

DELIVER THE MODERN MEETING EXPERIENCE

The evolution of technology and meeting spaces offers a higher level of workplace collaboration.

Video solutions are now essential for supporting remote workers, connecting far-flung employees and making meetings more productive.

EXECUTIVE SUMMARY

The workplace has evolved considerably over the past decade. Meeting spaces need to keep up.

Today, more and more employees are working remotely, giving rise to a pressing need to create more meaningful and deeper connections between colleagues via collaboration tools. At the same time, video solutions finally made significant inroads with the consumer market, resulting in a workforce that not only accepts video solutions, but has even come to expect them.

To enable effective video collaboration, organizations must make strategic investments in a range of technologies — including video displays, software platforms, advanced cameras and audio solutions — and then connect these tools in ways that both ensure compatibility and lead to tangible business benefits. Above all, video solutions need to provide end users with a simplified, seamless experience that helps to boost their productivity and easily connect with colleagues and clients.

The Evolution of Meetings and Meeting Spaces

Only a decade or so ago, some business and IT leaders were skeptical that video collaboration would ever catch on.

Video calling had been something of a pipe dream ever since AT&T first demonstrated the solution at the 1964 New York World's Fair, but it seemed like the reality of the technology would never catch up to the vision of crisp, clear video conversations with loved ones and colleagues around the world. There were simply too many hurdles related to connectivity, data processing, resolution and other technological limitations. Even just a few years ago, news outlets were running stories with headlines like "[Four Reasons Video Calling Is Horrible](#)" and "[The Videophone Turns 50: The Historic Failure That Everybody Wanted](#)."

But a few years later, grandparents routinely use FaceTime and Google Hangouts to watch their grandchildren dance, and businesses are installing large, ultra-high-definition (UHD) video displays that create an immersive environment for collaboration.

At the same time video solutions are coming into their own, many knowledge workers are beginning to view their own organizations' wonky audioconferencing tools as inhibiting collaboration, creating a suddenly pressing need for video within the enterprise. Merely joining a group audio call is often a

cumbersome process, one that is typically followed by several rounds of "Who just joined?" and "I'm sorry, did you cut out, or did you forget to take yourself off mute?" On audioconferences, participants have no way to gauge each other's interest or read nonverbal cues. They can't tell if other parties are truly invested in the meeting, or if they're checking email or surfing the web. The limitations of voice calls are even more apparent when a customer or a colleague tries to describe a problem with a product and has no visual way to communicate information.

Make no mistake: Many organizations are continuing to iron out kinks in their video solutions — especially organizations that have older video equipment or network infrastructure, or those that are struggling to integrate a number of disparate systems. And although people are becoming more comfortable with video solutions (which the youngest members of the workforce have been using for much of their lives), it can still be a challenge to drive adoption among employees who either feel self-conscious on screen or are simply intimidated by something new. According to a [Forbes Insights survey](#), 32 percent of IT decision-makers cite end users' reluctance to "break existing habits" as an inhibitor of videoconferencing adoption.

Overall, though, video collaboration is clearly trending upward. According to Forbes Insights, 62 percent of companies are already running three or more video collaboration solutions, and executives cite benefits including an improved sense of connectedness for remote workers, improved team effectiveness and stronger customer relationships.

Once companies break down the cultural and technological barriers holding employees and executives back, video solutions have the potential to simplify meetings, improve their quality, increase engagement, reduce costs and improve employee collaboration. Consider the "can you hear me now?" confusion of audio-only conference calls. According to one survey, businesspeople waste an average of 15 minutes per conference call simply getting started or dealing with distractions, [costing companies \\$34 billion a year](#) in wasted time. Moreover, anyone who has participated in an audio-only conference call with more than three or four participants can attest to how difficult it often is to determine who is talking, or even to break into the conversation. As a result, more peripheral participants in voice-only conferences tend to disengage.

Video collaboration tools present a clear contrast, offering participants the ability to immediately see who is on the call, determine who is talking at any given time, read body language and other nonverbal cues, and signal when they have something to say. This is especially true of the latest generation of solutions, which offer features including UHD displays, smart scheduling software, screen-sharing capabilities and automated camera systems that shift angles to give remote participants the best possible experience. These features represent a leap forward (rather than an incremental improvement) over previous generations of video collaboration technology, which were plagued by low resolution, glitchy feeds and stationary

Three Top Benefits of Modern Meeting Spaces

When establishing goals for a video collaboration investment, organizations should start with these benefits, outlined in the Samsung white paper "[Modernizing Meetings: The Ultimate Guide to Conference Room Technology](#)."



Space: According to some estimates, the average cost per employee office seat is more than \$32,000 per year, giving companies a powerful financial incentive to encourage remote work. In addition to connecting remote users to the office, video solutions can generate analytics that help companies to right-size the amount and type of space needed for offices, resulting in further savings.

