



WHITE PAPER: How to get more out of your telepresence installation with unified interoperable video conferencing technology



INTRODUCTION

From the time it was introduced, corporate telepresence had enabled businesses to transform their operations, globally. But even given its longevity, it's by no means fully developed. The technology continues to evolve at a rapid pace to meet new business needs while also remaining true to its original vision: to create a meeting experience that closely replicates in-person communication.

Companies have struggled with major obstacles to full adoption including the lack of interoperability between legacy systems and emerging technology, ownership and operating costs, and system scaling challenges. This white paper reports on recent research conducted on video conferencing and telepresence practices, benefits and challenges, and the characteristics of the “ideal” solution to address challenges.

The evolution of video conferencing and telepresence systems

At the most basic level, installed telepresence systems enable users to meet with remote participants using technology that closely replicates the experience of being in the same room. Telepresence users communicate from the telepresence installation point using voice, gestures, facial expressions, and eye contact—all of which are essential components in human interaction. People thousands of miles apart can participate in face-to-face meetings.

Hallmarks of traditional telepresence include video in true-to-life dimensions and resolution that permits eye contact, with other essentials such as image stitching and sound localization. These telepresence system features create the feeling of an in-person, across-the-table experience for participants who cannot be in the office, training facility or boardroom.

Many companies invested heavily in telepresence infrastructure, usually from a single vendor with proprietary hardware and software. With no connectivity to the rest of the market, users could communicate only with those who possessed the

same systems, from the same vendor, using rooms that were specifically designed and outfitted for the purpose of telepresence. The financial outlay to install these solutions was considerable—ranging from hundreds of thousands to sometimes millions of dollars.

For many organizations making significant investments for in-room systems, the anticipated return on investment in telepresence couldn't be realized as originally envisioned.

Exclusive hardware and other proprietary infrastructure components of telepresence solutions made it financially challenging for companies to expand. These legacy telepresence solutions were costly to scale up—to accommodate the communications needs of additional locations and branch offices. This hindered the ability to expand communications to include a larger pool of users, such as prospects and customers, who may not have the same system from the same vendor or perhaps chose not to invest in the technology. For many organizations making significant investments for in-room systems, the anticipated return on investment in telepresence couldn't be realized as originally envisioned.

When telepresence systems were first introduced, the C-suite found them particularly attractive because these communications solutions could significantly reduce travel costs—which were and still are considerable. Board meetings, sales meetings, and the like could be held without the need for incurring airline, hotel, ground transportation, and other related expenses for every meeting attendee.



Using telepresence to reduce costs has remained a consistent goal for companies. What has changed since telepresence and video conferencing systems came to market? There are now ways to extend value well beyond travel costs.

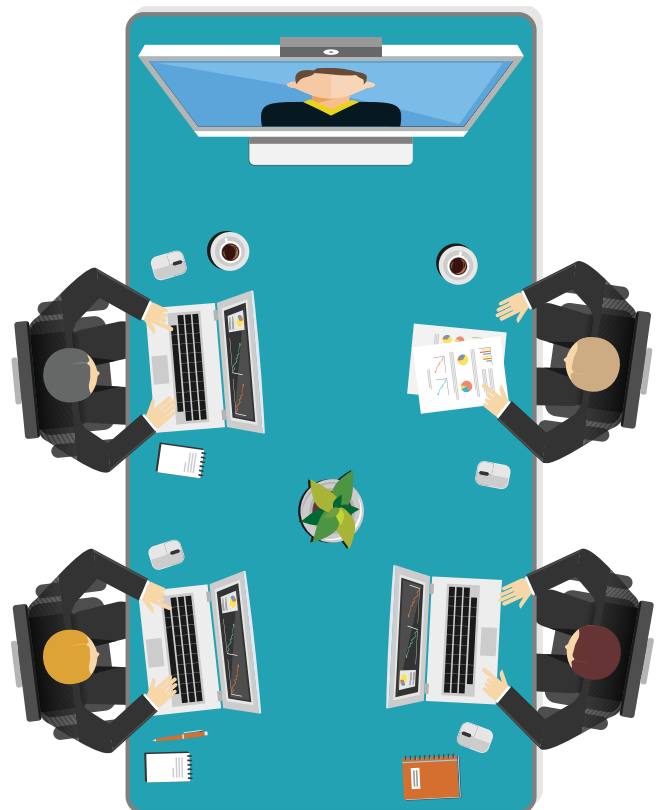
According to research recently conducted by Spiceworks¹, IT professionals clearly recognize the benefits—and challenges—of telepresence solutions today. For example, they cite the top benefits of today’s telepresence solutions as:

