



Technology Guide:

HOW TO SELECT THE RIGHT TECHNOLOGY FOR REMOTE AND LOCAL COLLABORATION





INTRODUCTION: MORE MOBILITY MEANS MORE REMOTE COLLABORATION

Whether businesses like it or not, it's getting harder to keep employees tied to their desk. Research shows that by 2020 a third of office workers will no longer be based in a traditional office. Instead, they will be working from home, in the field, and while traveling.ⁱ

Advances in technology have made employees more mobile and drastically increased the number of remote workers. Businesses that want to attract and keep talent must provide an environment that allows for employee mobility—otherwise, the talent will go where they can maintain flexibility and use cutting-edge technology to do so. To remain competitive and agile in today's marketplace, 90 percent of U.S.-based companies offer or plan to expand remote work options.ⁱⁱ

As part of the transition to a more mobile workforce, workspaces are undergoing their own transformation. Video collaboration is no longer confined to the meeting room or even the office itself. Audio, video, and content-sharing capabilities have been extended to employees wherever they may be and on whatever device and operating system they may be using.



Modern Organizations Need Flexible Work Arrangements:

79% believe senior management can be more productive if they work flexibly

43% of firms offer special training to help management better manage remote workers

29% of firms are offering more flexible work arrangements to attract talentⁱⁱⁱ





THE EXPANSION OF REMOTE COLLABORATION

Remote collaboration is seen by many organizations as a way to offer more flexible work arrangements and infuse the business with more agility. However, historically, remote collaboration technology was only available in large, expensive conference rooms equipped with proprietary hardware-based appliances. Not only did this arrangement cap scalability and take up valuable rack space in data centers, companies were left having to manage multiple hardware service agreements and employ additional specialized staff. The cost of all this limited the extent to which they could make remote collaboration available across the organization.

However, by moving to a cloud service model, companies no longer have to employ a large number of highly skilled individuals to administer and manage expensive on-premise applications and appliances. Through cloud services, including unified communications and collaboration (UCC) solutions, companies not only reduce overhead and inventory, they gain access to the latest technology, can scale according to usage, and can provide a platform that allows for the ability of any user on any device and operating system to connect.

What's more, as the proliferation of the cloud persists, end users—and not IT—are driving the trends. Executives are making application decisions to increase efficiency, and users want technology that allows them to collaborate easily, effectively, and securely using these applications.

Trends in Unified Communications and Collaboration

IDG's recent research reveals that:

- In the upcoming year, 56% of enterprises and 66% of SMB companies have plans to upgrade their UCC solutions.
- In the next two years, companies plan to move UCC tools to cloud-based and hybrid models.
- Security, ease of use, and total cost of ownership rank highest in importance when companies evaluate UCC solutions.^{iv}



Typical remote collaboration technologies include video conferencing, displays, video cameras, microphones, and content presentation solutions with any-to-any connectivity.

THREE WAYS TO DEPLOY REMOTE AND LOCAL COLLABORATION

There are three primary ways that collaboration spaces are used in the modern office. Here's a look at the most common uses for collaboration spaces and the types of activities these spaces need to be able to facilitate:

AD-HOC OR PLANNED MEETINGS

Today, 35 percent of all meetings are impromptu and that number is expected to grow.^v And, employees confirm this research, with 40 percent of employees saying that over the past two years they have been holding more impromptu meetings than previously.^{vi} At the same time, there is also the need for planned, small meetings with participants that may be working remotely, either at home or out in the field.

To make these types of one-to-one or small group remote meetings successful, ease of use is key. Therefore, the technology must provide user-friendly interfaces that can schedule and start calls with a simple click and professional-quality audio and video every time. Because productivity is a central pillar around planned or last-minute small group remote collaboration, if the technology causes delays or doesn't work properly, employees will stop using the technology or switch to another platform with or without IT's permission.

Real-World Collaboration: Don't Be Tied Down

The Cisco Spark Room System is not only a way to tie all of your office collaboration tools together, but the mobile app lets you work on the go. Whether you are working remotely or just can't sit still, the app allows you to answer calls, chat with anyone, share content, and receive notifications. You can even use the app on your phone to walk into a meeting room and start a video conference on the room's display.



