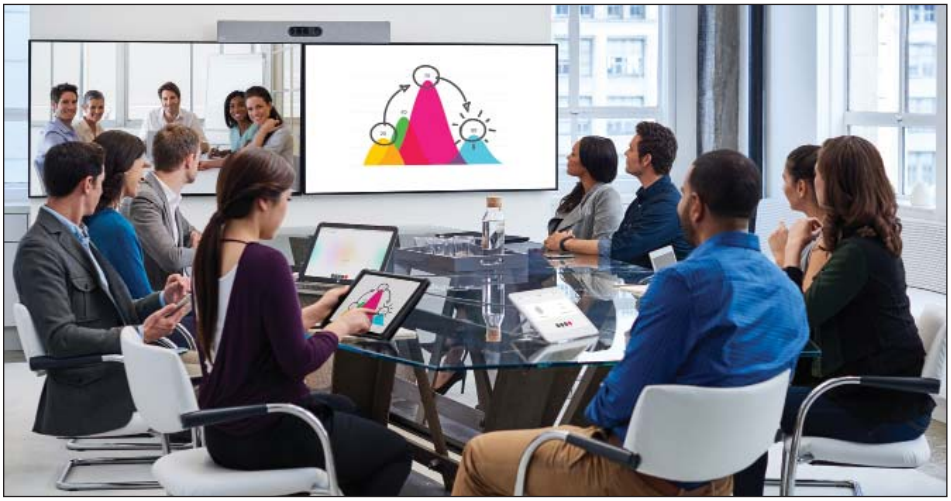
Tech Outlook

May 2017

PROSYS
A PIVOT COMPANY

Fresh Meet

Revitalize meetings with Cisco Spark's cloud-based collaboration tools.



Business meetings are widely derided as a waste of time. Economist John Kenneth Galbraith once said that most meetings are held "not because there is business to be done, but because it is necessary to create the impression that business is being done." Management consultant Peter Drucker said "one either meets or one works — one cannot do both at the same time."

Such assessments may be overly harsh, however. Effective meetings create opportunities to connect, collaborate and exchange ideas with peers. At a time when mobile and remote workers are becoming increasingly isolated from coworkers, one could argue that meetings have never been more important.

"Studies show that mobile workers will soon make up 75 percent of the total U.S. workforce," said Jeff Jennings, Pivot Director of Advanced Services. "While mobility can deliver huge benefits in terms of productivity and innovation, we must also recognize that it fundamentally changes what we know about organizational dynamics. Businesses need some sort of meeting platform to ensure their people can continue to share information and build relationships with their customers and colleagues.

"The key is making sure you aren't wasting anybody's time. You must be able to conduct effective meetings among remote employees, allowing them to share files, send messages and collaborate from anywhere across a variety of devices."

The Spark Difference

Video and web conferencing solutions have been around for years, but the vast majority of the collaboration platforms available today have significant shortcomings. Research has shown that organizations waste about 15 minutes per meeting because of ineffective technology. Teams waste valuable time distributing links and access codes, downloading software and grappling with balky technology.

continued on page 2

TECH OUTLOOK

PRSRT STD
U.S. POSTAGE
PAID
Tulsa, OK
Permit No. 2146

continued from page 1

Cisco Spark is rapidly evolving as a frictionless collaboration experience. Launched two years ago, Spark is a cloud-based service that was designed from the ground up to blend messaging, meeting and calling into one powerful application that works seamlessly across devices and endpoints.

While most collaboration platforms require the use of disconnected tools for messaging, virtual meetings and phone calls, the cloud-based Spark solution delivers all of those core services as an integrated user experience that is intuitive and simple to use. Unlike other systems that require directory federation, dedicated lines or custom software to collaborate with people in other organizations, Spark works across any network on any device.

For instance, users can turn a phone call into a video meeting with a single click. One swipe moves the video call from a desk phone to a room system to a mobile device. Other team members can be invited to the meeting space where they can collaborate and share content. All notes, comments, documents and to-do lists are saved to the team space for easy access.

Spark also enables users to make calls to any other Spark user as well as landlines and mobile phones. Users can receive calls from the Spark app on their mobile phones or desktops or from any desk phone connected to the Spark service. Messaging is universal — users can enter anyone's email address in order to exchange messages.

