research Globe™ for Unified Communications and Collaboration, 2019

Putting People at the Center of the UCC Journey

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Topic: UCC

Issue: Who are Unified Communications and Collaboration providers and how will they evolve?

Summary

Aragon Research releases its third Aragon Research Globe™ for Unified Communications and Collaboration. It examines 14 major providers in a market that focuses on all forms of collaboration and communication. As UCC platforms become more integrated and intelligent, the market will shift to focus more on people and the work at hand and less on the mechanics of doing calls and meetings.

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TABLE OF CONTENTS

Introduction

The demand for communication and collaboration offerings continues to grow, in part due to cloud flexibility, mobility, and better customer journeys. Video meetings are becoming more seamless and conversational AI is poised to accelerate the shift towards multi-modal interactions.

Voice, video, and messaging communications and collaboration will drive the future of this market. In 2019, more providers invested in their messaging platform and the demand for conversational AI, or chatbots, started to pick up. Team collaboration capabilities continue to expand and more UCC providers are investing in their offering.

The integration of communications and collaboration features with other work tools is creating a UCC driven work hub. Moreover, the convergence of content types under UCC will be greatly enhanced by a categorized and dynamic, ontology-driven knowledge framework that goes beyond search. Once the framework supports are in place, UCC will accelerate its momentum at an even greater rate than it already is today. This research note identifies the new elements of UCC, how enterprises can plan for the shift to multi-modal communications, and evaluates fourteen major providers in the market.

Communications and Collaboration: Market Momentum

UCC is one of the largest markets and demand for each of the modalities in UCC is growing. As demand for UCC grows, more providers are making moves to embellish their UCC portfolio, even if buyers are still basing their purchase decision on one or two of the modalities.

Voice and email communications are still the primary modes of interaction within the enterprise today, but messaging is closing in on email. Enterprises, however, are still in the process of establishing an enterprise standard. Video meetings are increasing, and launching video meetings from email or a chat session is considered a standard capability.

Prediction: By YE 2025, team collaboration will be the primary way that people collaborate and communicate.

Today, business leaders want faster outcomes and are seeking providers that can deliver on this. The need to integrate collaboration and communication capabilities with other business applications is one of the ways that enterprises can transform into a full-fledged digital business.

Although there is still a huge demand for voice, today buyers realize that it needs to be part of a broader multimodal portfolio. Unified communications has always encompassed a voice-led product offering, but as the market has shifted, buyers want more than voice; UCaaS providers continue to grow due to this demand. Buyers also want video, collaboration, and mobile access, and they want it to be more seamless and more automated. The market is moving in this direction and major providers have been maturing their UCC platform.

The UCC Platform—Automation and Intelligence Are Here

The go-forward approach to UCC will be an integrated offering that allows people to collaborate and communicate in a more seamless fashion. The need for real-time communication is growing and for that reason alone, we see team collaboration gradually becoming the primary work modality over email.

While team collaboration has been growing by leaps and bounds at the team and department level, we have seen a lag in full enterprise adoption in large enterprises. SMBs and universities (due to alerts) have already gone there. The demand for team collaboration is expected to grow as product functionality and better integration with other UCC modalities becomes commonplace.

Automation of arranging meetings and calls is part of the modern UCC approach. Enterprises need more than a collection of features bundled into a suite. It is clear that the market is starting to deliver on this promise.
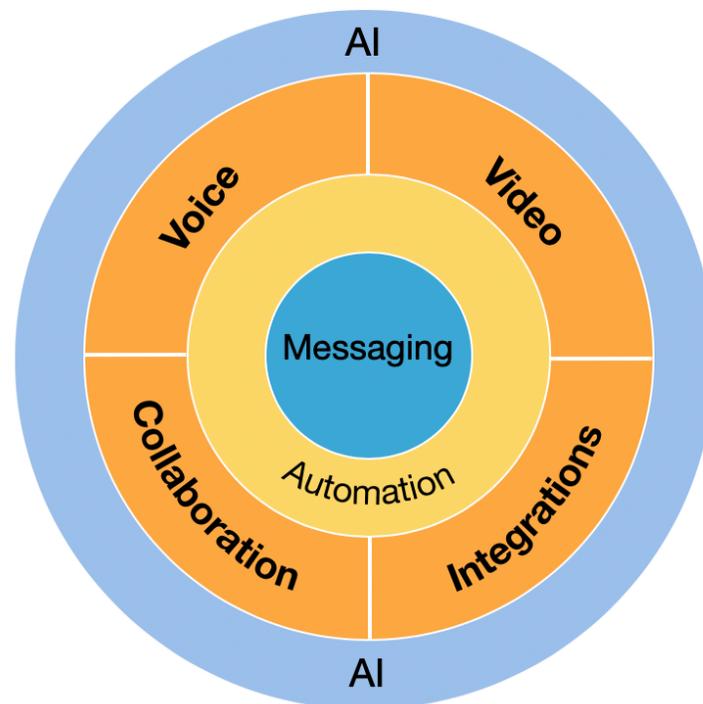

Figure 1: UCC platforms are becoming more people centric with tighter integration and more automation.