COLLABORATION SESSIONS

Whether meetings are scheduled or not, a frequent use of remote collaboration is to meet with peers or clients to collaborate on specific projects. In these instances, meeting participants will frequently need the ability to use video as well as chat capabilities, and any-

Real-World Collaboration: Collaborate at a Moment's Notice

The VIA Connect PRO is read for collaboration at any time. The wireless connectivity and easy-to-use design mean users don't waste time setting up or getting connected. Mirroring for iOS and Android simplifies sharing. Ease of use doesn't mean security is sacrificed, as it features user authentication, 1024Dbit encryption, and dynamic room code.

to-any connection capabilities. Content sharing for all participants, the ability to annotate both locally and remotely, and to record and save the work that is generated throughout the collaboration session are all critical components of making a collaboration session as productive as possible.

VIRTUAL MEETINGS

Dispersed teams, a more mobile workforce, and an increase in remote workers make remote collaboration a common occurrence among business teams. Today, 32 percent of all meetings are virtual, with young workers (age 26-35) reporting an even higher number of

virtual meetings (38 percent).^{vii} Not surprisingly, many workers are connecting to these remote meetings via a number of devices—smartphones, tablets, laptops, or desktop, and even from a number of operating systems, such as Android or iOS.

To make these remote collaboration meetings productive and effective requires a cloud-based video conferencing solution that makes scheduling virtual meetings easy and allows local and remote participants to connect via any device. Additionally, these meetings need the ability to present and share content remotely,

Real-World Collaboration: Everyone Gets Seen and Heard

Using the Polycom® RealPresence Centro™ ensures everyone stays on camera and gets even audio coverage. The integrated directional microphones capture audio from anywhere in the room, and 360-degree video technology means no one gets cut out of view and remote participants aren't stuck staring at a table. You can even share content right from your smart phone.

including annotation capabilities, and the ability to record and save the work. Security is another priority; as confidential information may be shared among meeting participants. Finally, because these meetings may involve small groups or large groups of participants, the ability of a remote collaboration solution to scale can be important.



ASSESSING YOUR CONFERENCE ROOM NEEDS

Just as employees have high expectations around being allowed to work flexibly, whether remotely from home or via mobile devices in the field, employees also have high expectations that the user experience with the technology be seamless.

As Office 365 continues to grow as the most common suite of business applications, traditional scheduling mechanisms are being replaced by applications like Microsoft Outlook. Similarly, Skype for Business (Skype4B), is rapidly becoming one of the leading enterprise communications solutions. While Microsoft Enterprise Licensing has made it easy to deploy Skype4B, it has simultaneously forced other unified communication vendors to integrate with Microsoft. However, this has been a challenge since Skype4B uses a proprietary protocol. In fact, other vendors have had to form partnerships with Microsoft to continue to operate in the industry.

Organizations that already rely on Skype4B will need to decide whether to extend this application into meeting rooms. They should also weigh considerations such as a solution's security, scalability, and reliability, as well as productivity enhancements like content sharing and annotation capabilities.

The chart below includes a comprehensive list of remote collaboration features users may need to productively collaborate with remote peers. Use the chart to assess and score how important each of these requirements/technologies will be to your own environment and working needs:

Need	Importance (Scale 1-10)	Need	Importance (Scale 1-10)
Any-to-any capabilities	<input type="text"/>	Record and save calls	<input type="text"/>
Scalability	<input type="text"/>	Screen sharing	<input type="text"/>
High reliability	<input type="text"/>	Document sharing	<input type="text"/>
Calendar integration for scheduling calls	<input type="text"/>	Annotate/brainstorm on interactive display	<input type="text"/>
Presence capabilities	<input type="text"/>	Integration with UC solution	<input type="text"/>
Instant message/chat	<input type="text"/>	Secure connection	<input type="text"/>



TECHNOLOGY SOLUTIONS FOR REMOTE AND LOCAL COLLABORATION

There are a number of different solutions on the market for remote and local collaboration, making it a challenge to determine what is the most appropriate and cost-effective solution for your unique business needs. To help, we've highlighted a variety of technology solutions that can meet your needs and your budget.

The focus of this guide is enterprise solutions. While there are commercial-grade solutions, such as Google Hangouts or Skype, on the market that can meet some of the same end-user needs, these solutions often come with limitations that impact the overall quality of the experience and are therefore not typically appropriate in a professional business setting. For example, a commercial-grade remote collaboration solution can create bandwidth issues, result in a poor audio experience, and it may lack the required security protocols.

