

Complimentary Report Courtesy of



We are excited to provide you with a complimentary copy of the Research & Analytics Report on UCaaS. As your Trusted Advisor, we aim to empower you with the information and resources you need to support your company's digital transformation.

There has never been a faster rate of change in IT, and the pace is accelerating every year. This Report arms you with the most relevant information and insights necessary to assist you in evaluating your communications needs over the next six to twelve months.

We look forward to supporting your IT needs and business outcomes to help you differentiate and stay ahead of your competition in this fast-paced and ever-changing world.

Introduction

AVANT Research & Analytics: The 6-12 Report

This "6-12 Report" is developed by AVANT Research & Analytics with the assistance of technical teams within AVANT Communications, and backed by a wealth of data secured by AVANT in our normal course of business, our own primary research of end customers plus other reputable industry sources.

Additional AVANT Reports

AVANT 6-12 Report: Security
AVANT 6-12 Report: SD-WAN
AVANT State of Disruption Study
Cloud Channel Survey

Our Mission

Our reports focus on today's most disruptive technologies, where the pace of change is rapid. These companies or technologies, which may have been relatively anonymous just a few years ago, have now emerged as highly viable solutions to resolve the business needs that led to their creation. They have, in effect, disrupted the IT landscape, which is well known for its accelerating pace of change and innovation.

The 6-12 Report is designed to provide enterprise technology leaders with a contemporary and relevant overview of the featured subject for the next 6 to 12 months. Each subject is selected based on its opportunity for adopting companies to realize competitive advantages within their particular industry, market space, or company size.

All currency values in this report are expressed in U.S. dollars.

AVANT enables Trusted Advisors (agents, MSPs, consultants and similar channel partners) to support their business customers with IT technology decisions, with a specialization in disruptive technologies and solutions. We accomplish this with our:

- **AVANT Technical Specialists** that study the ins and outs of the latest IT technologies
- **AVANT Assessment Data** collected during thousands of customer assessments and resulting customer decisions.
- **AVANT Primary Research** of both customers and trusted advisors, to inform our decision making process.
- **AVANT Pathfinder** an IT Decision Making tool and repository of AVANT's market intelligence, allowing for comparative searches and intelligent search to help. (GoAVANT.net/Pathfinder)
- **AVANT Analysts** to conduct research and analyze data for in-depth analysis.

AVANT's Platform for IT Decision Making has assisted Trusted Advisors and their customers with thousands of IT decisions annually for customers of all sizes, from SMB to Fortune 500, providing us a large experience base and data set to reflect upon. Our role in supporting real world IT decision making with Trusted Advisors and their customers with leading technologies and solutions places us in a unique position to see near real-time market trends.

Our data is collected through sales efforts in conjunction with the Trusted Advisor community, through assessment data collected at the outset of the sales discussion, and through various market research tools, including surveys, interviews, focus groups, and external reports

Key Takeaways

- The consensus of the analyst community points to rapid growth in the UCaaS space.
- Customer interest spiked 86% in the midst of the Covid-19 pandemic.
- Technical differentiators are very difficult for vendors to maintain, since competitors quickly adopt similar or identical features.
- Your Trusted Advisor has the expertise and the understanding of subtle differences among products, and can provide feedback and direction on which systems are best suited to your needs, based on your specific circumstances.
- Proof-of-concept engagements will help you validate your decision.

UCaaS: The Landscape

Based on components, the Unified Communications as a Service (UCaaS) market has been segmented as follows:

- Telephony
- Unified Messaging
- Conferencing
- Collaboration Platforms and Applications
- Analytics

There are often different variations on these options but, by and large, features tend to fall into these categories. While many products and services fulfill at least some of these functions on a point basis, the true value of UCaaS lies in interoperability and integration. The basic value proposition is to combine all these features into a fully unified and fully compatible communications solution that displaces a series of point products, thereby simplifying management, strengthening interoperability and, in most cases, reducing cost and complexity.

Your Trusted Advisor can provide feedback on which particular systems and related options are best suited to your circumstances.

About the Analyst



Alana Haney develops the strategic framework and manages the process of leveraging AVANT's internal data and external data to drive high-value market research designed to help consultants, agents, channel partners, and other members of the Trusted Advisor community more effectively help their business customers understand and evaluate Information Technologies.

Alana Haney comes to the table with a wealth of experience in market research, survey development, focus group moderation, interviewing, and content development for the technology industry. Her primary area of expertise is focused on go-to-market and channel strategies spanning the industry sectors of networking, cloud, security, and telecom.

A former Research Director of IDC's Network Channels & Alliances service, she has served as a Trusted Advisor to several key networking vendors and service providers. She has also led her own market research and channel advisory firm, CloudZen Partners, and has worked with other prominent channel consultancies. CloudZen specializes in combining empirical data, her own experience with the perspectives of industry leaders in a way that fully illustrates technology trends, business model evolution, likely outcomes, and strategies for success

**Let's review your use case, Schedule a Discovery Call with
Alana Haney Co-founder & Global IT Strategist**

By the Numbers

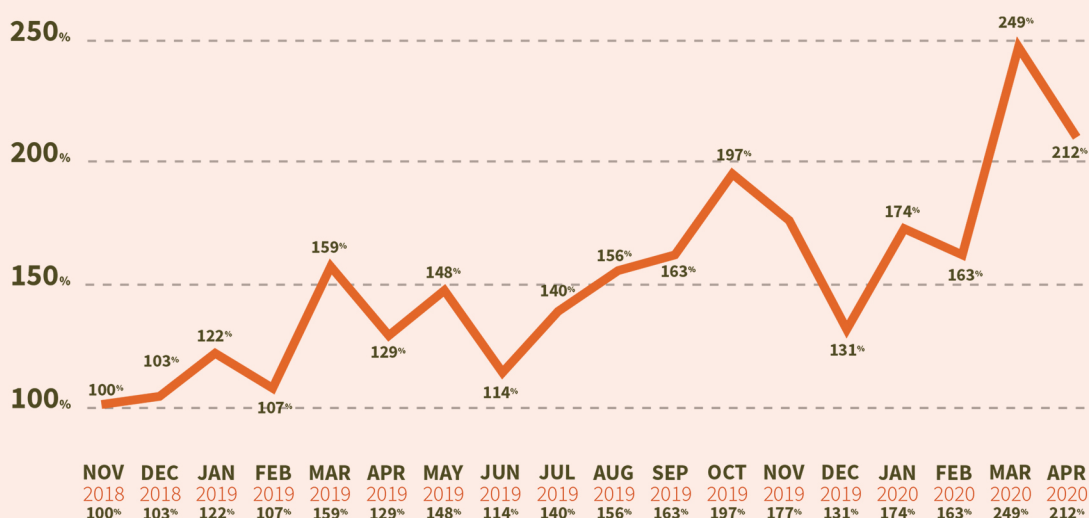
— Across the Industry

Consensus among the IT analyst community clearly points toward rapid growth for the UCaaS market. The global UCaaS market is expected to grow to USD 24.8 billion by 2024 from USD 15.8 billion in 2019, at a Compound Annual Growth Rate (CAGR) of 9.5% during the forecast period, due to mobility and BYOD, as well as advancements in artificial intelligence, machine learning, and other emerging technologies, MarketsandMarkets estimates. Small-to-medium enterprises are now adopting UCaaS at a faster rate than large enterprises, according to the research, which was conducted prior to the widespread outbreak of Coronavirus.

