Hybrid and equal:
creating the workplace of the future

Transforming the workplace — seemlessly linking team members anywhere in the world via Crestron's Microsoft Teams ecosystem

CRESTRON®

Microsoft Teams

Content

What is the digital workplace and why is it important?

The pandemic accelerated workplace trends that had been gaining traction: namely, a growing number of remote and hybrid employees and the expansion of video conferencing platforms. Microsoft Teams® surpassed the 270 million active monthly user mark in December of 2021. The digital workplace — with its combination of remote and in-person collaborators who need to communicate effectively — is here to stay.

The Transition Hasn't Been Without its Frictions

INCOMPATIBILITY Lockdowns arrived suddenly, and many companies had no choice but to cobble together solutions that utilized a variety of devices and platforms that didn't "work and play well" with one another.

USER EXPERIENCE Employees with little remote experience struggled to learn when using devices or platforms with less-than-intuitive interfaces. Poor audio and video solutions further impacted an employee's collaborative contributions — whether they were at home or in the boardroom.

CONNECTIVITY Some employees felt frustrated, lonely, or detached from their teams. It's why proper connectivity — including both human interaction and robust internet links — is so important.

SCHEDULING AND MANAGEMENT Connecting those at home with those in the office, keeping everyone engaged and ensuring there are rooms and devices ready-to-go for meetings and presentations are critical to collaborative success.

SECURITY There's a lot of potential headaches for the corporate IT department: a broad range of devices on a company network, machines accessed by family members with little cybersecurity oversight, and less-than-secure home networks. Same goes for access and connectivity for in-office workers, guests, and devices.

The Solution? Creating a high-performance digital workplace

The right digital workplace seamlessly links team members anywhere in the world. While specifics can vary wildly — from the physical footprint of a room to a team member's individual needs for, say, sharing content — there are some fundamental considerations when choosing a solution:

- **Is the solutions easy to use?** Easy to deploy? Easy to support, monitor, and troubleshoot? Are clear and concise training resources available?
- **Does it include devices that are purpose-built?** Can those devices provide intelligent video, clear audio, localized AV options, intuitive content distribution, and effective video conferencing solutions?

- Does the solution include **scheduling tools** to ensure that rooms, desks, and equipment are all available?
- Is the solution **scalable** — can you easily add or change spaces, and support those spaces?
- Is the platform **"future-ready"** — can it handle upgrades as new technologies are developed?

Digital Transformation of the Workplace

The new normal is **Work from Anywhere.** Onsite workers collaborate with employees elsewhere. The workplace of the future must be highly flexible to support employees everywhere.

Existing Spaces Will Be Modified

Which of the following existing spaces will be modified to **include video conferencing?**

5% Other

80% Meeting Spaces

60% Offices

70% Huddle Rooms

15% Common Spaces
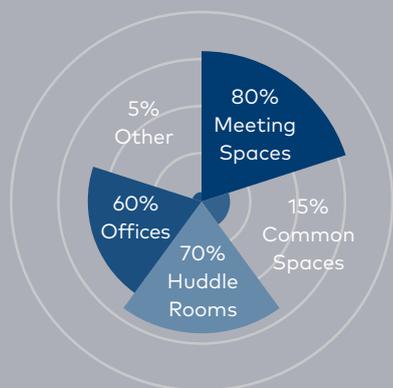
85% of respondents noted meeting spaces will have reduced seating capacity

40% of respondents noted huddle rooms will be converted into work offices

Source: Crestron Corporate Customer Survey, Jan. 2021

Office design changes with the times. For the past decade, FORTUNE 500® companies have engaged with architects and technology consultants to **create workplace environments that facilitate creativity and collaboration.** Ideation spaces and open floor plans replaced cubicle pens and corner offices.

Today, the same architects and technology consultants must **design retrofits of these spaces to develop long-term responsive plans** to accommodate highly flexible teams.

Flexibility, scalability, mobility, and analytics are the cornerstones to transform the workplace.

In January 2021, Crestron surveyed a group of existing corporate customers who installed or updated systems in the last two years. Respondents shared that nearly every office space will be modified to include room systems automation, collaboration, and video conferencing technologies.

Managing the Return to Office

When workers in Gensler's 2020 *Work From Home Survey* were asked what they miss most about working from the office, three out of four survey respondents said, "the people." Scheduled in-person meetings with colleagues and clients, socializing, and access to technology were among the top reasons employees wanted to return to the office.

Activities such as collaborating and staying informed about others' work are harder to do at home, underscoring the value of physical presence.

Getting back into the office requires employees to feel comfortable and secure.

Technology can help enable the implementation of new processes and provide a way to monitor and enforce new guidelines.
Facial recognition, and RFID badge scanners can track employees or guests as they enter the building. Artificial intelligence (AI) can help measure people flow.