The differentiating characteristic will be the platform play. There will be multiple angles to the platform and many vendors will try to leverage their core strengths. Google has made a significant makeover of its UCC portfolio that features its Hangouts Chat. Microsoft is also

focusing on team collaboration via Teams, Fuze and RingCentral have also been retooling their platforms with enhanced mobile clients that allow easy switching between modalities.

People-Centric Collaboration is About Making All Modes Seamless

Aragon feels that the market is starting to put people at the center of UCC, which is more about people-centric collaboration than channel specific UCC. Use cases will help to drive this, as will the addition of intelligence using predictive and prescriptive analytics. There are many business use cases for UCC because of the increased demand for omni-channel forms of communication. For example, sales reps know that today's customers are busy, and trying to schedule a sales appointment has become much harder. Customers might not have time to look over every email or return a missed phone call—and they might not want to, either.

When it comes to outreach, the efforts made must be omni-channel and take into account the technology that customers increasingly want to use—such as messaging and video. Phone calling and emailing are only part of the communications equation. A UCC platform will provide different areas of the business with multiple forms of outreach capabilities in order to successfully compete in today's digital world.

At its core, people-centric collaboration is about enabling seamless communications and collaboration. It allows for calls that are both voice-based and video-based; it enables meetings with users and rooms; it is about the shift from instant messaging to mobile messaging, which we have termed mobile collaboration. However, not all have been quick to recognize these changes in the market, particularly the impact of mobile messaging.

Figure 2: People-centric collaboration means being able to seamlessly switch to the right method of interacting with others.

The Key Elements of the UCC Platform

The demand for the key elements of the UCC platform is being influenced by current shifts in the market:

Voice is the Largest Market

While the market focus on voice communications is large, shifting to cloud-based voice offerings is the new battle cry. Voice communications is still the largest market out of all the other modalities, but today it is not enough to solely have a voice-only solution; there is a demand for video and messaging. That said, it still comprises an integral part of the UCC platform.

Today, the benefits and the innovation that a full cloud UCaaS offering provides are clear. Hybrid cloud served as a bridge, but going forward, the costs of keeping old and new systems aren't always beneficial. In some cases, a hosted offering that gives the benefit of cloud and data privacy will be as popular as a multi-tenant offering.

Unified Communications as a Service (UCaaS) is growing due to the cloud and the fact that enterprises want to get out of managing on-premise equipment. This has increased pressure on traditional on-premise PBX suppliers. Microsoft's focus on voice in Office 365 has helped Fuze, RingCentral, and Vonage gain traction.

In many cases, enterprises want to replace an aging PBX, and the shift to cloud has served as a revenue engine for many providers. Furthermore, demand for cloud-based voice capabilities on a global basis is becoming the new normal for providers.

Video: Users Expect More

The growing demand for video has raised knowledge worker expectations for seamless, high-quality, real-time video interactions with colleagues and partners. The BYOD and consumerization phenomena have made video accessible to anyone, anywhere, and at any time. People want the same level of access in their professional lives as they have in their consumer lives to get their work done, and this has placed high expectations on video for enterprise use.

Video Meetings: Intelligence, Quality, and Simplicity

Video meetings are becoming the new normal in the enterprise. Intelligent video meetings will mean that users do les work to start the meeting. Transcription will also become standard. Video mobility, which is about enabling video meetings from anywhere and on any device, is also becoming a mandatory capability. Making the mobile video meeting as good as the desktop may impact vendor selections.

The competition for conference and huddle rooms keeps getting more intense. Web and video conferencing providers such as Avaya, Cisco, Google, Highfive, Lifesize and Microsoft, are offering their own intelligent room systems. Others are accomplishing this by partnering with providers such as Logitech and Poly.

The Race to 4K starts with 1080P

On quality, while many providers offer 4K cameras, few offer true 4K meeting experiences. At a minimum, enterprises should be looking at 1080P as standard. For most use cases, 1080P will suffice, but we expect 4K to become a standard over the next four years. 4K will also drive more video-based use cases in the workplace.

Team Collaboration: Messaging is Now Front and Center

Messaging can act as the launch point for communication with other colleagues or customers. Team collaboration has become a dominant form of communication for consumers (e.g. Apple iMessage, Facebook Messenger, WhatsApp, Snapchat). In the enterprise, many departments have deployed team collaboration, but many enterprises have not made it a standard yet. UCC providers have made their offerings more integrated with their voice, video, and collaboration capabilities.

Team collaboration is also in prime position to become a business platform on-ramp where teams can get work done and business can be transacted. Conversational AI maturity and applications have evolved, and new products are coming online to take advantage of this technology. That said, this has given rise to a new power struggle to own team collaboration.

Mobile workers need their communication and collaboration capabilities to do three things:

1) Fully mobile.
2) Fast.
3) Seamless.

The mobile worker needs collaboration tools that will allow them to be notified of things instantly from any—and all—of their applications without having to switch back and forth between them.

On-the-go workers are not in the same place as their team and need the ability to be connected and have a constant stream of communication, consistently pushing the need for faster messaging methods.

With so many different communication and collaboration apps available, the ideal ecosystem for team collaboration is the ability to integrate with other third-party applications. The mobile worker requires multimodal channels of communication, so a good collaboration platform will allow more app to app notifications. This means that communication becomes seamless in the enterprise, and allow for immediate notifications.