Extending Access

Cisco recognizes that organizations have a lot invested in phone systems and other on-premises equipment. Cisco Spark Hybrid Services connects this equipment to Cisco Spark in the cloud so users can add meetings and messaging. For example, placing a call from a Cisco IP phone would automatically create a meeting in the Spark room shared by the two users. Cisco calls this a "zero-touch meeting" because no one has to set it up.

"Spark Hybrid Services can also link on-premises calendar servers to the cloud, making it easier to arrange and join meetings. Users simply type "@spark" or "@webex" into the location line when creating an invitation. Spark will automatically start a room for the group and insert meeting details into the invitation," Jennings said.

Security is a traditional barrier to cloud service adoption, but Spark features end-to-end encryption along with an open architecture for the secure distribution of encryption keys. The service encrypts messages, files and conversations on a user's device before sending them to the cloud. The content remains encrypted until it is unencrypted on the recipient's device. Cisco also offers an extra level of security by limiting access to authorized and authenticated recipients.

Cisco continues to introduce new innovations for Spark. In January, Cisco introduced Spark Board, a smart whiteboard that allows users to wirelessly present content, collaborate via a whiteboard, and conduct video and audio conferences. In March, Cisco unveiled new video collaboration hardware, advanced security options and streamlined meeting capabilities.

Getting on Board

With tight integration with the Spark cloud platform and ultrasound wireless pairing technology, Spark Board is an elegant replacement for large-format video conferencing solutions. Users with the Spark app on a mobile device can simply walk up to a Spark Board and be recognized and connected. There's no need for Bluetooth or special Wi-Fi or network connections. Plus, it delivers so much more than video. Any member of the conference who has the Spark app can draw on the screen in real time, either on the whiteboard itself or from a remote mobile device. Conference members can edit material simultaneously, and all content is saved instantly so that the whole team can share.

"Honestly, it's an amazing device," said Jennings. "There are no wires, no microphones — there aren't even any controls on the board. It's a theater-quality touch screen that you just mount on the wall and plug in. It is so much easier and more functional than traditional conferencing products."

With the recent introduction of the Cisco Spark Room Kit Series, Cisco extends the Spark experience to organizations that have already invested in room-sized video conferencing solutions. The two new products — Cisco Spark Room Kit and Room Kit Plus — attach to standard HD screens and convert them into powerful video collaboration systems.

Cisco has also made it easier to connect to a Spark meeting by creating a uniform resource identifier (URI) for all Spark spaces. Based on the Session Initiation Protocol (SIP), the URI allows people to join meetings from any standards-based SIP hardware or software client. This means that people with third-party softphones, legacy conferencing products and other video conferencing endpoints can participate in Spark meetings.

"Complexity has been the chief shortcoming of most collaboration platforms," said Jennings. "People lose patience with systems that require dedicated lines, access codes, multiple passwords, directory modifications and such. Real-time meetings lose their value when people become frustrated with the process.

"People just want to communicate, regardless of the platform or the device. Cisco understands that people who use technology aren't necessarily technology people. With Cisco Spark, they've taken a lot of the complexity and confusion out of collaboration technology."

News Briefs

Video Conferencing Gains Momentum

Video conferencing is becoming an increasingly important element of the unified communications (UC) toolkit, with most medium and large organizations looking to integrate video into their communications infrastructure over the next year, according to a survey from analyst firm IHS Markit.

The survey of 207 North American firms found 86 percent plan to be actively using video conferencing as part of their UC by February 2018. That's a slight increase over the previous year's projections.

Video conferencing adoption through PBX and UC systems is on the uptick since they provide a more cost-effective, high-quality experience compared to dedicated room-based systems, according to the survey. And as video conferencing becomes more readily available, businesses are using it to enhance interactions among employees, partners and customers.

Aside from conferencing, video is also taking on different forms within unified communications. For instance, video communications can be embedded into business applications to improve workflows. Additionally, "huddle rooms" have offered a new frontier for video deployments. These are small conference areas equipped with audio and video systems for small groups to conduct impromptu meetings to collaborate on projects.

Aging Circuit Interface Gets Update

The MIPI Alliance, an international organization that develops interface specifications for mobile and mobile-influenced industries, recently released the MIPI I3C Improved Inter-Integrated Circuit — a specification that streamlines sensor integration in smartphones, wearables, Internet of Things (IoT) devices and automotive systems.