Worldwide revenue of UCaaS could reach USD 36.45 billion by 2026, with a CAGR of 10.5% during the forecast period, found a Fortune Business Insights report published in January 2020. The same study measured the market at \$16.73 billion in 2018.

— Across the Industry

In the course of our normal business as an enablement platform for IT decision-making for over 10 years, AVANT saw UCaaS monthly recurring revenue increase 29% in the 12-month period beginning April 2019. Customer interest in UCaaS spiked 86% in the midst of the pandemic. Aside from monthly recurring revenues, the table below demonstrates the rise in UCaaS opportunities that AVANT has seen over an extended period of time. While the specific dollar amounts are unavailable for public consumption, the chart demonstrates percentage increases over time, culminating in a major increase in the March timeframe at the height of the Coronavirus pandemic, and the shift towards work-from-home environments.



Source: AVANT Assessment Data

“Nearly one-fourth of the respondents report they are considering a UCaaS solution...”

In addition, the pre-sales phase includes an end-user survey called the Interactive Quick Assessment (IQA), administered by Trusted Advisors. The IQA is a systematic way of gathering the relevant information necessary to understand customers' needs, attitudes, and resources, empowering the Trusted Advisor to deliver a customized and personalized offer to each client.

This comprehensive line of questioning is an important resource designed to assure customer satisfaction after Trusted Advisors deliver each solution. In fact, more than 60% of IQA respondents approach their Trusted Advisor early, discussing UCaaS during the initial exploration phase. About one-third of customers already have begun reviewing their options for UCaaS providers.

Where are you in the UCaaS evaluation process?

(684 Responses)



Still Considering UCaaS



Still Learning About UCaaS



Already Looking at Providers

Source: AVANT Assessment Data

Nearly one-fourth of the respondents report they are considering a UCaaS solution because their legacy system is falling out of warranty, thereby making the move to UCaaS especially timely

Why are you considering a new UCaaS solution?

(1227 Responses)

About two-thirds are not looking to bundle different services from the same UCaaS provider, preferring a best-of-breed approach applied by a combination of their own knowledge plus the expertise of their IT teams or Trusted Advisor.

I have a legacy PBX that is out of warranty: 21%

I have service contract expiring soon and want to explore my options: 14%

I have outgrown my current system: 12%

I am paying too much for my current solution: 10%

I no longer want to be responsible for managing my telephony environment: 10%

I am not satisfied with the quality of tech support I receive: 9%

I have too many disparate systems and want to consolidate to a cloud-based solution: 9%

I have experienced a recent outage and seek a more reliable solution: 7%

Source: AVANT Assessment Data

Would you like to bundle services from the UCaaS provider?

(667 Responses)

The most requested features include voicemail-to-email; click-to-dial; presence; call reporting, and enhanced integration for various apps. All were within 4% of one another.

In terms of the underlying network infrastructure, MPLS posted an overall footprint of 18%, though that number spiked to 62% in the 2,500 to 10,000 seat range. SD-WAN was in place at 6% of

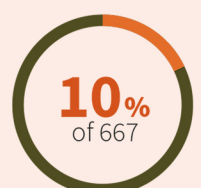
locations, with its largest presence of 26%, also in the 2,500 to 10,000 seat range. SD-WAN continued to score highest in smaller companies while MPLS dominated larger enterprises, particularly at the cores of those networks.



No



Yes, SD-WAN



Yes, circuits

Source: AVANT Assessment Data

Current WAN Setup in Seats

(2,285 Responses)

250-500

41% MPLS

250-500

10% SDWAN

500-1k

49% MPLS

500-1k

11% SDWAN

1k-2.5k

54% MPLS

1k-2.5k

25% SDWAN

2.5k-10k

18% MPLS

2.5k-10k

62% SDWAN

Source: AVANT Assessment Data

State of Disruption: UCaaS

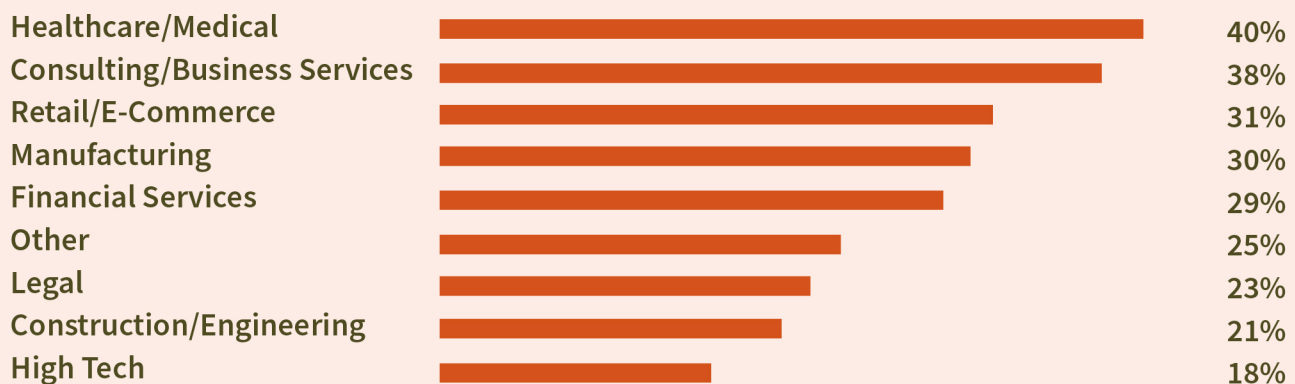
The "2020 State of Disruption Report" by AVANT Research & Analytics leverages data from a survey of 500 enterprise decision makers. The study measures perceptions and attitudes about how newer technologies are displacing older ones and, hence, disrupting their respective markets. For more information on our latest State of Disruption Report, visit our website at www.goavant.net/research-and-analytics.

This data demonstrates the degree to which companies of different vertical markets or size are forward-looking or lagging behind technology

adoption. From the perspective of the enterprise decision maker, this information serves as an important comparison between their companies and those of the competition.