CPaaS and Team Collaboration

While integration of apps is a trend coming from the consumer world, this will become increasingly important in enterprise. CPaaS (APIs) is enabling the integration of team collaboration with other

applications. Many providers are making their CPaaS capabilities as a core part of their platform and it powers their solution efforts.

Because mobile-working is gaining traction, it is also especially important for people to stay on top of scheduling to stay on-target and on time as they work on-the-go; features like Google Calendars and Microsoft Teams are supporting this need. We will also see chatbots pushing productivity for mobile-workers by becoming like a digital assistant, which we will dissect further in later sections.

There is still leftover pain with IT buyers over instant messaging, which never truly became a dominant standard in the enterprise. Team collaboration, however, is different because it is mobile-enabled and cross application. This is one of the reasons we feel that it will become the dominant form of communication in enterprises due to its ubiquity and real-time nature.

Team Collaboration Poised to Challenge Voice and Email

Messaging has become one of the starting points for communicating between team members and customers. As team collaboration speeds up, the email era is winding down. With so many communication and collaboration tools available, email simply cannot match the speed of some of the instant messaging methods of enterprise social networks (ESPs). People require fast responses from coworkers to keep up a smooth workflow.

While email is still the necessity for external communication, internal team collaboration is now supported by ESPs for the most part. In fact, email has become more of a notification service than a communication tool. These new, faster methods of communication and collaboration pose a threat to incumbent providers like Microsoft and Google. Enterprises have yet to see the full benefits of company-wide team collaboration—small enterprises already have. The race for team collaboration solutions is only beginning and there will be many new entrants as larger providers get consolidated.

Conversational AI—Getting to Outcomes Faster

Chatbots, which need to mature to become full digital assistants, are becoming more of the norm. A common mistake many buyers and vendors make when it comes to a chatbot is that they don't understand that it is a window into an application; however, most major providers have a chatbot engine and we expect others to partner with or acquire.

The vision for people-centric collaboration is to have a communications digital assistant (i.e. an AI chatbot) with the ability to help schedule or begin a call, start recording, schedule and launch meetings, make adjustments for any encountered errors, or other commands. AI chatbots will be able to accomplish more tasks for people in the quest to make collaboration and communications more seamless.

Prediction: By YE 2021, 50% of UCC providers will offer an AI-based digital assistant to enable a more seamless collaboration experience.

The Landscape of UCC

There are different ways that vendors will build out their UCC portfolio; most will start from their core strengths. The different types of entry points are:

1. Providers who have most or all the elements of UCC, offered as a bundle.
2. UCaaS providers who focus on voice, but are adding other UCC elements.
3. Digital work hub providers that focus on work management and are adding UCC capabilities.
4. Web and video conferencing providers who are expanding from their core video offering.

Many of the providers evaluated in this Globe report are at different stages of an integrated UCC offering—all have different strengths across their portfolio. Partnerships and integrations are an area to watch for enterprise buyers**.**

UCC Consolidation Is Starting to Slow Down

Consolidation in UCC now shows some signs of slowing down. In recent years, the need to have a full UCC platform caused many providers to consolidate because the fastest way to accomplish this was to acquire a customer base. Avaya buying cloud contact center provider Spoken, LogMeIn buying Jive Communications, RingCentral's purchase of Dimelo and Connect First, and Vonage's acquisitions of NewVoiceMedia and TokBox are all examples of the consolidation taking place.

The integration of team collaboration into other work environments will also fuel consolidation. ServiceMax, newly free from ownership by General Electric, announced it was buying team collaboration provider Zinc, to allow service and support people to collaborate and communicate in a service-focused work hub.

In 2019, we expect to see more UCC providers expand their focus on team collaboration and on AI. In AI, many enterprises have partnered up, but larger firms with more R&D have had a greater focus on AI than smaller providers.

People-centric collaboration is more than just the ability to switch between UCC modalities. Given the need for an integrated experience, and the ability to switch communication types, enterprises should focus on the UCC providers that can deliver at least two or more UCC capabilities.

Aragon Research Globe Overview

The Aragon Research Globe graphically represents our analysis of a specific market and its component vendors. We do 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 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 Sectors of the Globe

The Globe is segmented into four sectors, representing high and low in 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 effectively perform against those strategies.

- **Contenders** have strong performance, but 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 that 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

- A minimum of $6 million in primary revenue for Unified Communications and Collaboration or a minimum of $8 million in revenue in a related market (voice, video conferencing, collaboration and mobile collaboration/messaging).
    - UCC as defined by Aragon is an evolving market. A vendor needs to have at least two of the modules to be evaluated. UCC modules include voice, video conferencing, collaboration, and mobile collaboration/messaging.

- **Shipping product:** Product must be announced and available.
- **Customer References:** Vendor must produce customer references in each hemisphere that the vendor participates in.

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. This determination was not applied to this report as all vendors participated in the Globe process.

New vendors added this year:

- Dialpad
- LogMeIn

Vendors removed from the report:

- Huawei
- Poly
- Ribbon Communications

Noteworthy vendors not included in this report:

The following vendors were not included in the report but are notable:

- ***Amazon***
  - Amazon offers Chime, which is focused on team collaboration. Amazon just announced voice calling plans.