The I3C is designed to replace aging circuit designs that are nearly 40 years old. The I2C was developed in 1982, and the Serial Peripheral Interface (SPI) dates to 1979. While those communication buses have driven short-range communication between circuits and microcontrollers for decades, they are becoming inadequate for today's bandwidth-hungry smart devices, wearables and computers.

The I3C can be used to build smartphones, virtual-reality devices, robot drones, medical instruments, autonomous vehicles, industrial equipment, all-in-one computers, TV remotes and more. It specifies a chip-to-chip interface that can connect all sensors in a device to the application processor, and uses a fraction of the power while providing more than an order of magnitude greater bandwidth compared to the I2C.

"Today's smartphones and wearable devices integrate a wide array of sensors into small form factors," said Justin McGloin, Senior Director, Sensors Group, Qualcomm. "I3C will allow integration of greater numbers and types of sensors into these types of devices through reduced connections and faster speeds. We expect that I2C components will quickly move to support compatibility with I3C if they do not do so already today."

Tech Outlook

Editorial Correspondence:
10221 E. 61st Street
Tulsa, OK 74133
Phone (800) 726-7667
Fax (918) 270-7134

Change of Address: Send corrected address label to the above address.

ProSys locations

Atlanta, GA
(Headquarters)
Phone: 678-268-1300
Toll-Free: 888-337-2626
chash@prosysis.com

Atlanta, GA
(Integration Center)
Phone: 678-268-9000
Toll Free: 888-337-2626
twheless@prosysis.com

Austin, TX
Phone: 512-658-5847
Toll Free: 888-337-2626
jwestmoreland@prosysis.com

Birmingham/Montgomery, AL
Phone: 205-314-5746
Toll-Free: 800-863-9778
birminghamsales@prosysis.com

The Carolinas
Toll-Free: 888-337-2626
chash@prosysis.com

Indianapolis, IN
Phone: 317-688-1283
Bill.sanders@prosysis.com

Knoxville, TN
Phone: 865-310-8843
Toll-Free: 800-863-9778
info@prosysis.com

Louisville, KY
Phone: 502-719-2101
Toll-Free: 800-863-9778
info@prosysis.com

Mexico City
Phone: +52 (55) 3601 3755
info@prosysis.com

Miami, FL
Phone: 305-256-8382
Toll-Free: 800-891-8123
lspivack@prosysis.com

Mid-Atlantic
Phone: 800-634-2588 ext 2
midatlantic@prosysis.com

Nashville, TN
Phone: 615-301-5200
Toll-Free: 800-863-9778
info@prosysis.com

New England
Toll Free: 800-634-2588 ext 1
newengland@prosysis.com

Seattle, WA
Phone: 425-939-0342
sballantyne@prosysis.com

Tampa, FL
Phone: 813-440-2410
800-891-8123
lspivack@prosysis.com

Most Organizations Are Adopting Multiple Clouds

It seems almost quaint that organizations once wondered whether they should move to the cloud. Today, virtually every organization is using some form of cloud, with the vast majority adopting a multi-cloud strategy.

As the name implies, a multi-cloud model involves the use of more than one cloud service. It's not the same as a hybrid cloud, in which public and private clouds are integrated into a common management framework. Multi-cloud simply means that organizations are implementing multiple cloud platforms and providers to support various infrastructure and application needs.

According to the RightScale 2017 State of the Cloud Report, 85 percent of enterprises have a multi-cloud strategy, up from 82 percent in 2016. On average, organizations are using 1.8 public clouds while experimenting with 1.8 more, and leveraging 2.3 private clouds while experimenting with 2.1 more.

Survey respondents say they've moved 41 percent of their workloads to the public cloud and 38 percent to private clouds. Overall, the challenges associated with cloud adoption have also declined since the 2016 report.

"The RightScale 2017 survey showed that enterprise multi-cloud and hybrid cloud adoption continues to grow, and even with that growth, challenges are decreasing," said Michael Crandell, CEO of RightScale. "Companies report using eight different clouds on average. Optimizing cloud costs is the top cloud initiative. Cloud challenges, including security concerns, continue to abate."