The charts below demonstrate UCaaS growth and UCaaS penetration, plus various characteristics companies share as they migrate from PBXs and other telephony systems to today's unified service-oriented cloud-based solutions

UCaaS Growth from 2019 to 2021



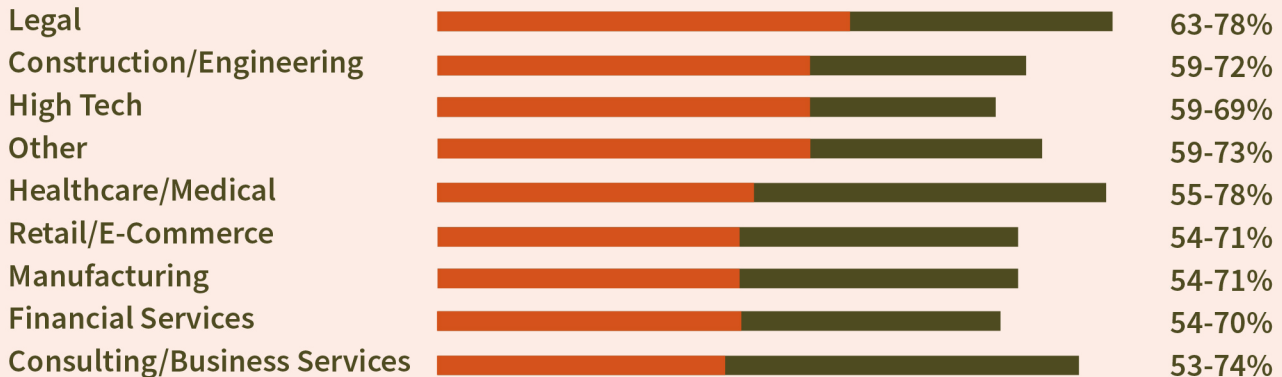
Source: AVANT Assessment Data

Healthcare/Medical posts the highest growth rates, with the Consulting/Business Services growth rate following closely behind. The remainder of the verticals trail the two leaders in a relatively close-knit cluster.

In terms of UCaaS penetration, healthcare/Medical and Legal tie for first place in the 2021 projection after AVANT Research measured both verticals at relatively average levels in 2019

UCaaS Penetration in 2019 vs 2021

■ 2019 ■ 2021

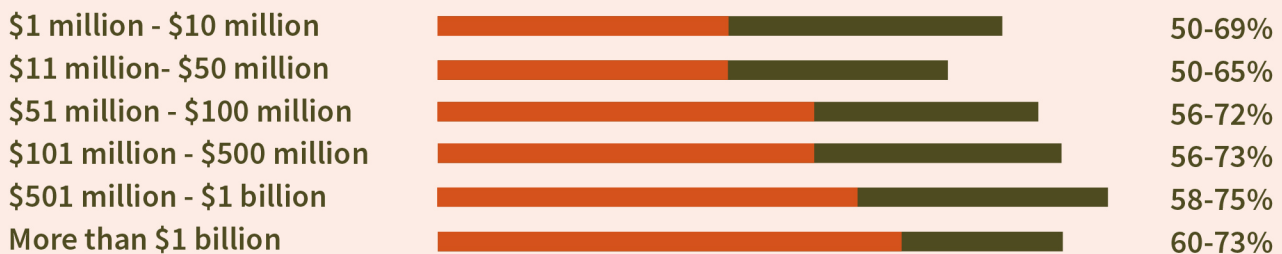


Source: AVANT Assessment Data

The data by revenue demonstrates relatively consistent uptake across revenue bands. For example, companies of \$1 million to \$10 million moved an average of 49.5% of their phones to UCaaS in 2019 and they anticipate an average of 68.8% will transition to UCaaS by the end of 2021.

UCaaS Penetration by Revenue in 2019 vs 2021

■ 2019 ■ 2021

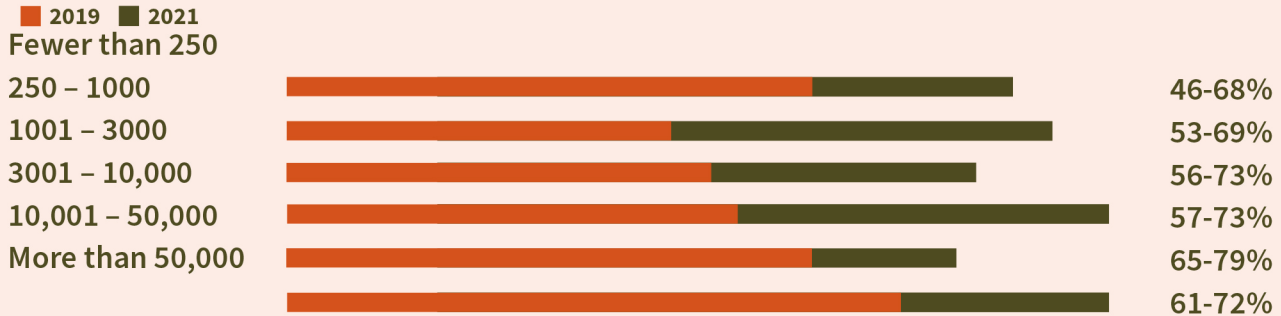


Source: AVANT Assessment Data

In terms of headcount, the strongest forthcoming uptake appears to be within the 10,000 to 50,000 seat range, although organizations of all sizes plan to invest in UCaaS, especially next year.

In terms of UCaaS penetration, Healthcare/Medical and Legal tie for first place in the 2021 projection after AVANT Research measured both verticals at relatively average levels in 2019.

UCaaS Penetration by Headcount in 2019 vs 2021

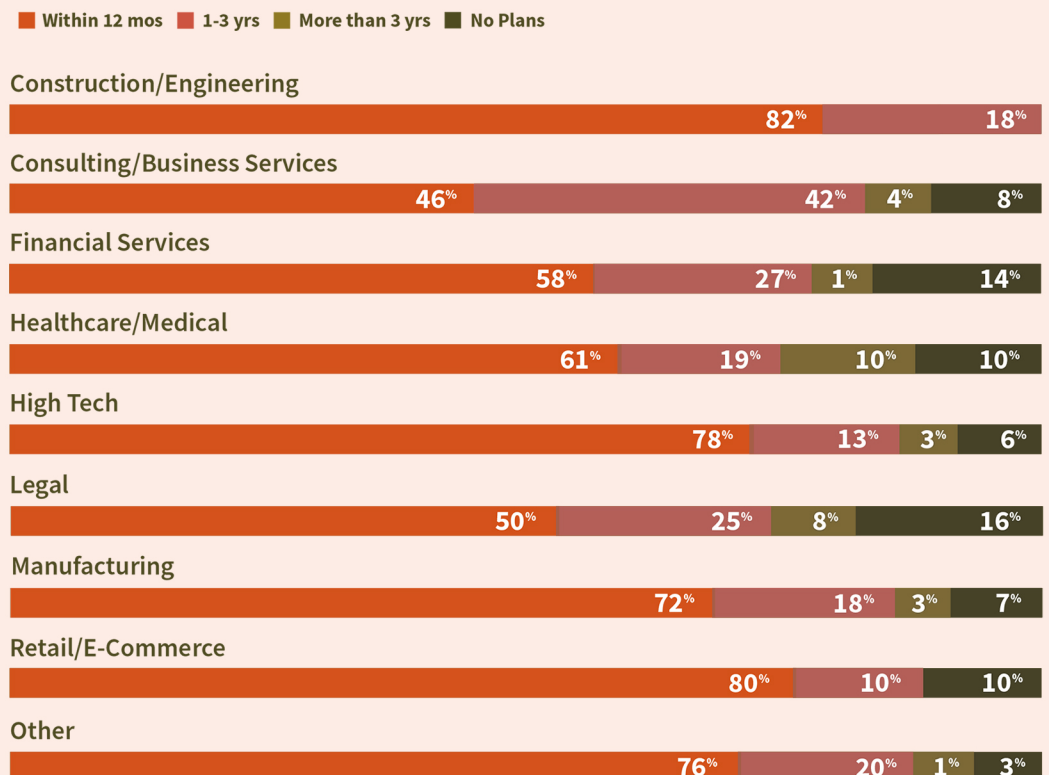


Source: AVANT Assessment Data

Overall, 67% of survey respondents plan to replace legacy telephone systems with UCaaS over the next 12 months. The chart*, below, shows long-range plan by vertical market.

