With the world becoming increasingly mobile, many companies are implementing a hybrid work strategy.

A hybrid work model recognizes that while some employees can be productive without being face-to-face, in-person interactions still have a role to play. Therefore, the future workplace must allow employees to work from a variety of spaces and places interchangeably and securely.

This fluidity of work locations will inevitably lead to an increase of mixed-presence collaboration, which refers to meetings or tasks that involve both in-person and virtual participants. These activities present unique challenges when compared with 100% virtual or 100% in-person collaboration. Presence disparity—when some are together in one place and others are not—creates a risk of inequity in meetings, particularly for virtual attendees. In-person participants have advantages reading body language, making eye contact and interacting with whiteboards and other materials. By contrast, virtual participants may struggle to find opportunities to contribute to conversation, disengage with the meeting or experience internet connectivity issues.
To ensure that hybrid work is optimized, companies will need to successfully bridge the physical and digital worlds. In this article, CBRE experts from the Workplace Solutions, Design, Network Advisory Services and Workplace Technology Services teams provide guidance on creating a complementary system of spaces, tools and behaviors to maximize productivity in mixed-presence collaboration.

Did You Know?

56%

Of employees report that face-to-face collaboration will be one of the primary reasons they would come to the office in a post-COVID world.

1 in 5

Employees currently experience technology issues while working remotely. 3

#9


On average, U.S. internet speeds have increased since the pandemic began, but this has varied state to state and compared to global increases the U.S. has lagged and risks falling off the top 10 list of fastest countries for fixed broadband, which happened in 2021.

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1-3 Source: CBRE Workplace Employee Sentiment Surveys, n=10,691.
Creating a more inclusive and productive meeting experience for virtual participants requires more than simply installing web cameras in conference rooms. Furniture choice, equipment configuration and even marker colors all affect the space’s effectiveness. Collaboration spaces that are purpose-built for mixed-presence collaboration will consider the following design principles:

01 Right-size **monitor height and distance** from the table or work surface in conference rooms. Monitors placed far away or at an awkward angle can lead in-person participants to disengage with virtual content and cause virtual participants to feel disconnected from the meeting.

02 A single monitor is appropriate for a room intended to connect an individual with a virtual colleague, but the best practice for group meetings is to have at least two monitors in each video-enabled room. One monitor can be used for screen sharing while the other displays the participants’ video feed. This prevents video from shrinking to the corner of a screen during presentations, sustaining maximum engagement with both people and materials.

03 **Table shapes and orientations** are also important. Semi-circle or guitar pick-shaped tables with a camera at one end are ideal for smaller rooms, while trapezoid-shaped tables are best for medium to large rooms. These shapes maximize the field of vision and help virtual participants feel like part of the group. They also prevent in-person participants from having to sit with their back to any virtual attendees or presentation material.
Larger rooms require a special A/V setup, including **distributed microphones, speakers, monitors and cameras** to prevent echoes, ensure all voices can be heard and provide clear visibility from any seat. Boardrooms often have monitors placed on the far end(s) of a long table, which should be supplemented with monitors along the side walls. Where side-monitor placement is impeded by glass or wall decor, consider screencasting to laptops, tablets or other mobile devices for in-person participants who may be in a seat with a poor view of the monitors.

**05**

Use **virtual whiteboards** to help all participants contribute and to document the meeting results. When virtual whiteboards are not possible, aim a camera directly at the physical whiteboard and **align the camera** with the boundaries of the work surface. A top-down camera can also be pointed towards the surface of a conference table if horizontal sketching feels more natural. Screensharing sketches from a tablet device can also be helpful.

**06**

Be mindful of the **visibility of marker colors**. Many colors do not translate well over video, but black markers have the highest visibility against a white background and are often the best choice to provide accessibility to color-blind colleagues.
In addition to the right physical environment, employers must also provide the right tools to bridge the physical and digital gap and sustain flexibility across the workforce. But which tools are the right tools? Hardware, software and apps promising to solve all the problems of flexible working have flooded the market resulting in a daunting process to discern useful tools from clunky distractions. There is no one-size-fits-all checklist for evaluating technology, but all organizations would benefit from the following tips when conducting a product assessment:

**In many cases, quick solutions were put in place during COVID without much thought to downstream implications or IT governance practices.**

This is often referred to as “Shadow IT,” and it leads to the duplication of services and difficulty in maximizing return on investment for each tool.

Organizations may need to undertake a **baseline inventory** to understand existing solutions and eliminate duplicate or underutilized applications and services before introducing new products.

**Even the most innovative technologies can be flops if they are misaligned with the greater IT ecosystem.**

Common examples of this include products that only run on a Mac OS when half the company works on Windows (or vice versa), tools that require manual data input rather than imports from existing databases or applications intended to support remote work that cannot be accessed via mobile devices.

To avoid these pitfalls, thoroughly document **workflows** to capture the intended user experience.

**Network bandwidth and accessibility are also critical underlying issues to address.**

When there is insufficient bandwidth on a network or poor connection quality, the performance of web-based applications suffers.

If overlooked, virtual meetings can quickly become frustrating or unproductive due to frozen screens or out-of-sync audio issues.
As the workforce grows more mobile and work is conducted using a variety of devices, concerns have increased over cybersecurity when connecting to the company network.

Ensure compatibility of new tools with the existing network infrastructure and security requirements.

Cost seems like a simple metric with which to compare products, but there can be hidden complexity over the lifetime of a new technology if you do not differentiate between the cost of procurement and the cost of ownership.