-  **66%** Reduced need for travel
-  **52%** Improved collaboration
-  **50%** Virtual “in-person” experience
-  **41%** Increased productivity

There have also been great strides made in removing the interoperability challenges that prevented full adoption of telepresence solutions. Beginning in 2010, previously proprietary protocols for one of the largest legacy telepresence vendors were released as open protocols, providing access to specifications license-free. Ownership was later transferred to the International Multimedia Telecommunications Consortium (IMTC). This effort by the IMTC was intended to encourage other vendors to support the open source protocol and thereby implement interoperability between legacy systems and telepresence/video conferencing solutions provided by other vendors.

Fast forward to today, and there is a proliferation of conferencing solutions and services—some of which are cloud-based. Teleconferencing industry disruptors have helped to put improved and more flexible telepresence tools into the hands of organizations and individual consumers alike. These communications and collaboration solutions have become more affordable than ever before, and are considered must-haves in virtually every workplace—or on every mobile device—around the world.

But companies still face challenges when it comes to realizing the full benefits of telepresence and for some, how to obtain value and return on investment from legacy and traditional solutions that may be currently underutilized or not used at all.



Thinking “outside the room”

The rapid growth of the web- and video-conferencing marketplace has brought more choices and greater flexibility to companies seeking to benefit from telepresence. But today, telepresence is no longer about a way to facilitate a meeting—it’s about high-intensity collaboration—and connecting with remote participants on a variety of devices.

For corporate IT and the business buyer, one of the key challenges when moving to or expanding company telepresence is to make sure they don’t inadvertently migrate from one proprietary solution to another.

Today’s users want to connect instantly and on-demand. They don’t want to be forced to make special arrangements far in advance and then be required to go to special rooms just to access telepresence, either. They want web and video conferencing to be accessible anywhere, any time—and to be as available and effortless as picking up a smartphone.

All of this is now possible. Secure, high-quality meetings via telepresence take place globally every day on a number of mobile and centralized platforms. Medical facilities, military operations, corporate offices, banks, and other organizations in virtually every industry use telepresence solutions for routine team check-ins, product development collaborations, corporate board meetings, brainstorming, and even patient management. But the difference today is that they are also figuring out how to connect these systems with new technology—like web conferencing.

Even with all the rapid and game-changing advances that have and continue to take place, there are still telepresence challenges to overcome. Not all solutions are secure and built for business use, and fewer still enable the seamless use of earlier solutions. And, given past problems with proprietary systems, solutions that are interoperable—enabling users to easily move between various services—are quickly becoming an absolute requirement. For corporate IT and the business buyer, one of the key challenges when moving to or expanding company telepresence is to make sure they don’t inadvertently migrate from one proprietary solution to another.

IT professionals surveyed by Spiceworks recognize the need for telepresence solution integration and more unified communications. Initial investment costs and total cost of ownership were cited as their biggest challenges with telepresence (53% combined).

After cost concerns, other telepresence challenges experienced or expected include:



Lack of expertise



Performance issues due to required bandwidth



Limited usage



Limited time for learning/training



Hardware integration

Extreme makeover, or seamless integration?

For companies that invested in room-based conferencing, the prospect of moving to web-based video conferencing is a financial heartbreak. But the significant investment in telepresence doesn't have to be lost—and room-based conferencing isn't necessarily obsolete. *Imagine a solution that would allow telepresence systems to connect via web- and video-conferencing solutions.*



Web conferencing is gaining traction because of its versatile technology, lower price point when compared to in-room video conferencing systems, and qualities that make it easier to use. When combined with business-class features, it can be a solid choice. But companies still need to consider how these solutions interact with their legacy telepresence.

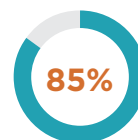
A solution that could bring together telepresence systems with web meeting technology could help overcome many conferencing obstacles that companies and their IT professionals grapple with

on a daily basis. Proprietary systems that can only communicate with the same vendor have long made telepresence tricky and costly. Beyond just connecting systems, it's also crucial that there is interoperability with desktops, laptops—and a full array of mobile devices that also play a critical role in business communications.

