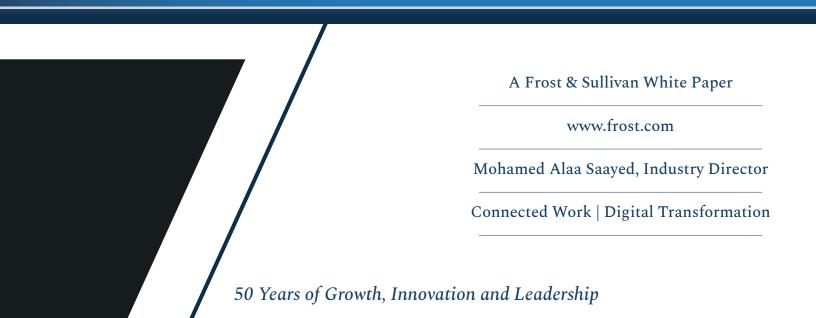


Eight Reasons UCaaS Providers Should Modernize their IP Device Portfolios



Introduction	3
The Role of IP Devices in UCaaS	4
Business Communications Endpoints—Today's Landscape	4
Imperatives for UCaaS Providers to Modernize Their IP Device Portfolios	5
The Avaya Approach	9
Avaya's Heritage	13
Conclusion	12

Introduction

In today's connected world, organizations of all kinds are seeking to modernize how they conduct business and how their employees communicate. As a result, the hosted IP telephony and UCaaS industry is becoming fiercely competitive as market participants of various backgrounds respond to rising customer demand for compelling cloud communications solutions. This is driving high growth rates in the Internet Protocol (IP) telephony and Unified Communications-as-a-Service (UCaaS) market globally, which is expected to expand at a compound annual growth rate (CAGR) of 23.6% in terms of installed users from 2017 to 2024. UCaaS providers continually strive to stand out with respect to solution features, price, service performance, partner ecosystem, brand visibility, and more. Only the fittest will survive as customers become progressively savvy with evolving technology maturity and its ability to meet their requirements.

Communications endpoints are a critical success factor for services providers and should be an important consideration for businesses deploying UCaaS. This Frost & Sullivan brief outlines eight reasons why UCaaS providers should modernize their IP devices to position themselves more successfully in the UCaaS market.

- Business desktop phones used by 92% of world's business users
- 50 million Open SIP phones shipped in the past six years
- Expected Open SIP CAGR growth of 11.8% in next seven years
- Main driver of Open SIP phone growth has been new desk sets attached to UCaaS solutions



The Role of IP Devices in UCaaS

The timing for digital transformation is right. Advanced technologies are profoundly transforming the way businesses operate and create value for their customers. Mobility, cloud computing, Internet of Things (IoT), Unified Communications & Collaboration (UC&C), artificial intelligence (AI), data analytics, advanced connectivity and other technologies are enabling operational efficiencies, greater employee productivity and competitive advantages in all industries and business segments.

IP communications endpoints offered as part of a UCaaS provider's portfolio should, therefore, live up to digital transformation aspirations by empowering users to work more intelligently and efficiently. Moving beyond today's generic voice offerings with next-gen IP devices is fundamental to satisfy the requirements of the office of the future. UCaaS providers that do not change their endpoint offerings by leveraging evolving technologies will considerably limit their growth opportunities.

Business Communications Endpoints—Today's Landscape

Today, business communications endpoints encompass a wide variety of hardware-centric devices such as desktop, wireless, conference and mobile phones, professional headsets, as well as a gamut of softphones and UC&C clients to access voice, conferencing, or collaboration solutions.

Frost & Sullivan research shows that business desktop phones continue to be used by a notable 92% of the world's business users. Yes, technology habits have dramatically changed: more business workers are diversifying the way they communicate and collaborate with others, particularly with respect to mobile phones and software services. However, desk sets are still seen by many professionals as the most reliable, convenient, secure and easy way to have business conversations.

Proof of the still-important nature of desktop phones among businesses around the world is the robust growth rate of Open Session Initiation Protocol (SIP) phones. Within the past six years, more than 50 million Open SIP phones have been shipped in the business space. With more than 11.2 million devices shipped in 2017, Frost & Sullivan expects the Open SIP phone market to grow at a healthy CAGR of 11.8% in terms of unit shipments within the next seven years. The main driver of Open SIP phone growth has been new desk sets attached to UCaaS solutions, with circa 70% of the Open SIP phones shipped in 2017 implemented in hosted/cloud communications environments.