Industry vs Intended Time to Move to UCaaS

The survey also suggests that most of these companies are at varying level of planning and implementation.*



Source: AVANT Assessment Data

How far along are you in the UCaaS process?

■ Within 12 mos ■ 1-3 yrs ■ More than 3 yrs

Exploration, but no budget allocated



Allocated budget and actively seeking solution



Deployment contract signed



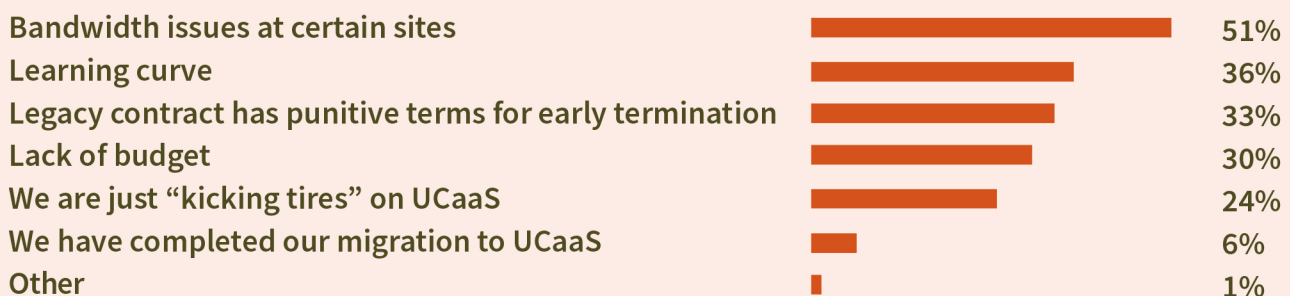
Fully operational UCaaS system



Source: AVANT Assessment Data

When companies delay migration to UCaaS, bandwidth issues are among the most common issues while concerns about the learning curve rank second

Percentage of Companies with Legacy Systems in Use



Source: AVANT Assessment Data

Not a PBX Upgrade: “It’s All About Customer Experience”

UCaaS can be characterized as a toolkit to provide a range of business communications that supports colleagues, vendors, partners, and customers. To that end, enterprise decision makers will want to evaluate the opportunity at two levels.

Level one: how the different constituencies interact under the current circumstances – often phone and email. Level two: how they might interact with a wider variety of available feature sets such as collaboration texts, etc. The variations between the two levels will be based upon the specific circumstances, so companies should evaluate where they stand at the outset of the engagement. This will be the first step in considering the opportunity.

Thus, the value proposition is about enhancing the customer experience. This is true of Trusted Advisors’ customers who are adopting the technology, as well as the customers of those companies adopting UCaaS. If you look at the ways that customers want to interact with the companies with which they do business, UCaaS brings new capabilities like SMS, video, email, and even certain types of social media which can be added to the equation. This cloud-based offering provides conferencing for every employee connected to the system – which is not the case with traditional PBX. Virtual conference rooms also are available, and as the world recently has seen, such features are particularly important during times when remote work is especially

“When you update your platform, you’re raising the stakes of what your business can do.”

Parallel to that consideration, UCaaS generally supports the gathering of data and analytics so organizations can effectively measure, then analyze in a separate solution, interactions with customers and other constituents.

Thus, the net value of UCaaS can be substantially higher than that of basic telephony, as delivered by a traditional Private Branch eXchange (PBX).

“This is not a matter of switching from a legacy PBX to another kind of PBX,” said Dave Dyson, CEO of Eclipse Telecom, a Chicago-based business management consultant. “We did that when we went from traditional copper-based PBXs to VoIP, and I think a lot of folks are looking at this in the same way. But the reality is that you have to think about unified communications differently. This platform

"This is not a matter of switching from a legacy PBX to another kind of PBX," said Dave Dyson, CEO of Eclipse Telecom, a Chicago-based business management consultant. "We did that when we went from traditional copper-based PBXs to VoIP, and I think a lot of folks are looking at this in the same way. But the reality is that you have to think about unified communications differently. This platform This is something Trusted Advisors must educate their customers about: With UCaaS, they are enhancing productivity, communications, and the customer experience, he said.

"While you're removing friction from the customer experience, you're also adding efficiency to your company because your systems are more capable of getting customers to the right people within your organization to sell them the thing they want to buy, or to solve the customer service issue that they have," Dyson continued. "So, the customer doesn't need to get transferred around the company hoping to find the person who can help them. This anticipatory behavior drives revenue, increased customer satisfaction, and higher Net Promoter scores."

There was a time when many people were uncertain about using the cloud to fully support their business communications, but those perceptions have dramatically changed over the last few years and continue to change even more rapidly amidst a global pandemic. Moving forward we expect UCaaS to expand into new frontiers such as voice/natural language processing (NLP) and speech recognition, which will open the door to new

differentiators, especially for those who own their own platforms or APIs, thereby making their offerings more difficult to copy, and speeding time-to-market.

"When you update your platform, you're raising the stakes of what your business can do," said Jim McGarry, Regional Vice President of Channel Sales at Mitel. "This isn't just about dial-tone. This is about collaboration, about the empowerment of your mobile users and, most importantly, this is about changing the way your customers connect with you. This is your brand-building."

Indeed, avoiding the cloud is perilous to an organization's success, cautioned added Jamaal Savvoir, Director of Channel Sales Engineering at 8x8, a cloud service provider based in Campbell, Calif., citing recent reports and ongoing technological advances in the hosted world.

"Any way you look at it, PBX technology has probably seen its final days."

"PBXs have had their day," Savvoir said. "For quite a while there was a significant amount of risk associated with moving to the cloud, but industry analysts are now saying that the actual risk is not moving to the cloud fast enough. Innovation is no longer happening in premises-based systems. They continue to go end-of-life, end of sale, out of maintenance – not to mention the fact that people who have traditionally maintained or used those systems are quickly moving on to other phases of their careers. Any way you look at it, PBX technology has probably seen its final days."

While Savvoir's point of view is widely held in the IT industry, not everyone is quite ready to put the proverbial fork into the legacy PBX business.

"I tend to see everything as a pendulum, said Blair Pleasant, president and principal analyst of CommFusion, and co-founder of BC Strategies, independent market research firms specializing in unified communications. "Right now, everything is moving towards the cloud, but I think some companies like the sense of having more control. So some companies might continue to use [PBXs], but the onprem systems have been on the way out for quite a while. I'm never going to say that 100% are going to cloud-based solutions. There will always be some companies who continue to use on-prem."

As the industry continues its shift toward the cloud, however, the ability to use on-prem equipment may become hampered by a shortage of options and available features.

