TechTarget

E-Guide

Tracking the Fast Changing Unified Communications Market

An essential guide to managing the rapid change

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Five UC trends that change the collaboration game

Irwin Lazar

Unified Communications is poised for rapid change that will be driven by a perfect storm of mobilized workers, innovative technologies and a changing vendor landscape.

On the vendor front, Microsoft Lync is challenging Avaya and Cisco for market dominance, while new cloud-based providers promise to allow IT to scrap its own servers, disband centralized technology budgets and assign spending to specific lines-of-business.

Meanwhile UC technologies are evolving to enable new kinds of communication through a wider variety of endpoints. WebRTC offers the power to democratize UC by extending features like voice and video into any desktop or mobile web browser. Additionally, UC vendors are integrating wired and wireless worlds to better serve the growing base of unwired workers who spend more time on tablets or smartphones than at desks.

Finally, video isn't just for conferencing anymore, as consumer services such as YouTube and Vine drive enterprise video collaboration and content sharing in the enterprise.

The following five trends are changing UC with the potential to alter how companies deploy technology and how business professionals communicate:

1. **Cloud-Based UC: How SaaS Will Change the Way We Spend**
   More than 90% of companies now use Software as a service (SaaS) applications, according to the Nemertes *2013-14 Enterprise Technology Benchmark*.

   Enterprises are turning to SaaS partially because they lack in-house expertise and need speedier deployment. But even more important, SaaS allows enterprises to be flexible with IT resources and

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spending.

Specifically, buying cloud-based UC applications allows IT to eliminate capital spending and move to an operational cost model in which companies only pay for what they need, when they need it. What's more, SaaS allows IT teams to push service costs directly out to specific lines-of-business.

Cloud UC isn't for everyone, however. The larger the user base, the more likely it is that cloud services will be more expensive than on-premises UC, according to Nemertes Research. The tipping point for IP telephony, is about 2,500 users. Cloud services don't allow for the customization that some organizations require, and the cloud may not be acceptable if security regulations dictate that companies must store all data on premise.

The solution may be in deploying a mix of cloud and on-premises applications, but that requires integration using middleware from vendors such as Esna and Next Plane to allow presence federation between applications. That means additional cost and complexity. But integrating services from multiple cloud providers (e.g., one vendor's Web conferencing with another's video), is even more problematic.

Despite the challenges, most companies will take cloud services into consideration as they evaluate UC technology.

2. **Mobile UC: Enterprises Must Deliver UC to a Multitude of Devices**

   Enterprises have learned quickly that the BYOD trend can benefit them if personal and enterprise-issued devices are used to improve worker productivity. So they're moving to support mobile workers across a wide range of devices and mobile operating systems, and enable mobile UC applications.

   Employees demand capabilities, like single-number reachability and

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the same set of UC features on their tablets or smartphones that they have on their desktop. For IT, supporting mobile workers entails a new set of challenges, including guaranteeing real-time application performance on crowded wireless networks, tracking user location for 911 response, securing applications and data on employee-owned devices and managing UC performance on mobile devices outside of IT's control.

In tackling these issues, companies will continue to embrace mobile device management and mobile application management tools from vendors including AirWatch, Good and Mobile Iron. Or they turn to mobile carriers such as AT&T and Verizon for hosted mobile device management services.

Meanwhile, most UC vendors have delivered fully functional mobile clients for personal and enterprise devices that support their applications and features. Mixed-vendor shops, however, face a larger problem because it's generally not possible to enable a seamless end-user experience across many disparate UC applications and features on one mobile device. Often this challenge leads UC architects to consolidate UC vendors around a single strategic partner that can deliver a fully integrated set of applications on desktops and mobile devices alike.

3. **Video: Not Just for Conferencing Anymore**
   Video is an increasingly central part of collaboration technology, becoming a more universal conferencing tool while simultaneously transforming into a medium for enterprise content sharing.

   On the video conferencing front, new codecs like H.264 high profile and H.264 Scalable Video Coding (SVC) are reducing the network impact of video, even enabling high-definition video across the Internet or public 3G/4G wireless networks. H.265 is on the horizon, offering the same benefits but in a standard protocol that should allow interoperability among various video vendors. Cloud services such as Blue Jeans Network and Vidtel provide the ability to hold

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conferences among a mix of room and desktop endpoints, mo-bile users and consumer services (like Skype)—all without the capital cost of buying a multipoint conference unit.