While claims of the "death" of the IP desktop phone are far from reality, devices deployed in the office do need an upgrade or refresh to keep pace with the evolving nature of the work and the workplace, as well as deliver on the variety of ways employees and groups expect to be able to communicate and collaborate. Many IP desktop phone offerings today are falling way behind the new requirements of businesses and users in terms of functionality, experience, performance, technology evolution, and overall support. To compete more effectively, UCaaS providers must diversify and enhance their communications endpoints portfolios with new brands and models that address a broad spectrum of customer needs.

Imperatives for UCaaS Providers to Modernize Their IP Device Portfolios

There exist eight key reasons why service providers must update their endpoints portfolios and provide more options to businesses moving their communications to the cloud.

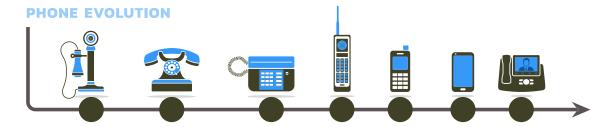
1 Support Multi-modal Communications



For a long time, UC&C has revolutionized the way professionals communicate through the convergence of voice, video and data. The move to converged networks and software-based communications has enabled businesses to cost-effectively deploy various applications and platforms, including telephony; email; audio, web and video conferencing; instant messaging (IM) and chat; presence; social networking; mobility; file sharing; and more.

While convergence has taken place mainly in the software communications realm, next-gen IP desk phones must accommodate accordingly by evolving from voice-only devices into full-blown, multimedia hubs able to offer a complete omnichannel experience. IP multimedia phones support increasingly popular multi-modal workflows and experiences. Frost & Sullivan expects IP multimedia phones to grow at a shipment trajectory of a 12.6% CAGR over the next seven years. UCaaS providers looking to differentiate their offerings must seriously consider vendors that deliver innovative IP multimedia phone options.

2 Meet New Features and Functionality Requirements



As communications and collaboration technologies considerably advance, requirements in the office environment radically change as well. Businesses investing in IP desktop phones today are expecting more features and functionality at much lower prices. Since the early days of IP desktop phone penetration in the business space, around the year 2000, IP phones have significantly evolved into more intelligent devices. Feature and functionality advancements such as color displays, Gigabit Ethernet, touch-screen technology, integrated Bluetooth and USB connectivity, HD audio, and advanced software interfaces have gradually spread down the IP phone spectrum to affect mid- and even low-range models.

Newer generations of business endpoints should, therefore, meet the new and evolving requirements of businesses in terms of features and functionalities. Importantly, the endpoint is also how users interface with the UCaaS investments that businesses make. Poor or limited UC&C features and functionalities at the endpoint level directly equate to lower return on investment (ROI).



Meet Evolving User Experience Expectations



Frost & Sullivan estimates that Millennials will comprise 75% of the US workforce by 2025. Furthermore, Generation Y workers are expected to account for 30% of the global population in 2025. Not to be forgotten, Generation X and Baby Boomers are still in the workplace adopting digital technology as much as any other generations. In fact, the oldest Boomers will not be 65 until 2029. The growing effect of tech-savvy individuals, including Generation Y and Z populations, on the way work

should be conducted has been positively affecting communications and collaboration usage patterns, fostering environments of increased engagement and innovation.

Today, more business users expect the same experiences they have on their consumer devices/endpoints to be replicated in the enterprise communications and collaboration environment. Newer generations of business endpoints should resemble the flow, ease of use, feature richness and overall user experience of their consumer-oriented counterparts. Additionally, newer generations of IP devices should allow users to intuitively personalize and customize their business communications endpoints in terms of form factors, application settings, interfaces, and other capabilities. Endpoint customization takes the end-user experience to a whole new level by allowing workers to stamp their personal identity in their workplace. UCaaS providers should increasingly consider modern IP endpoints that allow greater device personalization as well as access to millions of cloud internet applications.



Offer New Choices for Businesses and End Users



The majority of UCaaS providers today offer only two or three brands of business endpoint devices. As such they are limiting the choices available to businesses and their end users in terms of phone models and associated functionality. Businesses that need to refresh their IP devices are often tied to new product releases and lifecycles from these two to three brand options. In a 2018 Frost & Sullivan survey of US-based UCaaS decision makers, 22% of non-users of UCaaS stated that limited

endpoint choices were one of the main reasons for not adopting UCaaS. Offering a broader selection is, therefore, crucial for providers to address customers' unique and evolving requirements. Instead of focusing solely on promoting their cloud services, UCaaS providers should also offer modern and attractive endpoint choices, shying away from a one-size-fits-all approach in terms of IP device options. Aside from features and functionality, more endpoint choices also translate into a larger spectrum of price options, from budget to high-end devices, which is always appreciated by businesses.