"If you're buying spare parts for your current on-premises solution from eBay, it's a good time to make a change because you're already engineering risk into the business," noted Eclipse Telecom's Dave Dyson. "Similarly, if you've got one guy who's been in charge of your telephony for 20 years, and he's the only one who knows the ins-and-outs of your system, you have a business risk. You can stay with what you have right now, and you're going to be fine – but only until something happens."

"If you're buying spare parts for your current on-premises solution from eBay, it's a good time to make a change..."

What's Driving this Market?

The death (or near death) of the venerable old PBX and other on-prem telephony systems is not occurring out of thin air. There are specific, business drivers that are steadily leading companies to UCaaS.

— The Potential for Savings

Under most circumstances (and your mileage may vary) UCaaS can offer some degree of cost savings. The accounting differences between Opex and Capex may be one means of doing so. However, some ways in which UCaaS saves money may be more easily measurable than others. For example, offloading the care and management of the phone system to a third party removes some burden from your internal teams; this, in turn, allows them to focus on other areas of new or strategic importance. Quantify the effect by multiplying each IT staffer's hourly pay by the number of hours per day or week they spend administering the current phone system.

Your Trusted Advisors will total monthly fees for audio and video conferencing, along with usage costs for SIP trunks, primary rate interfaces (PRIs), and plain old telephone (POTS) lines – some of which probably aren't even in use today, recommended Kendra Karczewski, Enterprise Technology Advisor at Stratosphere Networks, a managed

service provider based in the northern suburbs of Chicago. "When you take all of those costs into consideration, UCaaS often looks more attractive from a cost perspective," she added.

"When you take all of those costs into consideration, UCaaS often looks more attractive from a cost perspective."

However, in making your calculations be aware that UCaaS can include taxes and fees of up to 40% of the base cost. Failure to plan for those charges will deeply impact the equation. Your Trusted Advisor will be better equipped to help you assess taxes and other charges based on your current circumstances and locations, but we would strongly recommend that decision-makers proactively inquire about them.

— Covid-19

As we began working on this 6-12 Report, a pocket of isolated illnesses in China morphed into a global pandemic. Parts of the United States are only now, as of this writing, emerging from the virtual lockdown prompted by Covid-19. We will leave further descriptions of the pandemic to people more familiar with epidemiology but, for our purposes, we are doing this research amidst a powerful move by companies of all sizes to leverage a remote workforce to the fullest extent that their business models and vertical markets will allow.

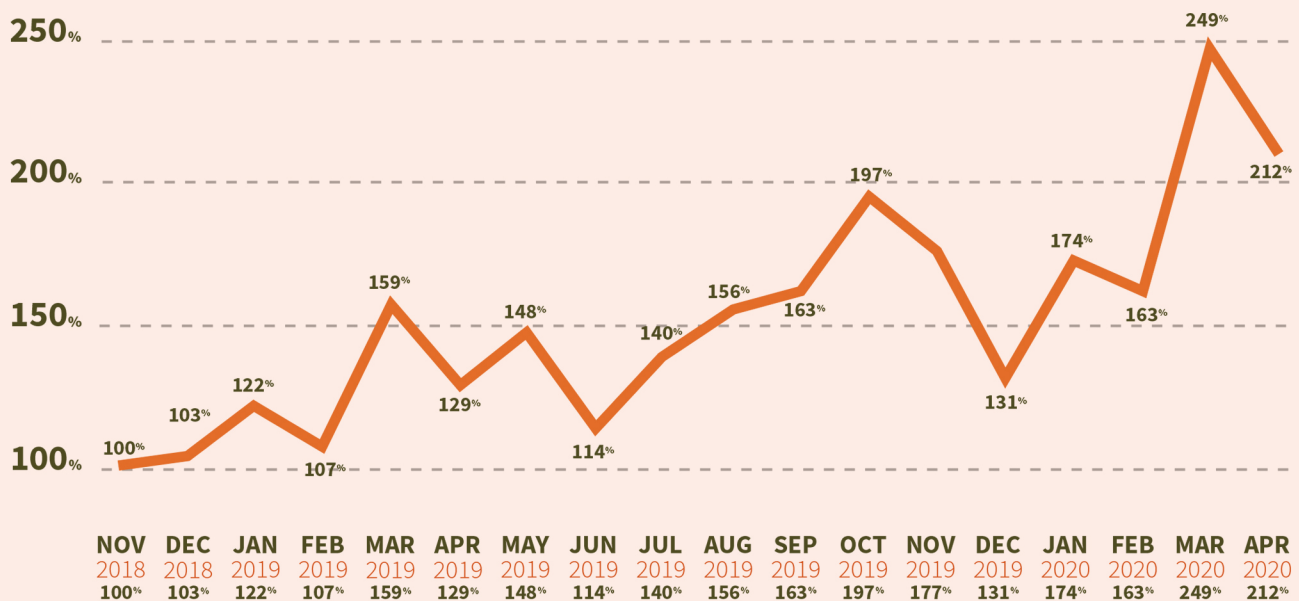
Successful work-from-home strategies developed during the pandemic have encouraged companies to now use remote employees full-time. In fact, 75 million employees (about 56% of non-self-employed workers) could telecommute, according to Global Workplace Analytics.

"The heat has turned up," said Dan Harrison, president of Up-Front Technologies, a Denver-based telecommunications consultant. "A lot of companies are thinking about moving to a remote workforce but are not ready to do that. It's not as simple as taking home a telephone and they're good to go, because you're now dealing with variable bandwidth. Whereas before you could lock yourself into a conference room and know you had excellent connectivity, your people are now in places where you don't control the bandwidth, you don't control the background, and you don't control the distractions."

Companies' first step is to require all employees conduct a home speed test to determine whether their broadband can handle the applications, including voice and video, Harrison said. The next steps will depend upon what you learn from that test. Given the pervasive footprint of broadband connectivity, most employees likely will meet the standard. Those that do not will need to upgrade if alternate broadband providers are available or consider alternative arrangements, such as returning to the office or working in a nearby locale with high-speed connectivity. Once high-speed broadband is available, UCaaS and a host of other "as-a-Service" offerings will be within reach, technologically. While the return-to-office movement has already begun, Harrison's guidance still rings true.

Companies' first step is to require all employees conduct a home speed test to determine whether their broadband can handle the applications, including voice and video, Harrison said. The next steps will depend upon what you learn from that test. Given the pervasive footprint of broadband connectivity, most employees likely will meet the standard. Those that do not will need to upgrade if alternate broadband providers are available or consider alternative arrangements, such as returning to the office or working in a nearby locale with high-speed connectivity. Once high-speed broadband is available, UCaaS and a host of other "as-a-Service" offerings will be within reach, technologically. While the return-to-office movement has already begun, Harrison's guidance still rings true.

"UCaaS can get stood up very quickly," said Stratosphere Networks' Karczewski. "I've seen UCaaS get stood up in a couple of weeks or even a couple of days, depending on the situation. The biggest part is the porting of numbers, which is usually the longest phase of the deployment. But you can forward those numbers to your UCaaS solution earlier, even though all the features might not be immediately available."