Time: When organizations employ older audio or videoconferencing equipment, meeting leaders frequently need to arrive to meetings 15 to 30 minutes early simply to ensure that the right equipment is in place (and in working order). Modern solutions are more reliable and can help cut down on this unproductive time.

Resources and productivity: Large organizations with many meeting rooms often employ IT or audiovisual staffers whose sole job is to facilitate meetings — for example, helping to connect projectors with laptops and finding appropriate adapters for different displays. More seamless solutions eliminate these tasks, allowing staff to focus on higher-value projects.

cameras — creating an experience that didn't provide a substantial enough upgrade from voice-only calls to convince many organizations and users to move away from traditional conference calls.

More and more organizations are finding that video solutions now provide a real alternative to in-person collaboration, with a wide array of high-value use cases that vary across industries. School and hospitals, for instance, are using video for distance learning and telemedicine. Large enterprises are freeing up money in their human resources budgets by interviewing candidates via video rather than flying them across the country and are reducing travel expenses by moving some companywide or executive-level meetings to video. Some startups even forgo in-person contact entirely, substituting video collaboration tools for physical headquarters.

Often, when executives and employees try out the latest video solutions, they're struck by the extent to which the technology seems to disappear during meetings. That is to say, the technology is so seamless that participants are able to shift their attention away from the cameras and screens and keep their focus on the content of their conversations.

The Technology of the Modern Meeting

To leverage video collaboration in ways that create real business value, it's important for organizations to adopt effective hardware, train users on simple (but powerful) software solutions and implement robust connectivity. Enterprises that skimp on supporting technologies run the risk of burdening users with buggy, inconsistent meetings — or, worse, watching as their meeting rooms sit empty. In a white paper titled "[Modernizing Meetings: The Ultimate Guide to Conference Room Technology](#)," experts from Samsung estimate the annual cost of empty meeting rooms at \$120,000 to \$369,000 for a 500-person firm.

Modern meeting rooms should incorporate the following components.

Video Displays

High-definition solutions are no longer the cutting edge. Today, the conversation revolves around 4K UHD displays, with around half of U.S. households expected to have at least one 4K television by 2020. The buzz around 4K isn't just limited to the consumer market, though.

While movies and video games are undeniably driving much of the adoption of UHD displays, the new resolution standard is an essential part of creating a seamless video collaboration experience in the workplace. For one, a 4K display makes video interactions more lifelike, providing the (nearly convincing) illusion that remote participants are actually



The portion of all global IP traffic that will be made up of IP video traffic by 2022 (up from 75 percent in 2017)¹

physically present in a corporate meeting space. Higher-resolution screens also allow product developers to better show off new designs and offer more precise imaging for industries such as healthcare and energy exploration, which rely heavily on visual information.

Newer displays also allow users to adjust brightness and contrast levels, ensuring that all participants can see the content being shown on screen, even in direct sunlight. For larger conference rooms and presentation theaters, organizations might consider larger canvases, such as LCD or direct view LED video walls. With direct view LED, the display is bright enough that lights don't

need to be dimmed for presentations, there are no seams from the joining of multiple panels, and presenters can walk in front of a screen without casting a shadow from a projector.

Cameras and Sensors

Stationary cameras tend to create a dull and disengaging experience for remote participants. Meanwhile, cameras that physically pan, tilt and zoom often produce mechanical noises that in-room participants find distracting. Today's meeting rooms feature not only wide-angle and 360-degree HD cameras, but ones that can automatically focus on the action of the meeting without sacrificing resolution — resulting in a naturalistic, lifelike experience.

When cameras can perform these functions digitally, without mechanical movements, they not only reduce noise but also have fewer moving parts that might break. Some camera systems even feature facial recognition, which can be used to confirm who is present at a meeting. A number of organizations are also beginning to equip meeting rooms with Internet of Things sensors that can dim or shut off lights when rooms are unoccupied, activate equipment when meeting participants arrive and even provide analytics to help optimize room usage.

HD Audio

While audio solutions alone are often insufficient for remote conferences, poor audio is enough to torpedo the effectiveness of an otherwise solid video collaboration session. When users have to pass limited-range microphones around the table in order to be heard or are forced to strain to listen to tinny telephone speakers to hear participants on the other end, they quickly become frustrated, and their focus turns to the technology (and its limitations) rather than the important business matters at hand.

Fortunately, these subpar solutions are being replaced by HD audio systems that can pick up voices from around

a conference room, minimize background noise and produce clear, high-quality sound.

Connectivity

Video collaboration solutions need to be supported by robust networks with bandwidth capacities large enough to prevent jitters and glitches. In fact, it's not an exaggeration to say that any video system is only as strong as this particular link, as even the highest-resolution displays and the most intuitive software won't be able to overcome backbone infrastructure that is prone to latency.