The New Office Environment

Furniture redistribution and augmentation, technology-enabled touchless meetings, wireless presentation and collaboration solutions, clear signage, room occupancy indicators, sensors to trigger actions, increased videoconferencing, monitoring, and intuitive mobile apps are the elements of the new office environment.

A recent Crestron survey showed that **businesses are planning on increasing videoconferencing rooms to serve their immediate needs and build flexibility for the future**.

Mobility and flexibility are key factors for success. Creating seamless and intuitive environments helps workers feel more comfortable.

Turn any room into a collaboration space

With hybrid work being the norm, **there's an increased need for robust videoconferencing and collaboration technologies.** The need for in-office and in-home arrangements remains, even now that it is deemed safe to return to the office. **Delivering solutions to create seamless collaboration and workflows are critical to the success of the new workplace.**

> **We made the decision to begin our digital transformation pre-COVID. Crestron offers us the technology solutions that have allowed for hybrid learning and working across the enterprise, while helping address the issues of accessibility, sustainability, and safety that schools and offices are facing right now."**
>
> — Joe Way, PhD, CTS Director, Learning Environments IT Services, University of Southern California

> **The way we work has radically changed due to COVID-19. Our associates are dispersed globally, and we have to equip them with the ability to work from anywhere. The world has become our workplace, and Crestron provides us with technology solutions that are essential to keep moving forward."**
>
> — Thomas Geblein, Solution Architect, Digital Enablement, Rich Product

> **The fact that we're invested heavily in Crestron and future proofing technology has a huge impact in our going back to work initiative."**
>
> — John Nunez, Senior Manager, Global Audio Visual Services, White & Case LLP

As much as possible, businesses should try to replicate a similar in-office experience for remote workers. This sense of cohesion is critical to keeping team morale high and building camaraderie among coworkers.

Aspects of a system include:

Video – Ensure you have the right camera for the space, whether that lens needs to provide coverage for a room full of people or a single individual at their desk. Make sure that camera is supported by an intelligent video solution with features such as framing and tracking to ensure that all participants have an "equal seat" at the table.

Audio – Speakers and microphones are just as important as video considerations — arguably, even more so. Mics that provide proper coverage for the size of the room, speakers that are free from distortion, and features such as echo-canceling facilitate more natural conversations and effective presentations. Remote workers or participants from a single desk or office space may choose a headphone rig with an attached mic — providing for those preferences is more than a morale boost, it can be important if an employee's joining the team from a crowded space and needs to shut out ambient noise.

Wires vs Wireless– Is a meeting participant presenting from a laptop via a Wi-Fi® connection or are they

sharing content via USB and/or HDMI cabling? If the connection is completely wireless, is the Wi-Fi in the space robust and reliable? Are your remote workers joining a meeting via Wi-Fi or a cabled connection? Have you ensured their connection is reliable as well?

Flexibility is built into our DNA

Forget all-you-can-eat food courts and ping pong tables. The new office perk is reliable technology for remote and hybrid collaboration. *Work from Anywhere* is about workplace flexibility both in the traditional workspace as well as developing spaces. Companies are investing in productivity by providing systems that are easy-to-deploy and easy-to-operate for impromptu meetings—onsite or virtually.

As the leader in automation, UC, and collaboration systems, our space utilization and monitoring systems are deployed around the globe by organizations large and small. Crestron is helping businesses reimagine and redesign their spaces to handle the transition to the hybrid workplace.
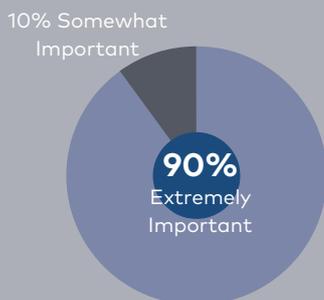
With Crestron's ability to automate nearly any scenario, a meeting or collaboration space transforms into a virtually touch-free environment. Using a combination of sensors, commands, and scheduling, a room can automatically "turn on," and a presentation launch simply by walking into the room.

Planning for Flexibility and Scalability

Myriad stakeholders are required to help reshape corporate environments: interior designers, technology integrators and consultants, AV and IT directors, HR, facilities managers, and security experts. For businesses that want to keep workers happy without sacrificing productivity or vital company culture, flexible designs are essential.

Importance of Flexible Meeting Spaces

How important is it for your company to have flexible meeting spaces that you can utilize for another purpose, or switch back to its original purpose?

10% Somewhat Important

90% Extremely Important

Source: Crestron Corporate Customer Survey, Jan. 2021

Planning for Now and Next

Policies vary from organization to organization, but it's clear that safety and hybrid approaches—accommodating onsite and remote teams—are paramount.

In-office and remote meeting spaces are being designed for mobility, scalability, and flexibility, taking into account the technologies that enable collaborative workflows. It no longer makes sense to build a room that is not accessible to remote participants.

Research has shown that deploying technologies which enable both communication and collaboration for a hybrid workforce is critical for success in today's environment.