Source: AVANT Assessment Data

The surge in remote workers thrust UCaaS and features such as videoconferencing into the spotlight.

"As a result of what's going on with the coronavirus and the global pandemic, cloud communication is in the spotlight because it makes it so much easier for businesses to be able to work and collaborate remotely," added Pleasant. "We've seen videoconferencing skyrocket."

In fact, although most people believe lockdowns are drawing to a close, experiences brought about by the pandemic will cause attitudinal changes about how we live and how we work.

"I think what we're going through is going to have long-term ramifications on how we think about remote work," said Dan O'Connell, Chief Strategy Officer at Dialpad, a San Francisco-based cloud service

provider. "There's a renewed emphasis on messaging, and people are just trying to find easier ways to communicate since people are not likely to be in the office. So, leveraging video chat and texting across the various platforms will remain more commonplace than has been true in the past.

As shown on page 17, interest in UCaaS prior to the emergence of Coronavirus/Covid-19 already was strong but accelerated rapidly as the pandemic forced office closures and a stronger

"What we're going through is going to have long-term ramifications on how we think about remote work."

— Video, Collaboration and Digital Transformation

Video, Collaboration and Digital Transformation “In the past you would see large enterprises consider UCaaS when they had what we call ‘a burning platform’ – something they needed to step away from because of things like cost or age,” said Jed Brown, Senior Vice President of Product and Design at Boston-based Fuze, a cloud communications and collaboration company. “But what we are seeing now is more about digital transformation change-management – how to help your employees communicate better. I believe now we’re seeing not just heads of IT, but also HR and sales begin to think about how communications across the company can start to transform.”

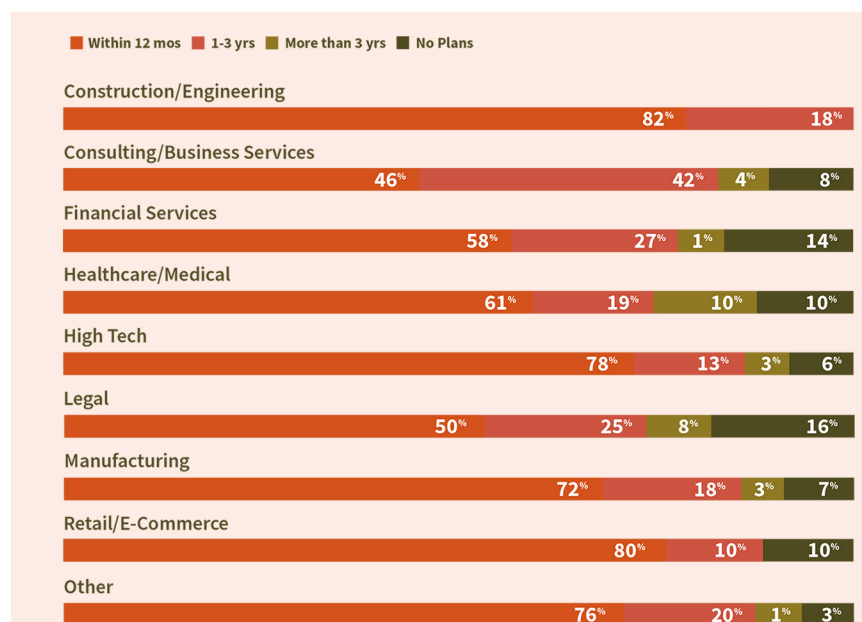
Over the years, the corporate approach to technology has evolved, brought about in no small measure by increased faith in the products and services, combined with a need to continually increase

efficiency to fuel the bottom line. This includes leveraging technology for corporate collaboration among human beings (or even machines), as well as all things generally categorized under “digital transformation,” which can typically be described as an increased use and dependence on cloud services, including UCaaS

“Unified communications had been progressing for quite a while,” said Pleasant. “Then came team collaboration. When UCaaS first came onto the scene, it was used by small businesses and maybe a handful of medium-sized businesses. These days, everybody is talking about [UCaaS] or cloud-based communications, and there’s not one discussion I have with companies that does not include UCaaS and cloud communications.”

Verticals Well-Suited to UCaaS

Unlike most technologies, UCaaS is one solution that fits with virtually every vertical market. Some of the most prominent include Gov/Ed, Healthcare, IT, Manufacturing, Media, Retail, Transportation, Travel/Hospitality, Transportation, and Utilities.



Source: AVANT Assessment Data

"We've seen a lot of use cases in retail," said Mitel's McGarry. "We can tie a lot of benefits to putting communication devices out at the edge in those stores, and then running all that back to be able to four-digit dial to the corporate office. Sales and professional organizations are another strong vertical because they need their communications to be nimble and agile, so when you can empower them with tools that will update the CRM platform based on the individuals that they've called, based on what trends and market data might be provided inside of their CRM, and tie that into collaboration, that is really valuable information for professional and sales organizations."

The competitive nature of modern retail demands agile technologies like UCaaS, agreed Fuze's Brown.

"Retail, in fact, is going through massive transformation about how they can stay ahead of their competitors," he said. "Communications really define your company – how you communicate within your business, how you make decisions, where your bottlenecks are located, and how you communicate with your customers. So, not just providing the voice, but providing analytics can really change those companies, and I think retail is catching onto that really quickly because performance can be directly tied to numbers. Healthcare is also starting to understand that, but they're lagging a little bit behind."

Initially, UCaaS saw limited uptake among regulated industries, especially the healthcare and finance sectors, given their specific privacy and compliance regulations. But as security within the UCaaS space has strengthened, a move to the cloud has become a much more viable option across the full range of verticals and company sizes.

The advent of Coronavirus drew more practitioners and patients to telemedicine, and schools extended their use of cloud for education, as many organizations look towards the cloud as a means of enabling the remote workforce.

UCaaS also has profound implication in manufacturing, where QR codes could facilitate the availability of a wide range of data on contracts, warranties, maintenance, etc., all easily accessible via smartphone. The global movement toward smart factories with increased technical integration is a case in point. Further advancements in computer-aided design is a similar example, in that UCaaS can be used to enhance communication among the team.

Network Infrastructure, Connected

Once an organization has assessed and adopted the relative value of UCaaS, the next important step focuses on the fitness of the underlying infrastructure.

"You need to have conversations about the necessary network infrastructure to successfully operate in a cloud environment," said 8x8's Savvoir. "You want to have conversations around security, including endpoint protection and the possible need for encryption. You'll also need to discuss reliability, and also the tools the UCaaS vendor needs to deliver in order to help the IT department monitor the system and respond to issues."

It's important to consider if your network infrastructure supplies sufficient bandwidth to support a UCaaS solution. One relatively simple option is to dedicate a specific circuit to the support of UCaaS traffic. Other options are also available and should be evaluated in discussions with your trusted Advisor. In many cases, Software Defined Wide Area Network (SD-WAN) technology can be a very viable solution for the dynamic management of network traffic, prioritizing UCaaS over other applications that might adversely impact UCaaS quality.

SD-WAN, which is widely viewed as an important strategic enabler of UCaaS, is explored in great detail in a previous 6-12 Report from AVANT Research & Analytics.