- ***AT&T***
  - AT&T Collaborate is an OEM version of Cisco BroadSoft.

- ***BlueJeans***
  - BlueJeans offers web and video conferencing, featuring Dolby Voice, and also supports meetings, webinars, and room systems.

- ***PGI***
  - PGI offers web and video conferencing and voice services.

- ***Zoom***
  - Zoom offers cloud-based video conferencing with multiple use cases, including meetings, webinars, and room systems. Its recent launch of voice dialing plans has it headed more in the UCC direction.

The Aragon Research Globe™ for UCC, 2019
(As of 4/24/19)
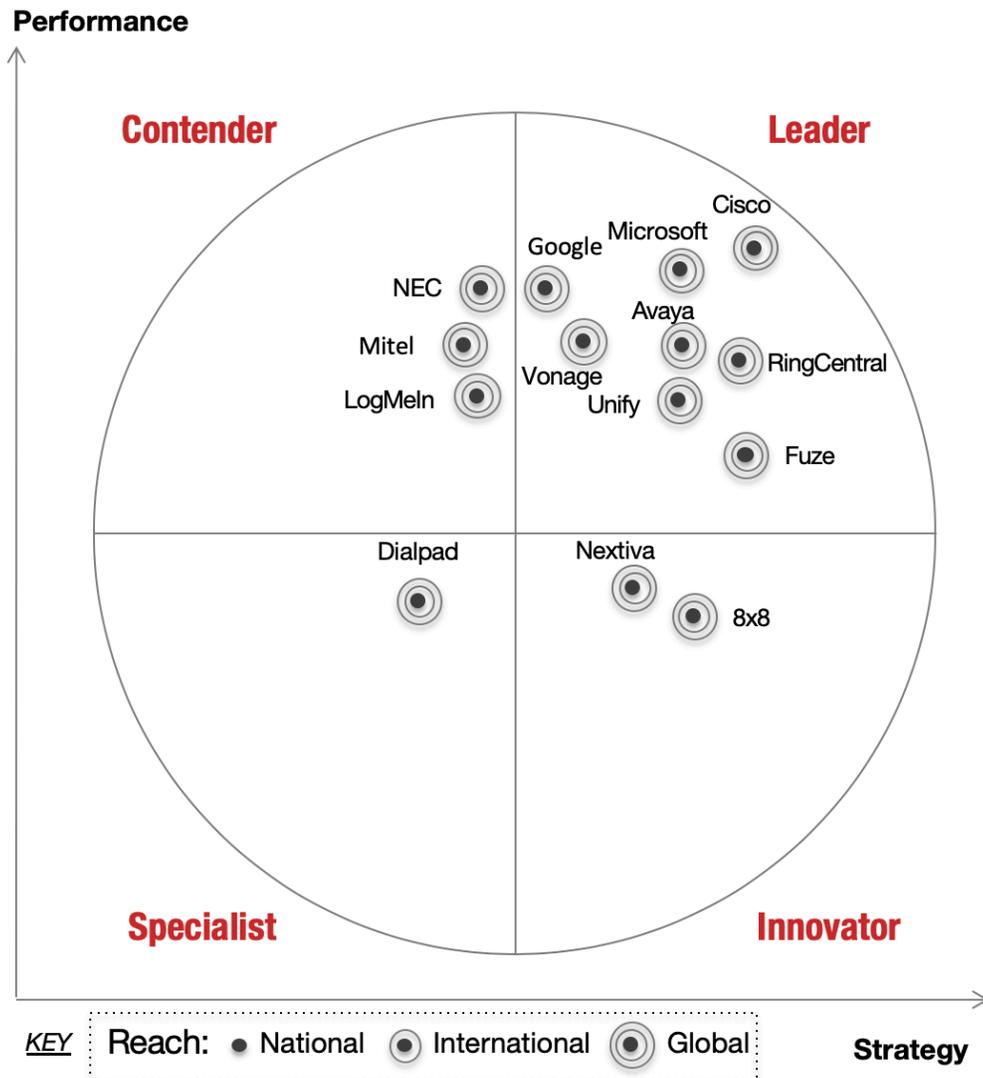
Figure 3: The Aragon Research Globe Unified Communications and Collaboration, 2019.

Leaders

Avaya

Avaya, under the leadership of CEO Jim Chirico, has been growing its customer base . Avaya now has a robust portfolio of cloud and private cloud offerings, branded Avaya OneCloud, that leverage its API based UCC platform, now branded as Avaya Intelligent Xperiences (IX) Workplace. Avaya IX Workplace is available as both a cloud and a UCC private cloud offering, which will give customers more choice. In 2018, Avaya also enhanced its IX Meetings (Equinox) capabilities with more flexibility for cloud-based meetings. Avaya has made the user experience intuitive via its client that it calls the Avaya IX Client, formerly the Equinox Experience. Avaya leverages its highly resilient core platforms into its cloud offerings providing full native support for the underlying communications and collaborations capabilities including voice, video, meetings, mobility, team collaboration, messaging, and customer contact.