Strength in Numbers

There are sound business reasons for implementing a multi-cloud strategy. The use of multiple clouds enables organizations to select the cloud service that best meets the requirements of a particular application or workload. Organizations can also leverage cloud services in multiple ge-

ographies, which can reduce latency by placing applications, services and content nearer to end-users, and meet increasingly stringent data sovereignty requirements of government and industry regulations.

In addition, the multi-cloud model can reduce the risk of downtime through redundancy. Although service provider outages are not as common and pervasive as they once were, the potential risk to customers is greater than ever. As organizations continue to migrate more mission-critical workloads to the cloud, an outage or performance degradation can severely damage their operations.

Despite these advantages, a multi-cloud strategy creates management and operational challenges. In the RightScale report, expertise, security and spending tied for No. 1, each cited by 25 percent of respondents as a major concern.

Although the cloud masks some IT complexity, it does not eliminate the operational burden. Organizations must dedicate time and resources toward learning and managing the cloud platforms they use. Furthermore, traditional siloed IT operations are not conducive to effective cloud management. A multi-cloud strategy demands a cross-functional team capable of monitoring, optimizing and securing multiple platforms and tiers across hundreds of applications.

Keeping Costs in Check

At a more functional level, a multi-cloud strategy increases the difficulty of integrating cloud services with existing IT infrastructure. Organizations that rely upon the open Internet for cloud connectivity lack secure, reliable and scalable access to a multi-cloud environment. However, respondents to this year's RightScale survey were less concerned about security than they were in 2016.

According to the report, more organizations are focusing on managing cloud costs. In fact, optimizing cloud costs is the top initiative across all cloud users (53 percent), particularly among mature cloud users (64 percent). Twenty-four percent of mature cloud users cited costs as their top cloud challenge.

Survey respondents estimate that 30 percent of their cloud spend is wasted, while RightScale has calculated actual waste to be between 30 percent and 45 percent. Despite an increased focus on cloud cost management, however, relatively few companies are taking critical actions to reduce expenditures, such as shutting down unused workloads or selecting lower-cost clouds or regions.

It's not clear whether organizations consciously adopt a multi-cloud strategy, or simply wind up there by implementing multiple cloud platforms. Either way, the multi-cloud model can deliver a number of business benefits, even if it forces organizations to rethink many aspects of their IT environment and operations. Today, the question isn't whether to move to the cloud but how many different cloud services to use.

Virtual Groundwork

Virtualization helps SMBs create a path to more effective digital initiatives.

The idea of harnessing emerging technologies to achieve "digital transformation" is appealing to small and midsize businesses (SMBs), but they struggle when it comes to actually developing a strategy for achieving that goal. Various industry studies show that although SMB decision-makers are eager to improve the way they use technology and data, most say their digital initiatives have been ineffective.

A recent IDC survey of 3,900 SMB leaders across 13 countries spanning a variety of industries finds that less than 7 percent are deriving any tangible benefits from digital initiatives designed to optimize processes and workflows.

"SMBs globally are increasingly recognizing the benefits of digital transformation and continue to add advanced technology resources," said Ray Boggs, vice president, small and medium business research, IDC. "But the challenge is in connecting different technology areas for maximum impact. Firms that do that tend to grow faster and be more successful in an increasingly competitive environment."

Lacking the budgets and resources of enterprise-scale organizations, SMBs typically don't have the expertise or manpower to develop and implement a comprehensive strategy. Another problem is that SMBs have traditionally been overly reliant upon consumer-grade technology that isn't designed for their needs.

Creating Efficiencies and Opportunities

Virtualization in all its forms — including server, desktop and application virtualization — could be the catalyst that pushes SMBs toward meaningful digital transformation. Specifically, virtualization lays the groundwork for new and exciting ways to consolidate infrastructure, improve resource utilization and streamline administration. This not only allows SMBs to reduce their IT costs, but opens the door to a range of solutions that improve mobility, collaboration and innovation.

Companies that leverage virtualization to modernize their infrastructure are experiencing up to three times the rate of growth in revenue, customer retention and profit as those that haven't, according to IDC. These companies have also deployed twice as many digital transformation initiatives compared to companies with legacy networks.

Server virtualization is particularly useful in allowing SMBs to consolidate hardware costs by eliminating the need to deploy a physical server for each application. This makes it far more feasible to invest in business-grade hardware, including hyper-converged infrastructure that combines unified management with virtualized compute, storage and networking.