Meanwhile, a revolution is taking place as companies embrace user-generated video, bringing the capabilities of consumer services like YouTube into the enterprise. From recording video conferences for future playback to distance learning, video is quickly emerging as a way to share content internally and externally from a multitude of sources. IT leaders are evaluating and deploying multipurpose video platforms from vendors including Kaltura, Kontiki and Qumu. They're also looking at integrated options from video-conferencing vendors like LifeSize and Polycom. Even service providers like Verizon are getting into the mix, delivering content management and sharing as a hosted service.

4. **WebRTC: Voice and Video for All… No UC Platform Required**
   WebRTC enables Web browsers to function as voice and video endpoints without the need for a separate app or browser plug-in. This means users can "click-to-call" from within a webpage or mobile app without ever having to pick up the phone. Ultimately, WebRTC aims to provide UC apps like telephony and video conferencing to literally anyone.

   Because WebRTC is implemented using JavaScript, Web developers can use the technology to add voice, video and screen sharing to their applications. This means they can enable peer-to-peer communications without using a UC platform, which raises some concerns that Web developers will create rich media applications without the knowledge of the network team.

   Despite all the hype, WebRTC is still in its infancy. Chrome's and Firefox's implementations aren't supported by Internet Explorer or Safari. Video codec standards aren't universally defined and common telephony features like compressed voice codecs aren't yet supported. Still, WebRTC represents one of the more exciting and

potentially transformative areas in UC.

5. **Lync: Transforming the Vendor Landscape**
   Ever since Microsoft introduced "VoIP As You Are" in 2007, Microsoft has gradually challenged the incumbent VoIP vendors including Avaya, Cisco, Mitel, NEC, Siemens and ShoreTel. Its efforts recently accelerated with the launch of Lync and Lync 2013, positioning Microsoft as a full-fledged, fully featured alternative to competing telephony platforms with one major advantage—the company's applications already dominate the desktop.

   Microsoft is convincing a growing number of its IM and Web conferencing customers to embrace Lync for telephony. As a result, the company is gaining market share and establishing credibility as an IP telephony and video conferencing vendor. It's also challenging organizational models that present telephony as a networking application. For Microsoft, telephony lives in the application and messaging domains.

   Microsoft still has a long way to go to equal the installed base of its larger competitors, but it continues to press for a larger piece of the UC pie.

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Irwin Lazar is the vice president and service director at Nemertes Research, where he develops and manages research projects, develops cost models, conducts strategic seminars and advises clients. Lazar is responsible for benchmarking the adoption and use of emerging technologies in the enterprise in areas including VoIP, unified communications, video conferencing, social computing, collaboration and advanced network services.

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UC survey results: Cisco and Microsoft Lync duke it out

Kate Gerwig

The traditional UC vendor market is in for a major shakeup: With Microsoft Lync, the company is poised to take on Cisco for the top spot in unified communications and collaboration (UCC), according to a new TechTarget survey.

Cisco and Microsoft: Top UC vendors

In terms of UC mindshare, the rise of Microsoft's Lync UC platform into the top two also speaks to who is buying what in today's enterprise. Changes in IT roles can influence vendor selection, indicating that the IT manager's authority is on the rise, and the traditional telecom manager may be going the route of the dinosaur. Microsoft's Lync would be more familiar to an IT person who traditionally manages Microsoft products like Exchange, Outlook and SharePoint, while a telecom manager would be more inclined to stay with a vendor like Avaya (placing a distant third in our survey), whose roots are deep in the telecommunications industry.

"Cisco still scored very well, and, by and large, organizations are still going to use it," said Zeus Kerravala, founder of ZK Research. But he mentioned that companies will increasingly choose Microsoft. "I think Avaya has the market share to remain a strong number three, but you really have to wonder about everybody else when you combine what companies can do with Lync and the potential disruption of cloud-based services."

In one of our most recent TechTarget-wide Unified Communications surveys we asked 348 enterprises IT respondents about their current UC deployments, plans for future investments and their UC vendor preferences. The survey results showed that after years of discussing the rise of UC, almost 22.7% said they have fully deployed UC across their organizations, while another 26.4% had either partially deployed UC or deployed it fully to a small number of employees.

Part of the reason for the relatively-low percentage of full UC deployment is that the number of applications it includes keeps expanding, Kerravala said. "UC is becoming more of an application platform than a bunch of products on the desktop. Workers want more functionality within the apps they already use, and that's where Microsoft will differentiate and change the way people think about UC."

Looking at the growth of UC applications

Since the type of application that fits under the "unified communications and collaboration" umbrella has grown over the years, confusion about who buys and maintains UC apps may be reflected in the survey. Nearly a third (32.5%) of respondents cited lack of trained IT staff as an obstacle to deploying UC.