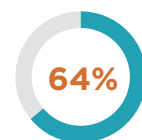
Here are some additional characteristics to look for in the ideal solution that connects these two technologies.

- Cloud-based
- Integration with in-room systems
- No special hardware
- Video conferencing interoperability that supports global standards
- High-definition quality and performance
- Easy room and meeting management
- Enterprise-grade security

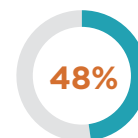
In the Spiceworks survey, IT professionals gave their initial reactions to a solution that would enable seamless, multi-point video conferences that used a company's existing in-room video hardware investment while still providing the benefits of a web-based online meeting service. Their initial reactions were quite favorable:



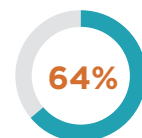
Interest in concept



Relevant for your organization



Differentiated from other solutions



Compelling

Regain control of telepresence with OmniJoin Interoperability

Flexible. Scalable. Compatible with current systems. Plug-and-play simplicity. OmniJoin® web and video conferencing, with Interoperability, is an affordable solution that enables companies to leverage their investments in telepresence infrastructure while also offering highly secure web meeting technology for desktop or mobile users. This solution:

- Enables access to web and video conferencing in the cloud anytime, anywhere, on any device
- Transmits all web, VoIP, video conferencing data over military-grade, end-to-end encrypted connections
- Supports meeting flexibility, collaboration, and scalability
- Requires no special hardware
- Offers interoperability that supports global standards
- Incorporates intelligent HD video technology
- Provides collaboration tools, such as whiteboarding and highlighting, for use during live applications
- Offers comprehensive room and meeting management tools
- Includes enhanced levels of user support
- Features boardroom hardware compatibility

OmniJoin with interoperability provides greater flexibility because it works with many different solutions and on multiple platforms. It offers:

Collaboration

Enables robust document, live desktop, application, and whiteboard sharing—features that are challenging to activate or which are not supported through traditional, room-based conference systems.

Compatibility

Supports global standards for room-based systems compatibility, and connects with most major telepresence systems.

Security

Offers business-grade security, including encrypted connections.

Mobility

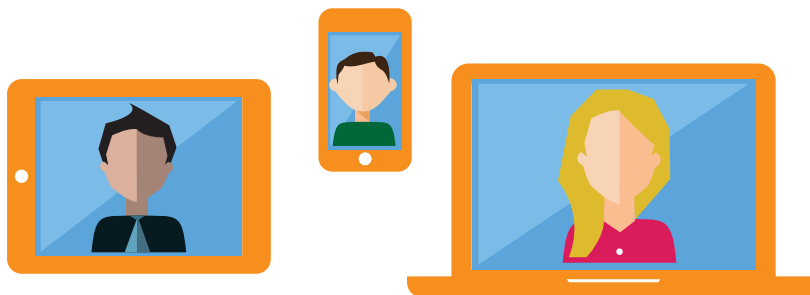
Connect your in-room system with users on iOS and Android mobile applications.

Productivity

Unified conference experience for all attendees by providing access to an attendee list, address book, and call history; plus, the OmniJoin meeting host can manage the online meeting room as well as place and receive calls during the meeting or event.

Performance

Facilitates HD 1080p resolution for multiple room systems.



System requirements

OmniJoin Interoperability video conferencing connects with and supports industry-standard protocols for in-room systems.

Type	Protocol
Signaling	SIP, SIPS and H.323
Video codec/media	H.264
Audio codec/media	G.711, G.722, G.722.1
Screen sharing	H.239 when using H.323 BFCP when using SRTP/SRTCP
Data transport	RTP/RTCP and SRTP/SRTCP

For full details on technical specifications and hardware requirements, see <http://www.brothercloud.com/omnijoin/features/Interoperability.aspx>

Try it Free.

SOURCES

¹Spiceworks survey of 155 IT decision-makers located in the U.S., working in companies with 100 or more employees, on behalf of OmniJoin, February 2016.



About OmniJoin. OmniJoin™ delivers high-quality, highly secure voice, video, and collaboration through web meetings—in our public cloud or your own private cloud. Discover how easy it is to use OmniJoin web conference solutions to conduct your next meeting.