Desktop virtualization dramatically changes the way SMBs deploy and manage end-user desktops. It enables mobility initiatives by allowing virtual desktops to be controlled and delivered from centralized servers, allowing end-users to access a personalized environment via a wide range of devices from any

location. This also improves data security and simplifies the process of updating applications, distributing security patches and onboarding new employees.

Application virtualization also promotes mobility by allowing apps to operate across a variety of different devices and operating systems. For instance, app virtualization can extend Windows applications to non-Windows clients such as iOS, Android and Linux devices.

Help Wanted

Despite the demonstrated benefits of virtualization, many SMBs lack the manpower and the expertise to fully exploit its possibilities. A ScaleComputing survey found that organizations with IT staffs of fewer than 10 employees struggle with daily troubleshooting requirements and managing virtualized resources.

Working with an experienced managed services provider (MSP) can be an effective way to achieve the benefits of virtualization without overloading in-house IT staff with new responsibilities. The processes and expertise gained through numerous virtualization projects give providers the proficiency to design, implement and support a broad range of virtualized environments.

Additionally, this expertise allows MSPs to offer a wide range of complementary services that can help companies boost efficiency, move appropriate workloads to the cloud, and leverage a modernized infrastructure for competitive advantage. For instance, a provider can help leverage the cloud to provide practically limitless capacity for virtual workloads. In the event of traffic spikes, virtual servers can be quickly provisioned without the need for additional hardware, and "cloud-bursting" to cloud storage can enable dynamic scalability.

A provider can also help ensure the availability of virtualized applications through policy-based prioritization of compute, network and storage resources. Outages can be minimized, if not eliminated completely, by automatically shifting apps to a different virtual machine.

Long a mainstream technology for large, enterprise organizations, virtualization is rapidly gaining acceptance among SMBs that recognize the technology's undeniable benefits. They also understand that virtualization is a building block for cloud computing and a key enabler of the modern IT infrastructure. Nonetheless, designing, implementing and managing virtualized resources can be challenging for companies with limited IT expertise and manpower. A qualified MSP can help ease the burden and deliver the operational and competitive benefits of a sound virtualization strategy.

Virtualizing Unified Communications

Virtualization cuts costs and improves efficiency by allowing organizations to decouple applications from hardware, eliminating the need to have a dedicated server for each individual application. Instead, several different applications can run on a single machine, all isolated by virtual partitions.

This didn't always work well for unified communications (UC) due to latency issues created when multiple apps share server resources. Processing and throughput limitations of early hypervisors created intolerable performance degradation for real-time applications such as voice and video.

Hypervisor improvements have largely eliminated these limitations, however. By separating call processing, which occurs in a virtual machine (VM), from voice streaming, which is transmitted directly between two endpoints, phone systems can be virtualized without compromising call quality.

As a result, UC virtualization now delivers all the benefits of traditional server virtualization, including reduced capital expenses, improved efficiencies and reduced risk. Organizations can also reduce energy, maintenance and support costs as a result of having less server hardware and software. And when voice is just another application within the virtualized environment, security becomes simpler, and users can communicate and collaborate from any device and location.

Virtualization also creates an easier path to UC for small to midsized businesses (SMBs) through a reduced form factor. Purpose-built virtual UC appliances eliminate some of the hardware restrictions of server-based systems, providing a smaller physical footprint with a lower cost of entry for SMBs.

"We've seen huge customer demand for virtualization, but fear of virtualization's performance penalty used to be the single hurdle that kept many IT managers from running real-time applications like voice in a virtual environment," said Dieter Rencken, senior product manager, ShoreTel. "The latest generation of virtual technology means that there's virtually no performance penalty."

Cisco Spark

Get things done from anywhere in the world

Cisco Spark is an app-centric, cloud-based service that provides a complete collaboration suite for teams to create, meet, message, call, whiteboard and share in one continuous workstream. Delivered entirely from the Cisco cloud, Spark is easy to use and easy to manage. And it's offered on a simple subscription basis, so you can add services on demand, in the cloud or on-premises. **Contact ProSys to learn more.**

PROSYS
A PIVOT COMPANY

www.prosysis.com 888-337-2626