In addition to back-end networking, organizations may also invest in in-room wireless connectivity. Wi-Fi makes it much simpler for meeting participants to connect their personal devices to displays or projectors, preventing scenarios where people have to pass around cables or search for adapters before they're able to share content.

Collaboration Software

Increasingly, software is becoming as critical as hardware to the success of video collaboration initiatives — in essence, putting the “collaboration” in “video collaboration.” Whereas it was once sufficient for vendors to simply connect remote participants via video screens, today's video collaboration software lets users

share their screens, remotely access one another's desktops, live chat, share files and more.

Some vendors tie video collaboration together intimately with other collaboration offerings, making it easy for project teams to video chat, access recordings and share files on a common platform.

Collaborative Displays

Along with traditional video displays, many organizations are finding value in interactive whiteboards and other collaborative displays that allow meeting participants to brainstorm, draw and annotate with a pen, stylus or even their fingers. These displays come in a number of different form factors. The Samsung Flip, for example, resembles a digital version of a flipchart, and users can easily save and share their notes from the display. These sorts of displays help teams to replace inefficient workflows, such as using their phones to take pictures of meeting notes and then emailing them out to each other.

Building Out an Effective Meeting Space

Creating an effective collaboration environment — one that yields tangible business benefits and one that employees will actually use — is more than a simple matter of investing in new technologies. Organizations must consider what they want to achieve with their new environments, how they want their meetings to run, how to address privacy and other concerns. By devoting time and effort to the planning process, and by involving end users at the design stage, organizations can avoid costly mistakes and develop a collaboration environment that transforms the way users work.

Improving the Meeting Experience

It's crucial for organizations to consider how they want to improve their executives' and employees' meeting experiences through their collaboration investments. Otherwise, video collaboration solutions could, in essence, end up merely replicating organizations' existing meeting processes, only at a higher cost.

To substantially improve their meetings, organizations must first assess their existing processes to establish a baseline understanding of what currently happens in the workplace. If an organization already has meeting spaces in place, for example, it will be important to learn how those spaces are now being used, how often seats sit vacant, what kinds of meetings the spaces most often accommodate and which types of technology are used most heavily.

Employee surveys or interviews can be extremely helpful as organizations seek to evaluate their existing meeting solutions and experiences. Staffers who work with existing technologies and spaces on a daily basis are uniquely positioned to share specific thoughts about what is currently working (and what isn't) and to provide suggestions about how meeting experiences can be improved through new investments.

Huddle Up

Video has played a prominent role in the rise of “huddle spaces” — smaller meeting rooms typically designed to accommodate five or fewer people. These spaces are partly meant to provide semiprivate meeting areas for organizations with an open office layout, but employees are also clamoring to use them for video collaboration sessions with remote colleagues and clients.



According to a [2018 Cisco survey](#), 65 percent of people who use, design or manage huddle spaces say that at least half of such spaces need videoconferencing capabilities. However, the same survey shows that people are frequently dissatisfied with existing solutions.

Forty-four percent of respondents say they've been frustrated with videoconferencing and web conferencing software in huddle spaces, and 32 percent say they've been frustrated with video hardware devices. The top problems cited by users are poor audio or video quality, lack of reliability and difficulty joining meetings.

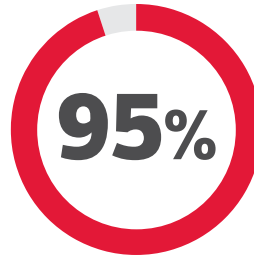
To best support employees, organizations should ensure that huddle spaces are not only equipped with state-of-the-art technology but that solutions are also simple to use (potentially by standardizing equipment across spaces). Respondents list ease of use as the top requirement of huddle space video technology, with 70 percent of users citing it as a critical capability.

Establishing Goals

Collaboration can be difficult to quantify. Any organization that is investing in video collaboration solutions will likely have "improve the meeting experience" near the top of its list of goals, but this is a broad, largely unmeasurable objective. To be able to measure success, organizations must break down their overarching, qualitative goals into smaller, more manageable metrics.

Often, these metrics will focus on end users (who, once again, are likely to have strong feelings about whether meeting experiences are valuable or not). Organizations can set goals around the percentage of employees who adopt video collaboration solutions, as well as the increase in the number of remote workers who are able to participate in meetings. They might also set goals around employees' satisfaction with ease of use, audio quality and the overall meeting experience.

By setting specific, measurable goals early on, organizations can ensure that their video collaboration investments yield the sorts of benefits that leadership and employees value.