Avaya still focuses significantly on contact center, which is now rebranded as Avaya IX Digital Contact Center. Avaya also announced that it was introducing its chatbot called Ava, which had previously been an internal pilot. Avaya is now fully committed to cloud, and its video-based offerings work out of the box or can be integrated into existing, client-facing applications. While Avaya has a large on-premise install base, the shift to cloud positions it well for the future.

Strengths	**Challenges**
• UCC platform	• Balancing cloud and on-premise offerings
• Cloud and on-premise capabilities	
• Overall user experience	
• Extensive video portfolio	
• Highly reliable telephony and UC	
• Partner network and ecosystem	

Cisco

Cisco rebranded its portfolio in 2018 and has consolidated it under the Webex and Cisco brands. Cisco also introduced Amy Chang as the new SVP of the Collaboration Technology Group. The Cisco UCC portfolio is led by its Cisco Webex Collaboration Cloud, which brings together Webex video meetings, calling, and team collaboration. In March 2019, Cisco enhanced Webex with People Insights and facial recognition to provide more contextual and relationship intelligence, as well as Webex Assistant to enable natural language interactions with Webex Room Series devices as part of its new cognitive collaboration capabilities. Cisco offers one of the most complete sets of voice and video conferencing platforms that is now fully integrated with Cisco Webex Teams, its cloud-based team collaboration.

Cisco has also introduced an enhanced enterprise-class, native cloud solution—Webex Calling, now powered by Cisco BroadCloud and integrated with Cisco Webex Teams globally. In addition, the Cisco Jabber client application continues to be a popular choice with enterprises for on-premises deployments supporting calling, meeting, messaging—including interoperability with Webex Teams for organizations with a range of workstyles. With Cisco's broad UCC portfolio and the Cisco Collaboration Flex Plan, enterprises have a range of options that combine on-premise, hybrid, and public cloud deployments, and the flexibility to mix, match, and integrate with services as the business evolves.

<table>
<tr><th>Strengths</th><th>Challenges</th></tr>
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- Cisco and Webex brands
- High quality video and voice across devices, including mobile
- Advanced People Insights with Webex for relationship intelligence
- Video rooms and endpoints
- Flexible cloud, premises, and hybrid deployment options
- End-to-end encryption
- Cisco mobile capabilities

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- Balancing focus on hardware and software

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Fuze

Fuze has been growing under CEO Colin Doherty's leadership. Given their growth, we expect Fuze will IPO in 2019-2020. Fuze has a complete UCC platform that offers a seamless user experience across all UCC modalities. This focus has allowed Fuze to continue its growth, particularly in medium and large enterprises. Its cloud-native platform includes cloud-based voice, HD video conferencing, and messaging, thus providing a seamless experience for both desktop and mobile environments. Fuze has continued to push the envelope on ease of use and has also expanded its video conferencing capabilities. With the convergence of web and video conferencing, Fuze offers a complete collaboration experience that includes business voice, persistent chat, presence, and content sharing in a single app for distributed teams.

Fuze has made the mobile-first experience one of its key differentiators. Many enterprises leverage Fuze, in part due to its unique capabilities built on its Car Mode, enriching communication and collaboration use cases for workers that primarily do their job from a car or truck. In addition to its desktop and mobile apps, Fuze Rooms offers a full, intuitive video meeting experience for conference rooms, and webcasting. Fuze is also leveraging its focus on data to provide a more advanced set of analytics information to users and administrators. Fuze can enable a communications mobile enabled work hub experience across voice, video, messaging in desktop, mobile, and room environments. This has enabled them to go beyond the office into first line worker scenarios where mobility is key.

<table>
<tr><td align="center"><u>Strengths</u></td><td align="center"><u>Challenges</u></td></tr>
<tr><td>

- UCC platform
- Voice and video quality
- Large global enterprise deployments
- Mobility experience
- Video conferencing across desktop, mobile, and rooms

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- Awareness outside of U.S.

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Google

Google is in the final stages of launching Google Voice, which has been in a private beta for some time. The Google Hangouts platform continues to be the lead UCC offering that enables video meetings and team collaboration. Hangouts Chat is tightly integrated with Google's flagship cloud office offering, G Suite. G Suite continues to be one of the lead email offerings on the market. Hangouts Chat and Hangouts Meet scale well and run on mobile and desktop devices. Additionally, Google Hangouts offers full integration with other Google apps like Google Drive, Gmail, and Calendar, allowing users to launch straight into a full video or voice call. Integration with Gmail ensures that Google enterprise users now have a full range of collaboration capabilities, from asynchronous to real-time.

Google continues to market their Hangouts Meet hardware kit, a robust room offering at an attractive price. The partnership with Pexip has helped to enhance the connectivity of Google Hangouts with endpoints from Microsoft, Cisco, and others. The Hangouts Meet hardware kit provides two options: a huddle room configuration with a wide field-of-view 4K video camera, or a PTZ camera that is ideal for rooms up to 20 people. It also added its Jamboard, which offers buyers a set of options for room deployments and AI-powered AutoDraw. Google Hangouts Meet supports both voice and video calls and offers interoperability with legacy H.323, the SIP-based video-conferencing room systems. The ease of shifting from messaging to a full meeting is one of the advantages of Hangouts, which fosters enhanced collaboration between users.