After starting with VoIP and presence, UC now includes Web and audio conferencing, desktop and room-based video, call center services, unified messaging, mobile UC, UC-enabled applications and social networking. In the survey, the most frequently deployed UC application was not the most cutting-edge; VoIP ranked highest at 63.2%, followed by audio conferencing at 59.7% and Web conferencing at 45.4%.

Beyond the traditional applications, respondents disagreed whether some of the newer unified communication applications are even included under the UCC umbrella. A full 30% of respondents said they do not consider social media a UC application, for example, even though 50% of them have deployed or are planning to deploy social media applications.

Survey gauges pros and cons of UC deployments

The need to improve team productivity is by and large addressed through collaboration applications. Survey respondents cited improved corporate collaboration as the biggest benefit of UC (57.5%), followed by improved time to information (56%) and reduced communications costs (55.5%). Reduced travel time, which used to be considered the top reason to deploy video conferencing, especially during challenging economic climates, came in seventh at 47.1%.

The obstacles to deploying UC were spread fairly evenly among a number of options. The main sticking points were the lack of trained IT staff (32.5%) and uncertain return on investment (27.9%). To bring UC applications together, organizations have to be increasingly comfortable with software, which makes it easier to integrate than previous hardware-based UC options. The difficulty of calculating up-front implementation costs was third on the obstacles list at 25%, followed by security concerns (23.3%).

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How Microsoft Lync disrupts the unified communications market

Kate Gerwig

Microsoft isn't the unified communications market leader yet, but with its Lync UC platform and the ability to integrate Skype into its portfolio, the war with Cisco is on.

Cisco still dominates in the major UC categories -- voice, video, mobile, conferencing and call center applications, according to TechTarget's recent UC survey. But Microsoft beat out long-term UC vendors with its Microsoft Lync Online in the presence, cloud-based UC options, and general "UC applications" categories.

"Lync is a disruptive force in this market because it will bring in new buyers and users. But the real disruptive factor is more the 'who,' because it's the Exchange admin and the Windows apps developers who look at Lync," Zeus Kerravala, founder of ZK research, said.

If the future of unified communications is a set of features to integrate into other applications, who's better positioned to do that than Microsoft with its great developer environment and desktop mindshare?

In an increasingly software-based world, Cisco has acknowledged that it shines in hardware but lags in software, according to Frost & Sullivan UCC analyst Michael Brandenburg. That's an issue Cisco's John Chambers said the company has to change at this year's C-Scape analyst meeting.

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Cisco also needs to integrate its UC product line to keep its lead position in the unified communications market. "It shouldn't burst like the sun on Cisco that it has to create unity among its Unified Communications solutions, WebEx and telepresence," CIMI Corp. President Tom Nolle said.

In terms of actual market share last year, Cisco and Avaya are one and two, said Kerravala, with Avaya first in total telephony and Cisco first in IP telephony. "Microsoft is a very small player overall today, but when I put on my Johnny Carson Carnac the Magnificent hat and look at the intent to purchase, we'll see a reshuffling of the top three. As long as Avaya executes well, it should be able to keep its base, but growing new customers could be difficult." After Avaya, there will be a huge drop off to the number four UC, which almost becomes irrelevant at that point, he added.

Which companies want Lync?

Very small and very large companies are adopting Microsoft Lync first, Kerravala said. This is because large enterprises understand how UC changes business processes, and for the very small, it's a relatively painless deployment process. The number of companies that have deployed Lync fully is fairly small, he added, but if you look at the number of companies with partial deployments, it's fairly big, so there's a big adoption wave coming. Lync 2013 will provide the infrastructure for enterprise IM, video calling, multi-party voice, presence, file transfer, audio, video and Web conferencing, and PSTN connectivity through a third-party gateway or SIP trunking.

Assessing the 'Lync is free' myth

What is the real cost of Lync? Survey respondents said their biggest concern about Lync is that it has too many hidden costs.

Unlike Cisco, Microsoft went to market with free Lync licenses, even though users end up paying for the hardware to run it on, including Microsoft Lync servers, IP phones and gateways to legacy systems and PSTN lines. If you're not using the latest version of Exchange, Microsoft will force you to upgrade, unlike Cisco, Kerravala said.

"But companies can get Lync onto a desktop for no money and use it for chat and presence. Then slowly over time, why not use it for mobile voice or

desktop voice? But there are a ton of hidden costs. It's like death by 1,000 cuts," he added.

Microsoft is aggressively building Lync into its enterprise agreements, and it's making a lot of companies pause and question their strategy before spending a ton of money on Cisco gear, said Frost & Sullivan's Brandenburg. "If you're an old dog telecom guy, of course you know Avaya. But if you're a server guy who just got handed the phone system, you think Cisco and Microsoft. So Microsoft is actively going to war on UC," he said.