Many technologies have moved toward subscription pricing models either for the entire product in the case of software (i.e., software as a service or SaaS) or for general licensing and product support in the case of hardware.

Subscription pricing can charge per user or enterprise, include caps on hours of support included, or have tiers of access and functionality.

Potential buyers should understand not only the sticker price but also what is included to evaluate which tech best meets their needs.

Technology at its best makes work life easier, but at its worst can add frustration and waste time.

Employees are becoming more tech-savvy, so typical user-error issues are diminishing, but greater familiarity often breeds higher expectations.

It is not enough for a product to simply check the box on a list of desired features; it must also be evaluated for user experience (UX) and user interface (UI) merits.

Touted features must be easy to access and use intuitively to add value.
Mixed-Presence Meeting Technology

Artificial Intelligence (AI)-powered Meeting Room Cameras

Some of the most consistent challenges of joining a mixed-presence meeting as a virtual participant include getting a clear view of everyone in the room and understanding who among them is speaking. AI technology integrated within video cameras can solve this problem with automatic zoom capabilities, speaker tracking and intelligent people identification.

Interactive Presentations

Joining a meeting while on-the-go often leads to participants going on mute, unable to take part in the conversation due to background noise or disconnected from the material due to the allure of multi-tasking. Interactive presentation features such as live polling, prompted comment boxes or embedded multi-media can ensure the meeting’s audience is engaged no matter where they are working.

Smartboards or Virtual Whiteboards

Digital tools for whiteboarding allow virtual participants to both view and contribute to the real-time brainstorming taking place during a meeting. Team members can add notes and drawings or insert images and hyperlinks from any device in any location. Other benefits include the infinite canvas feature, which can ensure that productivity is not constrained by the size of the board, and template libraries, which can jumpstart a meeting with ready-made organizational frameworks.
Virtual or Extended Reality

VR headsets and hologram technology are allowing people to connect without borders in new and exciting ways. Some allow for full immersion in a virtual world, while others project photorealistic images of people or materials. Science fiction is slowly becoming reality with real-world applications such as virtual product demos, new-hire training and company-wide events.

Proximity Chat

Most mixed-presence collaboration is scheduled and formal, but it doesn’t have to be with proximity chat platforms. These tools allow for spontaneous collaboration that mimics organic water-cooler talk. It works by creating a two-dimensional virtual office that employees can navigate with a digital avatar. If you pass in range of another employee, an audio connection is forged allowing you to stop for a quick chat or “walk” away together to find more people. Sound familiar? You may recognize this technology from popular video games like Among Us or DayZ!
Behaviors

The behaviors of mixed-presence meeting participants are just as important as room design or equipment.

In-person and virtual participants must work together to adopt new habits and etiquette. The following recommendations can help employees better understand their role in promoting successful interactions:

— **Can this meeting take place entirely virtually?** If even one intended participant must join virtually, defaulting to an entirely online meeting ensures a consistent experience for everyone. Meetings that require participants from several geographies, quick status updates and informal discussions are ideal for virtual collaboration.

— Encourage in-person meeting participants to **engage with cameras** when speaking instead of only looking at other in-person participants. **Facilitate conversations** by inviting virtual participants by name to respond to a prompt or share ideas.

— If the in-person meeting is catered, consider sending virtual participants a similar **lunch/coffee/gift certificate** for an inclusive experience. Thoughtful details can reinforce to employees that hybrid work is embraced, not just tolerated, and no one is missing out by working virtually.

— Publish a formal **agenda** and set **expectations for participation** for all attendees. For example, articulate whether live feedback will be needed or the meeting will be purely informational with designated speakers. This will empower all employees to make informed decisions about where and how they work.

— Build **transition time** into the agenda for informal, non-meeting-related chat for all participants. This often happens naturally in person during meeting setup (when virtual participants have not joined yet) or in the downtime before the next meeting (after virtual participants have logged off). These **informal, relationship-building moments** are invaluable, and opportunities to take part should be intentionally extended to virtual employees.

— Share **materials in advance** as a digital attachment or, if printed materials will be needed, by mailing them to virtual participants. This will ensure that all employees can come prepared with thoughtful questions, commentary and the ability to follow the pace of conversation.

— Deploy multiple modes for **digital meeting participation**. Tools allowing virtual attendees to contribute without speaking if they are joining on-the-go or in a noisy environment are useful. Examples include chat boxes, Q&A features, virtual polls and shared virtual whiteboards.
Conclusion

Supporting mixed-presence meetings requires coordination between conference room design, the suite of supplied technology and new employee habits to successfully connect employees working anywhere. If one of these pillars fails, it risks the integrity of the whole. The key to delivering high-performing workplace experiences will continue to be a multi-disciplinary approach, driving real estate, IT and HR professionals to closer collaboration. Leading occupiers will implement detail-oriented strategies across these three areas to gain an edge in the hybrid working future.

*Companies and technologies mentioned in this article are shared as examples only and do not represent the full suite of products that may exist in these categories.

Contacts

Kasey Garcia  
Senior Director  
CBRE | Workplace Solutions  
+1 213 613 3622  
kasey.garcia@cbre.com

Katie Kitchens  
Design Project Lead  
CBRE | Design Collective  
+1 404 923 1399  
katie.kitchens@cbre.com

Rick Mullins  
Senior Director  
CBRE | Workplace Technology Services  
+1 727 692 0080  
rick.mullins@cbre.com

Michael Murphy  
Executive Vice President  
CBRE | Network Advisory Services  
+1 508 523 4627  
michael.murphy3@cbre.com

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