In a fast-evolving cloud communications and collaboration market, offering a wider and diversified IP device portfolio grants UCaaS providers competitive advantages in terms of positioning, visibility, and overall ability to thrive. A UCaaS provider that also offers multiple IP endpoint choices catering to different business roles, tasks, physical spaces, and preferences, is more likely to expand its target audience, generate higher revenues per customer, and position itself for sustainable long-term growth.



Expand on Vertical Opportunities



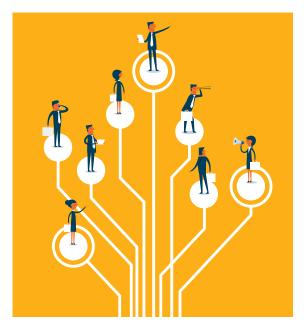
The deployment of standard/general-purpose endpoints can notably compromise the breadth and depth of functionality that distinct lines of business find invaluable. This is particularly true in specific vertical markets. Outmoded or limited IP device options can severely impede a UCaaS provider's ability to efficiently serve the needs of specific industries such as hospitality, healthcare, retail, legal, financial services, media and entertainment, and more, thereby curtailing the customer organization's ability to deploy solutions that dovetail into their processes.

With modern IP devices, UCaaS providers can considerably expand their vertical opportunities by offering highly customizable application programming interfaces (APIs) with their cloud platforms and through which vertical-specific services may be developed. In the hospitality realm, for example, advanced IP multimedia phones are helping hoteliers control in-room features and extend services. Custom hotel applications are not only delivering key information directly to the desktop, but also enable in-room environment control, including functions related to blinds, curtains, lights, and temperature settings. In sectors requiring surveillance and monitoring, advanced IP multimedia devices are allowing video streaming from surveillance cameras directly to the IP device to meet the varying needs of workers in the government, private security, retail, and other sectors.

By demonstrating a deep understanding of the business and human workflows of each type of organization, modern IP devices allow UCaaS providers to establish strong competitive differentiators within various vertical industries.



Address the Mobile Workforce



In the office environment, 90% of the workers are at least 20% on the go, which compels them to leverage mobile technologies to stay connected while away from their desks. A 2017 Frost & Sullivan survey, which interviewed more than 1,900 decision makers around the globe, revealed that 36% of employees currently use smartphones, including both company- and employee-owned, to perform some of their job functions.

While the use of mobile devices in the workplace is undeniably growing, the majority of workers continue to see their mobile devices as complementary to their desktop technologies instead of a complete substitute. The average business worker continues to use different types of endpoints during the day, alternating between PC communications, desk phones, and mobile phones, depending on the circumstances. Some corridor warriors also prefer alternatives such as digital enhanced cordless telecommunications (DECT) phones and Wi-Fi phones when it comes to indoor communications.

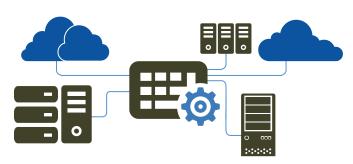
Eight Reasons UCaaS Providers Should Modernize their IP Device Portfolios

UCaaS providers should strive to deploy intelligent endpoints that can speak to each other. The ultimate goal is to adapt to the new ways of work, offering business workers product choices and the flexibility to easily switch from one endpoint modality to another. In the case of desk phone/mobile integration, modern Bluetooth-enabled desk phones are allowing users various interconnection capabilities such as the ability to synchronize contacts, calendars, and call history; transfer calls; and remotely control phone functionalities from one device to another. In addition to Bluetooth connectivity, evolving smart desktop devices are also incorporating Wi-Fi and DECT connectivity, as well as support for modern, open operating systems such as Android to empower users to share the same apps they use on their mobile devices with their desktop phones. Business and consumer-centric applications and content could, therefore, be easily shared among a business worker's devices, similar to their capabilities at home.

UCaaS providers looking to better cater to the needs of a mobile workforce should not only focus on extending their software UC&C experience to mobile devices but also integrate the mobile world into other business endpoints.



Improve Provisioning, Roll-out, and Management



In the UCaaS space, the lack of an efficient endpoint deployment and management system can severely affect the provider's relationship with business customers. Certain enterprise endpoint vendors have not fully mastered capabilities to meet UCaaS providers' requirements when it comes to device provisioning and management. This lack of fluid roll-out and management directly translates into increased total operational costs of a UCaaS provider's customer support and lower satisfaction from the initial deployment.