Please visit

<https://ta.goavant.net/sdwan-report>
to download your free copy.

250-500
41% MPLS

500-1k
49% MPLS

1k-2.5k
54% MPLS

2.5k-10k
18% MPLS

250-500
10% SDWAN

500-1k
11% SDWAN

1k-2.5k
25% SDWAN

2.5k-10k
62% SDWAN

Source: AVANT Assessment Data

Choices and Challenges

At the most basic level, choosing the best UCaaS solution would seem to be the same as selecting any other technology product or service: Consider the differentiators, analyze the cost, (along with the total cost of ownership), evaluate usefulness and compatibility with legacy systems, check for any landmines in the paperwork, and forge ahead with the migration.

Not so fast, however. Part of this scenario runs just a little bit differently because of some unique dynamics inherent in UCaaS, as well as in many other segments of the "as a Service" market. And that has a lot to do with who is providing the "Service" component of UCaaS (or any other "X"aaS).

A lot of the products get commoditized quickly, said Eclipse Telecom's Dyson. A vendor can release a new, differentiating feature and three months later all competitors have a similar capability, he added. "And I think it's a good thing that commoditization happens so rapidly because that gets us to the product sets that are driving value. That makes us compete based on flexibility, customer service, contract terms, prices, rollouts, implementations, and all the things that really matter," Dyson said. "In general, there are multiple providers who can fit

any given use case. But not everyone has built out their fabric on a global basis, so sometimes locations can make a difference."

Where a partner is – or is not – can be critical.

"If there's one word that describes the best-in-class in any industry, it would be 'simplicity.'"

"Location is a consideration so if you have offices around the world, you want to use a provider that has POPs in those areas because that reduces latency," agreed Karczewski. There are quite a few UCaaS providers that have an international presence. Also consider the applications you are using. Are you a Google shop, a Salesforce shop, or Microsoft? There are providers that integrate really well with different solutions, so planning that correctly can increase your organization's productivity?"

The degree to which platforms fit together is one of the prime concerns customers and Trusted Advisors examine during the initial search process.

"In order to truly unify communications, you have to be involved in the business process, and you have to be ingrained into the business applications that customers are using every day," observed Mitel's McGarry. "As enterprise decision makers look at services and applications that can facilitate collaboration and deliver a better customer experience, it should be at the top of their list to make sure that they're getting those integration points with their chosen UCaaS manufacturer or provider."

Of course, reliability is critical. And it's vital for businesses to have a partner they can rely on who owns the entire UCaaS solution, whether it's best-of-breed or a one-vendor solution, said 8x8's Savvoir.

"One thing that tends to differentiate the providers is the reliability of the solution, and whether or not the provider owns the technology, or partners with other providers to deliver the complete suite of solutions. There's a connection between owning the technology stack and being able to react to market forces on a timely basis."

Mitel's McGarry agreed. "As interactions with clients continue to change, and as features become more ingrained into the applications and customer usage, the ability to own your own platform and write changes without hitting any roadblocks is really important."

"If there's one word that describes the best-in-class in any industry, it would be 'simplicity.'"

By controlling the platform, vendors can better ensure that features continue to interoperate properly over time. Yet some customers will often prefer a multi-vendor, best-of-breed approach designed to more immediately deliver technical differentiation. After all, much of the IT industry is built upon small, nimble startups that disrupted the status quo, and then went on to be acquired by larger competitors.

"If there's one word that describes the best-in-class in any industry, it would be 'simplicity,'" said Fuze's Brown. This is not about a lack of features or the inability to handle a complex scenario, it's about being able to address the customer need in the most simple possible way."

Despite the industry's best intentions with regard to simplicity or features and benefits, any new installation can face difficulties or challenges that are fairly organic to the technology, and UCaaS is no exception. Given the strategic communications importance of the telephone system, an outage caused by a problematic migration is one of the great fears of enterprise decision makers who are thinking about deploying UCaaS. While those risks are worth exploring with a Trusted Advisor, it's also true that sticking with an old legacy system carries its share of risk, as well.

"We hear from enterprises about the pain of outages typically coming from their on-premises gear, and the cost that's associated with maintaining those systems," said Brown. "Another aspect is the changing workforce – not just the demographics, but also the commute time, as cities are becoming more expensive and people move to areas with less density. Plus, it's easier for a user to jump to something like FaceTime, WhatsApp, and a number of other services that are outside of IT's control. The ability to pick up something to get their work done is easier than ever before, so companies need to fill that void proactively."

A good Trusted Advisor will keep customers up-to-speed on what risks or challenges might prevail. While it is justifiable to expect the Trusted Advisor to proactively provide this information proactively, we recommend customers also put together a list of concerns to be explored.

The place where things go wrong is in setting the wrong expectations," said 8x8's Savvoir. "Also, some things on the technical side can go wrong if the devices become a point of contention with the users because they don't enjoy the experience. Other times the business might pivot and not get the results they expected because their needs or circumstances have changed."

In some cases, enterprise customers – especially those with a deep bench of IT support – may be tempted to go it alone with their UCaaS installation. But this can be a very risky move when those technology teams lack the necessary expertise and experience to not only install the service, but optimize it based on the specific needs of the organization which may extend into other cloud-based offerings such as Communications Platform-as-a-Service (CPaaS) or Digital Subscriber Line (DSL).

"Customers should never self-deploy," said Kate Jaffe, CEO of Convergent Technologies, a Philadelphia-based IT and telecommunications management firm. "You're going to need that knowledge base to start with, and you'll also need a great project management team. Phones might not be provisioned correctly. You can have reporting issues. The telephony numbers might not port over in time for the cut-over. All of those things can happen. We sit down with them and give a clear explanation of what might go wrong. We share what we've seen, and what we're going to do if those things happen. Knowing this ahead of time alleviates a lot of customer stress. The deployment difficulty is another aspect. Is this a simple vanilla site, or will we be doing a lot of integration? Are we doing CPaaS along with this? All of these things factor into the level of success."

"Turning up UCaaS is fast, said Up-Front's Harrison. Porting numbers, however, can take five to 10 days, although legally it can take up to a month," he added.

"On the connectivity side, if you're going with DSL satellite or coax, you're probably looking at five to 10 business days assuming it's already built in," Harrison said. "For Desktop as a Service, it's going to get more complicated, depending on a host of circumstances."

Verticals Well-Suited to UCaaS

Prior to signing any UCaaS purchase order, it's advisable for enterprise decision-makers to host a proof-of-concept (PoC) evaluation in order to get a first-hand look at how well the proposed system works in their actual environment. Although some people view this exercise as an avoidable extension of the sales cycle, there is no substitute for hands-on experience with a proposed technology.

"The proof of concept is really helpful in helping them decide which platform is best."

Engage power users or tech-savvy users who would be able to see not only the strengths and weaknesses, but also will evangelize the deployment after the final decision is made.

Gathering requirements and feedback from different "personas" across the organization is important to do prior to the PoC. Consult these users about improvements to the communications tools during the down selection process to avoid going to POC with a vendor that has shortcomings related to the company's desired future state. IT can be unaware of the needs of certain departments or the shadow IT workarounds department heads and individual users have put in place to fill gaps in the current company provided tool set.