<table>
<tr><th>Strengths</th><th>Challenges</th></tr>
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- Enterprise penetration with G Suite
- Global cloud infrastructure
- Partner ecosystem
- Team collaboration
- Growing AI capabilities
- Video meetings
- Cloud native collaboration applications
- Ease of use

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- Late to market with voice offering

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Microsoft

Microsoft Teams is the lead UCC offering for Microsoft, leveraging Skype for Business mostly for business functionality. Skype for Business 2019 is the on-premise offering that continues to be popular with enterprises that had made significant investments in SfB over the last few years. Enterprises are still faced with the need to use both the Teams or the SfB client, given slight differences in functionality. The migration from SfB to Teams has taken longer than anticipated, which is the reason that enterprises still have to use both client interfaces. That said, Microsoft has migrated most of the SfB calling features to Teams over the last 18 months and with the exception of advanced features that are part of Skype for Business Server, the migration is complete. Microsoft is now offering planning workshops to customers to assist them with migrating form SfB to Teams.

Microsoft has made Teams its cornerstone of its overall UCC offering and has been innovating the Teams service itself by adding more features that support mobile workers. Teams is part of Office 365 and the E5 version is required to get all the voice functionality to make it a Cloud PBX. The Teams client works well and is seamless across operating systems (iOS, Android, Windows, Mac, and Microsoft Teams Rooms). Microsoft has a growing partner ecosystem to deliver additional services for voice and video that are tightly coupled with Teams.

<u>Strengths</u>	<u>Challenges</u>
• Microsoft brand	• Making all SfB Server capabilities available in Teams
• Video meetings and webcasts	
• Global PSTN conferencing coverage	
• HD video quality on point-to-point calls	
• Overall collaboration applications	
• Global footprint	
• Full hybrid scenarios enabling migrating strategies to the cloud	

RingCentral

RingCentral continues to grow due to the strength of its UCC platform that focuses on Cloud PBX, video meetings, and team collaboration. In 2018, RingCentral bought Dimelo to enhance its capabilities relative to omni-channel customer journeys, particularly for contact center needs. This will help RingCentral be more of a people-centric collaboration offering that enables engagement across digital channels (e.g. social, communities, chat). Glip, which is RingCentral's team messaging and collaboration offering, added more functionality and became more natively integrated over the last year. RingCentral has differentiated its offering through high-quality voice, and also offers video conferencing, mobile messaging, and cloud contact center capabilities. 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.

RingCentral has continued to grow on a global basis with availability of RingCentral Global Office in 41 countries, and this has attracted larger enterprises that need UCC capabilities around the world. In 2018, RingCentral announced its new collaborative meetings offering that provides stand-alone web and video meetings integrated with Glip. The Glip application, which now includes options for chatbots, means that enterprises can ramp up their digital transformation efforts. One of the strengths of RingCentral is its growing open platform which offers APIs and SDKs for custom integration and workflow. RingCentral also has an app gallery which offers over 170 pre-configured integrations with third-party business applications (e.g. Office 365, Google G Suite, Salesforce, ServiceNow, ZenDesk). RingCentral is also fairly easy to deploy, which gives it an advantage over others, but also offers an expanded services portfolio for full implementation support.

Strengths

- UC cloud capabilities
- RingCentral brand
- Team messaging and collaboration functionality
- Ease of configuration and deployment
- Open platform and app gallery integrations

Challenges

- Partners for video capabilities

Unify

Unify, the Atos brand for communications software and services, continued to deliver its portfolio of UCC solutions, led by the OpenScape Cloud and the Atos CPaaS Orchestration platform. Unify's team collaboration offering, Circuit, serves as the platform that is the on-ramp to all the UCC services that Unify offers. Part of the focus for Unify in 2018 was centered on industry solutions, such as E911 and an integrated UCC platform in healthcare. OpenScape Cloud supports cloud, on-premise, and hybrid cloud options for communications and collaboration. Circuit, the team collaboration platform, also supports messaging, voice, screen sharing, and video, including integration with OpenScape.

Unify combines Circuit and OpenScape to provide a full UCC platform with a full stack of cloud capabilities. Circuit also provides extensive integrations via its PaaS offering. Partner integrations include Box, Google, Microsoft, and Salesforce. Unify has some strong Industry offerings that leverage its complete UCC capabilities as well as Circuit, to offer a differentiated solution in markets such as healthcare. Atos is now leveraging the full Unify UCC portfolio to broaden its digital workplace offering and help with its growing success in industry verticals.

<table>
<tr><td align="center"><u>Strengths</u></td><td align="center"><u>Challenges</u></td></tr>
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- UCC expertise with OpenScape
- Messaging capabilities
- Vertical industry solutions
- PaaS platform with Circuit
- Cloud deployment options

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- Overall focus on video

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Vonage

Vonage has seen strong growth powered by its UCaaS, CCaaS, and CPaaS technology. It spent 2018 making some key acquisitions so that it now offers complete, end-to-end communications solutions, bringing its UCC Platform Vonage Business Cloud, contact center and programmable communications via APIs together on one portfolio, on a single stack. In 2018, Vonage acquired TokBox to bolster its overall video capabilities. It also acquired NewVoiceMedia to provide a full contact center offering. While anchored by its voice offerings, Vonage's UCC platform enhances internal connection and collaboration among employees and enables deeper connections externally via cloud-based APIs. While Vonage has been known for its prowess in voice, its complete makeover as a UCC provider means more existing customers can look to Vonage for their enhanced UCC portfolio for current and future needs.