The portion of executives who believe their company could improve the effectiveness of teams by providing greater access to better-quality videoconferencing facilities²

Right-Sizing Meeting Spaces

Different types of meetings will require different technology configurations, as well as smaller or larger physical footprints. A small "huddle space" might require only a wall-mounted display and videoconferencing sound bar, while a larger conference room designed to accommodate more participants will need multiple microphones, more powerful speakers and larger displays. Boardrooms typically require the most sophisticated audio and video systems and may incorporate technologies such as direct view LED, depending on the size of the space.

Calculating Costs

As with most technologies meant to enhance employee productivity and collaboration, it can be difficult to pin down an exact ROI for video collaboration solutions. However, by estimating the costs associated with the problems that video solutions are meant to solve, organizations can devise ballpark calculations that help them to justify the expense of new technologies.

For example, if wonky solutions currently cause employees to waste an average of 10 minutes per collaboration session simply getting a meeting started, that time can be multiplied by employees' average hourly earnings to calculate lost productivity. If video solutions help more employees to work from home (or allow a company to outsource to more contractors), any savings associated with these moves can be incorporated into ROI calculations. Organizations might also have targets around more traditionally hard costs, such as decreased travel expenses for executives.

When calculating ROI, it's important for organizations to consider the full cost of video solutions, including ongoing maintenance and upgrades.

Addressing Privacy

Acoustic damping measures, as well as high-quality audio systems that enable call clarity without excess volume, can help to prevent sensitive conversations from being overheard. Organizations should also consider employees' privacy concerns when adopting technologies such as cameras with facial recognition capabilities. Finally, video collaboration solutions now incorporate content sharing and the storage of meeting recordings, and organizations should apply appropriate security policies and processes to safeguard this data.

Ensuring Compatibility

Usability is, perhaps, the most important factor in determining whether employees will enthusiastically adopt a new video

Video Collaboration: By the Numbers

- 34%** The portion of executives who say that at least one quarter of their employees' communications already occurs via video solutions
- 70%** The portion of executives who anticipate that video conferencing is likely to either "increase" or "increase significantly" among internal teams featuring one or more remote worker
- 87%** The portion of executives who agree that video collaboration improves the sales process
- 89%** The portion of executives who agree that their companies need to provide better training so that teams can make more effective use of video collaboration solutions
- 92%** The portion of executives who say that video enables individual employees to be more productive
- 93%** The portion of executives who believe that video solutions improve the effectiveness of teams



Source: Forbes Insights, "[The Connected Culture: Unleashing the Power of Video in Everyday Collaboration](#)," December 2017

collaboration solution. Workers may get frustrated if video or sound quality is subpar, but they will likely simply stop using a solution altogether if they can't figure out how to quickly and easily join a meeting and share content. Whether using all-in-one solutions from a single vendor or using components from different suppliers, organizations must strive for consistency of

experience for all participants — including external stakeholders such as customers, partner organizations and contractors.

A trusted third-party partner with extensive experience in collaboration technologies can ensure that solution components are compatible with one another, helping to provide a seamless end-user experience.

CDW: A Collaboration Partner that Gets IT

The solution architects at CDW stand ready to help enterprises unlock business value through technology investments, with decades of experience assisting organizations of all sizes across the country. By partnering with CDW, business and IT leaders can be confident that their technology initiatives will run smoothly and achieve their objectives, from design and implementation to user adoption and ongoing management.

Expertise and experience: CDW's experts boast deep knowledge and years of experience in all aspects of collaboration, including hardware, software, integration and back-end support infrastructure. Through custom engagements, these experts can architect solutions that cater to each individual organization, ensuring long-term adoption and organizational integration.

Industry-leading partnerships: CDW has established partnerships with nearly every leading manufacturer in the IT space, including Cisco Systems, Samsung, APC and Lifesize. CDW's experienced professionals are certified and accredited through these partnerships to ensure the highest levels of expertise, and provide objective, vendor-agnostic advice.

End-to-end support: By assessing existing environments and then designing long-term strategies, CDW's solution architects help build out and implement solutions that focus on an organization's business goals — from beginning to end.

The CDW Approach



ASSESS

Evaluate business objectives, technology environments, and processes; identify opportunities for performance improvements and cost savings.



DESIGN

Recommend relevant technologies and services, document technical architecture, deployment plans, "measures of success," budgets and timelines.



MANAGE

Proactively monitor systems to ensure technology is running as intended and provide support when and how you need it.



DEPLOY

Assist with product fulfillment, configuration, broad-scale implementation, integration and training.

CDW's solutions and services can help you connect seamlessly for greater efficiency and productivity. To learn more, visit [CDW.com/ModernCollaboration](https://www.cdw.com/ModernCollaboration).

Want to learn more about how advanced workplace technologies can modernize your meetings? Download "[The Modern Workforce Insight Report](#)" by CDW.

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