"The proof of concept is really helpful in helping them decide which platform is best," said Convergent Technologies' Jaffe. "I recommend that they test two or three solutions with the help of key influencers within the company to provide feedback."

Companies should create PoC scorecards to better track attitudes around collaboration functionality, features, ease-of-use, ease-of-management, and the effectiveness of any mobile applications, she added. The task force should clearly define parameters for success and look at how to weight those parameters in the cross-platform comparisons and evaluations.

"These could include certain dialing capabilities, such as users having the opportunity to move from place-to-place," said Savvoir. "I've seen some trials in which the criteria were not well defined, the users didn't provide the feedback, and it turns into a very extended and less useful time for the customer."

Industry analyst Blair Pleasant had more ideas: "Make sure that the chosen UCaaS system really works and integrates with the applications and workflows that your company has in use. That needs to be a big part of the proof of concept. I would also make sure that the features and capabilities that your workers use, and need are part of that solution. Many times, the IT department will roll out something that might be missing things that the end users need. So, it's important to get different types of end users from different departments involved in the POC. Then I would also examine how it works for remote workers. Things might be fine in the office, but not necessarily fine when people are mobile. People need to understand what's in it for them, and how it's going to help them do their jobs better or enhance their work-life balance. So, doing some internal marketing and change management is important to helping people understand the value."

Once the final decision is made, your Trusted Advisor steps to the forefront with the integrations and other technical considerations necessary to go live. But the customer's job is not quite over yet. The next step is to focus on user adoption. This includes not only training, but also on articulating the benefits the new installation will bring to the team. It's recommended that this effort be more than just a single meeting. Assistance should remain available over time.

"We have to make sure we continue to stress the availability of training, the importance and necessity of training, because when you are integrating such cool technology into your business, you want to make sure that your people know how to take full advantage of that," said McGarry.

As the search begins to narrow to a few preferred options, it is advisable to request customer references and also speak with the supplier implementation project manager to get a better understanding of each party's responsibility during an implementation.

Key Roles

Unified Communications-as-a-Service involves companies serving in a variety of roles that represent different portions of the value proposition. The general categories listed below are not necessarily mutually exclusive. Different companies may have or merge different models. Here are the general categories:

— Product Vendors

These are the companies that develop the software, hardware, platforms and solutions. You will likely find some options to be more effective than others, and some will work together in the same environment better than others. When they don't interoperate very well, they might cancel out one another's benefits, or cause the systems to work more slowly, due to the different products struggling for dominance. Vendors often rely upon Trusted Advisors, MSPs, and other members of the indirect sales channel to bring their products to market, though some also may sell through their internal sales forces. From the customer standpoint, direct sales efforts are led by people with sales quotas. Thus, the product they're offering may or may not be the best fit for your circumstances.

— Managed Service Providers (MSPs)

MSPs use vendor products (as mentioned above), sometimes with a portfolio of vendors to choose from, to deliver a solution. They are not developers of the product, although sometimes

they may combine different products into a unified offer; perhaps combined with an additional homegrown service or software that differentiates them from their competition. MSPs often optimize a given solution to your needs and function in a mode very similar to consultants (see below). In most cases, the buyer will have certain options available in their service selection but will be unable to make detailed requirements on which vendors and solutions will be used. This limitation is typically balanced by enhanced simplicity. Managed security services can also be provided by carriers working with an MSP model. In most cases, carrier-based offerings are made available in conjunction with other offered services.

— Consultant/Agent/Reseller

This segment of the industry typically does not have an internally developed product or technology. They, instead, are designed to function as independent entities that can help you sort through the available options based on your company's specific needs, budgets, and legacy infrastructure. Their role is to do the necessary legwork, understanding the differentiators among the various offerings as well as those of the vendors that provide them. Aside from helping with the pre-sales phase of the engagement, they also play a key role in deployment, optimization, support, training, and other facets of technology.

Key Action Items

- Don't be too attached to outdated legacy gear.
- Compare the UCaaS feature set to your current system.
- Evaluate UCaaS in the context of digital transformation and rapidly shifting work patterns.
- Consider differentiators, TCO, compatibility with existing applications, contract terms, availability of POPs in your desired locations, reliability, and user-facing simplicity.
- Make sure security is baked in to your preferred solution.
- From early on, rally support from your users.
- Turn to your Trusted Advisor for guidance.

Trusted Advisors

Trusted Advisor is a technology company that translates the offerings of technology vendors and service providers into integrated solutions that further the interests of the customer, typically by reducing costs or building productivity. They often are called "agents," "resellers," integrators," or "managed service providers," each of which has its own business-model variation, as defined by the individual company. Trusted Advisors are third party entities; neither owned by the vendor nor part of the internal IT department. They advise their clients and make recommendations that are then decided upon by the customer.

Their role is to understand the products and the key differentiators. However, their knowledge of technology must interweave with their knowledge of business functions in order to devise technology solutions that successfully resolve business problems. Their strategies are therefore highly consultative in nature, and they seek to maintain a direct line of sight into the needs of the customer.

They typically have a technology specialty, or a vertical market specialty that spans multiple technologies, although most will offer a wide assortment of services in allied sectors, either directly or via partners. How those specialties align, combined with the resources and footprint of the company, generally determines the portion of the market they serve, ranging from small business to large enterprise.

Trusted Advisors specializing in the technology-of-interest are generally the first step taken by enterprise decision makers in their technology acquisition process. While each customer brings different values to the equation, and therefore seeks different types of companies, their presence in the technology lifecycle is generally viewed as a practical necessity.

Acknowledgments

We'd like to thank all these consummate professionals for their assistance in making this report possible.

— Our Partners

Jed Brown, Fuze; Dave Dyson, Eclipse Telecom; Dan Harrison, Upfront Technologies; Kate Jaffe, Convergent Technologies; Kendra Karczewski, Stratosphere Networks; Forrest Knueppel, Fuze; Jim McGarry, Mitel; Dan O'Connell, Dialpad; Blair Pleasant, COMMFusion; Jamaal Savvoir, 8x8

— Our Team

Samantha Carfagnini, Alex Danyluk, Alison Calderbank Diana, Bill Franklin, Jesse Garing, Lindsay Giersch, Ron Hayman, Robert Kazarian, Prerna Khandelwal, Ian Kieninger, Drew Lydecker, Juan Ochoa, Niko O'Hara, John Paullin, Ken Presti, Bana Qashu, JP Tucker, Lily Weibel, Brent Wilford

Tech Industry Shorthand

- **CPaaS** – Communications Platform-as-a-Service
- **DaaS** – Desktop-as-a-Service
- **DSL** – Digital Subscriber Line
- **IQA** – Interactive Quick Assessment
- **MPLS** – Multiprotocol Label Switching
- **NLP** – Natural Language Processing
- **PBX** – Private Branch eXchange
- **PoC** – Proof of Concept
- **POTS** – Plain Old Telephone Service
- **PRI** – Primary Rate Interface
- **SD-WAN** – Software-Defined Wide Area Network
- **SIP** – Session Initiation Protocol
- **UCaaS** – Uni