The Vonage Business Cloud (VBC), which leverages a micro-services architecture, now supports all modalities including the VonageFlow Team Collaboration offering; file sharing, SMS, voice and video, available across any device. Vonage also offers a cloud-contact center solution, CX Cloud Express, integrated with its Vonage Business Cloud UCC solution. In addition, Vonage now offers Number Programmability, which enables any Vonage phone number to be programmatically routed to a host of API-driven capabilities, as well as integrations with Google G Suite, Microsoft Office 365, Slack and CRM applications from Oracle, Salesforce, Zendesk, and many more. Vonage also provides businesses with the ability to engage more effectively across SMS, chat, social media, video, and voice through Nexmo, its leading API platform and CPaaS provider that the company acquired in 2016.

Strengths	**Challenges**
- UCC platform - UCaaS offering - CCaaS offering - Brand recognition - API portfolio (voice, SMS, messages, video) - Integrations - CPaaS API flexibility	Building awareness for its full portfolio

Contenders

LogMeIn

LogMeIn added a new General Manager, Mark Strassman in 2018, and also acquired UCaaS provider Jive Communications. LogMeIn, which is known for its GoToMeeting web and video conferencing offerings, now has a full UCC Portfolio in March 2019, LogMeIn announced its new brand—GoTo and GoToConnect, its complete UCC platform that blends the existing offerings into one complete and integrated platform. As part of its GoToMeeting offering, in March 2019 LogMeIn also announced new partnerships with Poly to offer a more choices for room-based meetings.

Jive Communications, which was privately held, had been growing due to the overall demand for UCaaS. With both Jive Standalone and with GoToConnect, LogMeIn has a full Cloud PBX to sell to its large install base. The battle for UCC in the mid-market is heating up and now LogMeIn, which has a very strong brand in its GoTo offerings, will be a strong alternative to other providers.

Strengths	**Challenges**
• UCaaS offering	• Integrating multiple brands
• Brand awareness	
• Web and video conferencing install base	
• Ecosystem	
• Analytics	

Mitel

Mitel went private in 2018 after it was acquired by Searchlight Capital Partners for just over $2 billion. Rich McBee remains as the Mitel CEO. Mitel offers a complete UCC portfolio with a focus in its on-premises voice offerings, contact center, and endpoints. It also offers its mobile enabled Mitel Teamwork series of apps that includes MiTeam for team collaboration. In 2018, Mitel announced a partnership with Google that leverages Google AI to enhance Mitel's contact center offering and recently expanded the relationship to leverage Google Cloud Platform for its public and private cloud solutions.

Previous to the Searchlight deal, Mitel had acquired ShoreTel, giving it a larger product portfolio and an increased focus on Cloud and Cloud PBX. MiCloud Connect is the flagship cloud offering and it works with the Mitel Teamwork and contact center offerings for an off-the-shelf, multi-tenant, scalable experience. Mitel continues to lead with voice and PBX as its primary solution story. However, its growing set of solutions and applications that are targeted at the mid-market allow Mitel and its partners to offer a more tailored set of solutions. These solutions, which are part of the Mitel marketplace, are powered by Mitel's CloudLink option, which is cloud-enabling technology, allows on-site enterprises to access cloud-based APIs and should be a key catalyst for enterprises that want to leverage hybrid cloud deployments.

<table>
<tr><th>Strengths</th><th>Challenges</th></tr>
<tr><td>

- Cloud and on-premise voice support
- Global cloud infrastructure
- Hybrid cloud API marketplace accessible to on-site customers
- Endpoints
- Global partner ecosystem

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- Overall focus on video

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NEC

NEC, which has a large global presence, offers a full UCC platform via its UNIVERGE BLUE that offers a full set of capabilities that includes cloud communications (UCaaS), messaging, meetings and contact center. With historical strengths in voice, NEC now offers a full voice and video set of offerings that support the needs of small and large enterprises. It also offers its UNIVERGE SV9100 BLUE and SV9500 BLUE PBX for those that still want an on-premise deployment. Its UNIVERGE BLUE video is powered by Vidyo and works well on both mobile and desktop platforms. Later this year (2018), NEC will introduce UNIVERGE BLUE Team Collaboration offering via a partnership. Additionally, NEC is in process of expanding its UNIVERGE BLUE offering globally and is beginning in the EMEA market and Australian markets.

In 2017, NEC added NeoFace Analytics to its UNIVERGE offering with the ability to do facial recognition via NeoFace Welcome and NeoFace Watch, which will help NEC expand its solution portfolio into certain vertical markets, especially those markets concerned with safety and security. In addition, NEC is introducing its Work Flow Engine, which at first will integrate its facial recognition solutions with its unified communications solutions to provide verticalized work flow optimization for small and large enterprises. Besides its UCC platform, NEC offers full handsets for large and small enterprises. More importantly, NEC is a full IT infrastructure provider for cloud data centers (Salesforce recently partnered with NEC). This level of investment and experience will serve NEC well as more enterprises look to leverage UCC offerings via interconnected clouds.