In an increasingly competitive space, innovative provisioning and management techniques that accompany a modern device vendor's offering can dramatically improve the overall quality of service that a UCaaS provider can offer to its business customers. Characteristics such as "out-of-the-box," zero-touch provisioning; automatic software/firmware upgrades; enhanced troubleshooting; and the availability of an intuitive and simple management dashboard for endpoint management and data collection (data analytics) can dramatically enrich the business experience to help UCaaS providers differentiate.

Frost & Sullivan recommends that UCaaS providers modernize their IP devices not only to meet their customers' needs in terms of overall product functionality, but also to cater to evolving industry demands in terms of endpoints provisioning, roll-out, and management. UCaaS providers must shy away from device vendors focused primarily on promoting their own technology. Rather, they should gravitate toward vendors that act as trusted partners that have a deep understanding of the workflows between people and technology.





Many UCaaS providers view enterprise endpoints/devices only as a necessary cost, instead of leveraging the innovation they can offer to differentiate the UCaaS service offering. Various IP device vendors in the market today also do not currently contribute to the objective of UCaaS providers' revenue growth. The opportunity to offer modern IP devices that incorporate innovative features and capabilities to address evolving technology trends in the enterprise communications and collaboration market can considerably unleash the revenue potential for UCaaS providers.

Newer generations of multimedia phones not only include in-built, rich capabilities but are also opening up possibilities to support millions of cloud applications that exponentially increase the value of an enterprise desk set. Clear examples of evolving IP device use cases include:

- The incorporation of Al voice assistants that make mundane tasks—such as initiating calls, auto-dial into the next meeting on a calendar, and executing Google searches—easier for office workers;
- The addition of real-time, speech-to-text language translation capabilities that can instantly show the translated and transcribed conversation on an IP desk phone display;
- The delivery of biometrics data in the form of facial, voice and fingerprint recognition to enable stronger identity authentication; and
- The possibility of smart device-to-device integration with Internet of Things (IoT), allowing desk sets to share important business data with each other.

Today, modern IP devices are advanced media hubs that enable businesses to unleash a world of new technological communications and collaboration possibilities. UCaaS providers should increasingly act as the facilitators of these evolving opportunities.

The Avaya Approach

Since entering the Open SIP market in May 2017, Avaya has built one of the most powerful portfolios of smart IP devices, opening up doors for UCaaS providers to expand their offerings and better align with the evolving communications and collaboration needs of today's businesses.

Avaya is committed to offering a platform-agnostic portfolio – and this commitment is evidenced by a dramatic increase in Open SIP devices available – sprouting from only 3 devices in 2017 to over 20 devices in 2018. The platform-agnostic Avaya Desktop Experience portfolio includes Essential Experience J100 desktop phones, a new portfolio of IP phones for the hospitality sector, DECT handsets for the wireless campus, professional headsets for desk phones and PCs, advanced Avaya VantageTM phones (with nine different form factors) for multimedia communications, and personal and tabletop conferencing devices.

MULTIMEDIA EXPERIENCES

EXPERIENCES

AVAYA DESKTOP EXPERIENCE

PERSONAL MULTIMEDIA

vantage"

- Keypad + Camera
- All Glass / No Camera
- All Glass / Camera

PERSONAL VOICE

- Essential Experience IP Phones and Headsets
- DECT Handsets
- Hospitality IP Phones
- Personal Conferencing





HUDDLE SPACES

- CU-360 Collaboration Unit
- Huddle Cameras
- Personal Conferencing





GROUP MULTIMEDIA

- Soft Clients
- Executive
- · Room Systems
- Telepresence

GROUP VOICE

Omnisound® Technology

- Bluetooth
- Analog
- SIP / H.323
- Wireless







Avaya's key value proposition and differentiator, when compared to other vendors in the space, is its laser focus on the end user experience. In fact, Avaya refuses to use the term "endpoint" because they say this supports a perspective of the IP device as the logical extension of the UC network platform outward. Avaya's view is that the IP smart device is actually a logical extension of each end user – and should be designed to augment each individual's work productivity. They view the IP smart device as a portal to numerous clouds of choice, not a slave to only one system delivering only voice call control capabilities.

A recent Frost & Sullivan survey of UCaaS investment stakeholders found that the user experience is a critical factor in provider selection, with 44% of respondents selecting a good user experience among the top decision-making factors in the final selection of a UCaaS provider. Through a detailed and structured process in the past two years, Avaya actively sought feedback from different businesses and UCaaS partners around the world to identify key objectives and pain points related to business communications devices. The result has been the roll-out of a modern fleet of Open SIP devices that move well beyond generic voice offerings with the objective of significantly revitalizing the desktop experience.