Skype's place in the Microsoft Lync vision

The survey showed that 19% of respondents have already deployed Lync as their primary united communications solution, while 7.5% have deployed it as their secondary UC solution and another 18% are currently testing it. Another 32% feel that although Lync isn't ready for prime time yet, it is a viable solution. Its use for all UC applications, especially voice, will take time, however.

Integrating Skype into Lync's UC features doesn't have a lot of potential for mainstream corporate buyers in terms of voice because of security concerns, in Kerravala's view, but he adds that Skype has long-term potential particularly with the millennial generation.

Other analysts disagree. With Skype, even though it isn't yet integrated into Lync, Microsoft has two things that no one else has in the UC market, according to Nolle. Microsoft has a global network with tens of millions of users, with call quality getting very good. "No other UC player has a network, not just a product. It's a free on-ramp. If you need more features than Skype has, Lync will be the next logical step," he said, adding that millions of Skype users are now Lync prospects, making Lync the overwhelmingly right answer.

Using only Lync's collaborative applications, businesses are essentially limited to staying within the company. Its advantages "fall off a cliff the instant you walk out the door because nothing is extended into the WAN to other customers or suppliers other than voice over the public switched network,"

Nolle said. "So you're back with Alexander Graham Bell once you leave the enclave of your own business." He maintains that when integrated with Lync, Skype will create a universal collaborative baseline that is higher than anyone else's because it includes video, IM, presence and other UC features.

Corporate collaboration: The essential ingredient to any UC strategy

Karen Kervin

Article content: Collaboration is a key component of the unified communications (UC) discussion. Many think of corporate collaboration in communications as the audio/Web-conferencing and shared-workspace component of the UC tool, but there is so much more to it. Collaboration means using communications tools to enable geographically distributed employees and work groups to cooperate with each other to achieve a business objective or goal.

Most UC and collaborative communications solutions are not single products. This means they require integration, either between technical elements or with processes and other applications, in order to simplify user enablement. Corporate collaboration is what brings value proposition to UC by improving productivity and reducing travel expenses and real estate costs. The overarching goal of unified communications and collaboration (UCC) is to not only improve intracompany collaboration, but to seamlessly and effectively allow real-time intercompany collaboration and communications.

Shared components of UC and collaboration

In addition to **talking**, **audio/Web conferencing** and **shared workspaces**, collaboration also encompasses the following UC components:

- **Chat, text or instant messaging** for quick discussions
- **Presence** for knowing who is available for quick discussions

- **Social collaboration** for sharing information and documents internally
- **Email** for discussions that need more words and possibly attachments
- **Video conferencing** for face-to-face collaboration

Integrating UC and collaborative components

UC architects should spend time with end users to determine current and future collaboration and UC needs in order to understand which components to implement. Since most of these elements are not single products, components must be integrated for maximum productivity and ease of use. UC architects tend to integrate these tools into the IP telephony platform, into the cloud, into the corporate data center or some combination of the three. Integration, for instance, makes it possible to view someone's presence status from within a customer relationship management (CRM) application or from a mobile device. It can allow a user to click-to-conference with a coworker then escalate into a video chat. Collaboration tools must be easy to use or they won't get used. Integration is the key.

Combine corporate collaboration and UC in the cloud

As enterprises assess how to build, deploy and manage their UCC strategy, they are turning to managed, hosted and cloud-based UC service providers to impact success. A recent 2012 Nemertes Research Group survey found that use of managed, hosted and cloud (MHC) services is exploding, with 75% reporting use of such services in 2012, and the majority (58%) reporting they intend to increase MHC service usage over the following year. Cloud-based UC services are a key method for reducing the complexity of your UCC deployment. For this strategy to be successful, follow these steps when building a UCC strategy:

1. Take a complete inventory of your infrastructure assets and network, staff skills and capabilities, and total cost of ownership, and understand how your IT strategy aligns with your business plan.
2. Decide which UC components should be outsourced, and determine return on investment (ROI) and service-level expectations.

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3. Create a plan outlining key milestones, skills requirements and cutover priorities.
4. Choose a financially viable provider with a good track record of quality and responsiveness that can fill in where your internal team is weak.

Once your UCC plan is implemented, and end-user training is complete, ensure that you can show ROI in terms of reduced travel, enhanced productivity and end-user satisfaction. This should be easy to do since collaboration, both inside and outside the company, will be greatly enhanced due to carefully planned unification.

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