Strengths	**Challenges**
• Cloud and on-premise voice support	• Focus on team collaboration
• Global cloud infrastructure	
• Industry solutions focus	
• Video analytics	
• Endpoints	

Innovators

8x8

8x8 launched its new platform called 8x8 X Series in 2018. X Series integrates all of its capabilities for voice, video, team collaboration and contact center into one platform. 8x8 has continued to grow its core UCaaS offering and with X Series it is now better position in UCC, even though it has not been that focused on video meetings. In October 2018, 8x8 launched 8x8 Team Messaging solution, which is integrated within the X Series desktop and mobile app providing voice, meetings, and messaging in a single experience. In March 2019, 8x8 announced its enhanced 8x8 Meetings capability, which helps to round out its UCC platform. The new Meetings offering is based on technology that was part of the Jitsi acquisition.

8x8 also announced new features for X Series in 2019. This includes a new integration framework that allows 8x8 users to have more seamless connectivity with Bullhorn, Microsoft Dynamics, and Slack. 8x8 also announced 8x8 speech analytics for its contact center application. 8x8 has a growing global cloud footprint includes data centers in North America, the UK, Amsterdam, APAC, and Brazil.

Strengths	Challenges
• Cloud-based PBX	• Overall focus on video
• Contact center	
• Partner integrations	
• CRM integration	

Nextiva

Nextiva launched its NextOS platform in 2018 and has been on a significant growth curve due to its focused customer experience, executive team expansion, and demand for its UCaaS-based business phone service, including Cloud PBX and SIP trunking. Its NextOS platform integrates a number of applications together including UCC, CRM, and chat. Additionally, built-in surveys and analytics gives enterprises a real-time picture of their customers which can be leveraged by the entire organization, from frontline employees all the way to the CEO.

The Nextiva App provides mobile phone service, instant messaging, presence, screen sharing, document sharing, and one-on-one video meetings. As Nextiva continues to grow, we expect it to round out its UCC portfolio as it expands the functionality of NextOS. Currently, Nextiva differentiates its UCaaS through its NextOS platform, which includes CRM, online chat, online survey software, email marketing software, analytics, AI and automation, and cloud storage and backup solutions.

Strengths	**Challenges**
• Cloud PBX	• Overall focus on video
• Call center	
• Mobile app	
• Analytics	
• NextOS Business Communications Suite	

Specialists

Dialpad

Dialpad, based in San Francisco and led by CEO Craig Walker, offers voice PBX, audio conferencing meetings, contact center and voice intelligence platform for sales. Dialpad is also making a significant investment in AI-based voice analytics. Dialpad pivoted in 2018 to focus more on the growing demand for voice-based solutions in sales. As a result, Dialpad launched Dialpad Sell, which is an intelligent sales platform that provides AI-powered insights and real-time coaching to improve sales productivity.

In 2019, Dialpad now offers four main products: Dialpad Talk, UberConference, Dialpad Support, and Dialpad Sell. Dialpad Talk is more of a digital work hub due to its ability to allow users to take notes and capture reminders after a call. Integrations with Microsoft and Google ensure that calendars are fully integrated. While Dialpad offers 1:1 video, its focus is more on the voice part of the UCC. UberConference is its web and voice conferencing offering that offers a significant value for its freemium edition. Dialpad also integrates with Salesforce, Slack, and Zendesk to ensure a seamless communications experience.

Strengths	Challenges
• Cloud-based, real-time syncing across devices	• Focus on video and team collaboration
• Contact center	
• Real-time AI-based voice analytics	
• CRM integration	
• Sales use case	

Getting Started With UCC

Enterprises need to realize that UCC is about an integrated set of communications and collaboration capabilities. While historically, enterprises have had best of breed capabilities from multiple vendors, the new trend is to have more than two capabilities from one provider. The need to leverage all forms of collaboration and communications is key.

The needs of specific business units may mean that one provider does not meet all of the requirements of every business unit. It is important to note that in some industries, some providers are better suited, given their expertise and their unique offering for that industry. At the same time, buyers need to realize that not every UCC suite can deliver a perfect people-centric collaboration experience, but most are well on their way.

UCC promises the ability to use different modalities to communicate and collaborate seamlessly. While the integration of the different modalities of communications and collaboration is in its early stages, enterprises need to examine how internal and external collaboration can be improved by offering users a more seamless and integrated experience.

Aragon Advisory

- Enterprises need to start evaluating communications and collaboration providers beyond their core strengths in areas such as voice or video.

- Enterprises should evaluate UCC providers for their extended roadmap to understand investments they will be making across the product spectrum as well as in AI.

- The shift to digital work hubs means that some UCC providers may be better suited to a specific set of solutions for a particular industry.

- Enterprises should examine the use cases for UCC, including application integration, and mobility support for mobile workers.

Bottom Line

The people-centric collaboration experience offered by a growing number of unified communications and collaboration providers means improved work experience, better customer interactions, and higher productivity. The separate realms of voice and video are converging, and messaging is poised to serve as the launch pad for omni-channel interactions. Enterprises should continue to look at the possibilities of consolidating at least two of the UCC capabilities into one offering.