Below is a brief description of some of the various remote and local collaboration solutions you may want to deploy as well as a comparison chart of what features each solution offers:

CISCO SPARK

With a user-friendly interface, the Cisco Spark allows users to meet, message, or call from the cloud. Users can easily and quickly move from one type of communication to another—turning a phone call into a video meeting with content sharing, or switching from a room system to a mobile phone—all with a single click. Its ability to connect local calendar servers to the cloud also allows users to automatically start meetings or join from mobile devices.

KRAMER VIA CONNECT PRO

Presenting and sharing in meetings with remote and local participants is easy with this wireless



presentation and collaboration solution. From any laptop or mobile device, users can share files, chat with individuals or multiple participants simultaneously, or view, edit, and comment on documents in real time. The main display can share up to four screens or turn into a digital whiteboard for annotating.



BARCO CLICKSHARE

The Barco ClickShare is a collaboration solution for those looking for a secure connection that



doesn't reside on the network. It allows end users

to share content from a computer, laptop, or mobile device over a Wi-Fi signal. Content is projected onto a TV, projector, or monitor in high definition with a video quality of 30 fps. The ClickShare enables up to 64 people to connect at one time, provides excellent audio and video, and is protected by a secure signal—all without affecting the bandwidth or connectivity of existing wireless networks.

PEXIP

By linking multiple nodes to form a mesh of interconnected servers, Pexip provides almost limitless scale when multipoint conferencing. Its deployment of nodes in disparate geographical regions limits bandwidth because users connect to the closet node. It reliably connects with video, audio, and web conferencing by any other technology, making it an option for geographically dispersed work teams.

POLYCOM® REALPRESENCE CENTRO™

Designed as a collaboration and content-sharing hub for local and remote work teams,



the Real Presence Centro's intelligent 360° camera captures everyone in the room, even if you're moving

around the room. Integrated microphones and powered speakers provide high-quality audio, while content sharing capabilities allow local and remote teams to share, annotate, and save content. Integration with Microsoft Outlook also makes it easy to start collaborating with one touch.



Requirements	Barco ClickShare	Cisco Spark	Kramer Via Pro	Pexip	Polycom RealPresence Centro
Any-to-any capabilities	X	X	X	X	X
Scalability	X	X		X	
High reliability (reduces reliance on bandwidth)	X			X	
Schedule calls and calendar integration		X			
Presence capabilities					
Integration with UC&C solution	X		X	X	X
Instant messaging		X	X		
Record and save calls					
Integrate with physical room's interactive display	X		X	X	X
Screen sharing	X			X	X
Document sharing	X	X	X		X
Annotate content/brainstorm			X		X
Secure connection			X	X	

CONCLUSION

With so many options on the market, it can be difficult to determine the best solutions for your remote and local collaboration needs. A qualified AV integrator, such as AVI Systems, can help determine what solution will provide the best experience for your users, meet your requirements, and be most cost-effective.

To learn more, contact AVI Systems at 855-521-0050 or www.avisystems.com.



ABOUT AVI SYSTEMS

Founded in 1974, AVI Systems is currently the nation's fourth-largest AV solutions provider, and the only 100% employee-owned one.

Our success owes in great part to having the most highly credentialed, capable and motivated work force in the AV industry. The strength of our process, the unparalleled support we offer, and our conviction that technology should liberate, not impede, are also foundational to our success.

By working together, we remove communication barriers instead of creating them, freeing our customers to seize opportunity, and imagine new possibilities. This is our definition of Communication Liberation, and it's reflected in the incredible diversity of AV solutions we provide for business, commercial, educational and government clients across America.

ABOUT KRAMER



Kramer has been on the leading edge of Pro AV innovation for over 35 years. With hundreds of employees and partners serving thousands of customers across six continents, we remain committed to delivering smart technology products and solutions for a wide variety of markets and applications.

ABOUT CISCO



Cisco is the worldwide leader in IT that helps companies seize the opportunities of tomorrow by proving that amazing things can happen when you connect the previously unconnected. At Cisco customers come first and an integral part of our DNA is creating long-lasting customer partnerships and working with them to identify their needs and provide solutions that support their success.

ABOUT POLYCOM



Polycom helps organizations unleash the power of human collaboration. More than 400,000 companies and institutions worldwide defy distance with secure video, voice and content solutions from Polycom to increase productivity, speed time to market, provide better customer service, expand education and save lives. Polycom and its global partner ecosystem provide flexible collaboration solutions for any environment that deliver the best user experience, the broadest multi-vendor interoperability and unmatched investment protection.



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