For businesses, the Avaya Desktop Experience delivers the technology that today's workforce wants. Recent Avaya research that surveyed over 1,200 full-time workers in the US revealed that, while the business desk phone is still the primary communication tool for more than half of full-time workers in office environments, there is a growing demand for modern phone capabilities relevant in today's new ways of work.



Want their office communications devices to be more like their personal communications devices in terms of high-quality audio and video, one-touch access to communications and collaboration, and the ability to text and chat.



Believe that device personalization and customization can help them increase work productivity, job satisfaction, and the ability to serve their customers.

Taking into account the evolving requirements of business workers, Avaya's new Open SIP device portfolio incorporates a full set of communications tools used by today's businesses—including voice, video, text, social, and literally millions of applications—as well as differentiated hardware and software customization options. Device form factors, application settings, and interfaces can all be tailored to fit the preferences and needs of business workers and their organizations.

For UCaaS providers, the Avaya Desktop Experience allows suppliers to increase their differentiation and expand their customer wallet share. By offering a wide range of modern IP devices, including IP desktop phones, wireless phones, audio conferencing phones, and headsets, Avaya allows service providers to broaden their revenue potential with more endpoints options.



Avaya is also committed to delivering value beyond just technological innovation to UCaaS partners. Avaya has recently rolled out new services to make the Avaya Desktop Experience easier for UCaaS providers and UCaaS customers to purchase, deploy, and customize such as:

- Purchasing Options: Avaya now offers device purchasing options similar to those found in the consumer smart devices space, including: One time upfront payment; three year finance payment (via Avaya's Device Flex Purchase Plan); and Device-as-a-Service, a true monthly device usage subscription option that provides change, upgrade and cancellation options. These options enable Avaya's UCaaS partners to compete not only on device innovation but also with the industry's most flexible device purchase plans. All of these plans are directly managed by Avaya, which reduces the complexity that exists in competitive offerings that involve third party leasing agents.
- Avaya Device Enrollment Services: Another service provider gain is potential operational and service delivery cost reductions through the implementation of efficient endpoint deployment and management systems. Avaya Device Enrollment Services provide "no-touch" provisioning, which means that, when a cloud device is delivered to a business employee, it works right out of the box with no need for staff on site or costly customer support.
- Avaya Device Management Services: The goal of Avaya's device provisioning and management services has always been to provide UCaaS providers and their customers with more scalability, ease of ownership, and workflow automation. Avaya Device Management Services simplify and increase the control of software, configuration changes, applications, inventory, and device troubleshooting and monitoring.
- Avaya Client SDK: New business models can be implemented leveraging Avaya's differentiated vertical focus. to expand into key target verticals with tailored endpoint offerings. Avaya IP devices can be packaged as part of specific vertical UCaaS offerings, leveraging Avaya's Client SDK to create unique experiences for customers and integrate with their workflows. Hospitality, healthcare, retail, media and entertainment are potential examples.

Avaya not only fully addresses all eight objectives for UCaaS providers to modernize their IP devices, but has also built a powerful team to support its UC&C devices mission, combining a select group of innovators and industry veterans that have deep understanding of the market. With great leadership, and a mandate to support businesses on their digital transformation and cloud service acceleration journey, Avaya has transformed itself into an Open SIP endpoint innovator with a solid commitment to become the preferred vendor in this space.

Avaya's Heritage

Leveraging the global power of the Avaya brand means trusting a company that has delivered communications solutions for more than 100 years. With more than 144 million people relying on Avaya's solutions every day, the company has shipped more than 130 million lines throughout its history. No one in the market can match these figures.

While Avaya's devices have always been known for their quality, reliability, and innovation among the company's own call-control customers, UCaaS providers have the opportunity to leverage the strong knowhow of a global brand in delivering enhanced experiences to their customers. For new business customers to Avaya, it means leveraging desktop experiences based on years of research, innovation and knowledge gained in business productivity, audio and video quality, and customer support. For existing business customers to Avaya, it means technology familiarity when moving to cloud communications environments. For Avaya, an endpoint is no longer just a phone; it is an open, flexible platform on which UCaaS providers and their customers can transform their businesses.

Conclusion

The hosted IP telephony and UCaaS industry is becoming fiercely competitive. UCaaS providers looking to stand out should seriously consider modernizing their IP device portfolios. However, service providers cannot go it alone. They must consider a potential partnership with Avaya to leverage the vendor's IP device know-how and broad array of communications endpoints options. With a strong belief that the future of enterprise communications and collaboration is open, Avaya has enabled its SIP endpoint portfolio to work with a wide range of service providers with the objective to unlock the true potential of the UCaaS service business. Service providers that include the Avaya Desktop Experience as part of their UCaaS offerings are expected to differentiate themselves in a highly competitive market.

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