Analytics-Based Decisions

Having the ability to create flexible workspaces with scalable technologies in today's office building is extremely valuable. Very soon, many office buildings will be bathed in an array of sensors of various types that will tie into services and use AI and analytics to provide data to inform decisions.

Crestron continues to develop new solutions to deliver device and room utilization data to enable decision-makers to take advantage of flexible workspaces and scalable technologies.

> "
> **As we introduce more technology across our offices, Crestron will continue to be our standard. The flexibility that their technology has provided and their support during the completion of this project is truly unmatched."**
>
> — Greg Gonzalez, Founder and Chief Technology Officer, SentryOne

The Touchless Meeting Experience

We are seeing trends across our current customer base that clearly indicate workspace transformations. Customers are implementing in-office solutions to ensure safety and enable collaboration.

> "
> **Crestron AirMedia helps our staff return to the office by avoiding interaction with common surfaces like cables and remote controls.**
>
> **The convenience of projecting wireless to any display in the building from your own device is critical to remaining productive."**
>
> — Robert Basile, Sr. Solution Architect
>   ONE Fiber-Deep Networks,
>   Corning Optical Communications

> "
> **Since the pandemic, our business has seen a significant increase in demand for our online bioskills training, and our ability to use our in-house Crestron technology has helped us meet CDC and social distancing guidelines by allowing our clients to safely spread out and collaborate with minimal physical touchpoints."**
>
> — Aaron Ali, MD. CEO & Co-founder
>   MedtoMarket, Inc.

Our team deeply understands the power of having physical hubs where in-person communication, brainstorming, mentoring, and fun happen.

This is why companies are leaning on technology to transform and make smart use of spaces for the short- and long-term. These technologies can enable a seamless flow of traffic in the office environment to limit face-to-face contact, while others limit or eliminate the need to touch room devices.

- ☑ Meeting participants can **reserve and schedule rooms in advance** to ensure availability and that the appropriate technology is present.
- ☑ Room availability and meeting information are displayed on the room scheduling panel outside of the meeting space, confirming participants are in the right location. Workers are able to **see from a distance if a meeting space is available**.
- ☑ **Sensors "turn on"** rooms as participants enter, and initiate touch-free room/device automation. Occupancy sensors are cost-effective and can be located almost anywhere.
- ☑ **A wireless presentation system** enables an automated room and allows participants to present and collaborate wirelessly. This is **the brains of the room, but there's no need to touch**.
- ☑ Meeting participants can **wirelessly share and present content, and control the room touch-free, using their own mobile devices and laptops rather than communal touchscreens**. Users are able to control the entire experience without needing to touch any cables.
- ☑ The media **presentation distributes to displays in overflow rooms** for more workers to view in real-time.
- ☑ A **cloud platform** enables AV/IT departments and help desks to **remotely deploy, manage, and monitor room and device usage**.
- ☑ **People counters send data and provide analytics to a cloud platform**, helping to ensure rooms are not overcrowded. People-counting also enables managers to understand the utilization of spaces to calculate real estate needs.

Work From Anywhere Drives Cloud Services

The transition from physical offices to remote environments brought the value of the cloud into sharp focus. AV/IT managers pivoted quickly to keep pace—utilizing cloud services, and expanding licenses to scale and meet staggering new demands.

"

In our cyber defense center, it's a 24/7/365 environment where our customers depend on us. Crestron XiO Cloud gives us the ability to centrally manage and quickly update all of our devices without any downtime or need to physically check each room."

— Matt Skeen, Director of
   Information Technology,
   Fishtech Group

Whether the location is at home, satellite or an adjacent office, the benefits of the cloud extend to the AV/IT department. With few exceptions, the team no longer has to be onsite to deploy and commission devices.

In 2018, Crestron launched a groundbreaking cloud solution enabling CIOs and technology managers to remotely deploy, manage, monitor, and measure room device and space usage via the cloud.

The cloud ecosystem has fundamentally changed the day-to-day operations of the AV/IT department, maximizing overall efficiency.

Where the rubber meets the road

Deployment and commissioning of room control and collaboration devices can be done from anywhere, allowing companies to **quickly scale** and add more collaboration spaces where needed. Techs are not needed onsite to program each device.

Management of room control and collaboration devices can be done from anywhere, **providing flexibility** to transition meeting spaces into collaboration spaces and troubleshoot from any location.

Monitoring of room control and collaboration devices **provides critical information** needed to ensure meeting spaces are being utilized properly, based on distancing guidelines.

Metrics help IT teams allocate new or shift existing equipment and manage inventory. Capturing real-time data about how and where workplace technology is being used is essential. Robust systems can track consequential metrics such as dropped video conferences, room occupancy, and device usage.

These analytics will help stakeholders craft better policies, support more workers, and strengthen company culture in this new age.

Next stage of growth

The demand for all things virtual—meetings, classes, tradeshows, events—is increasing dramatically. The cloud will enable the next stage of growth.

Investments in network infrastructure and hybrid workplace-safe technologies are critical. These ecosystem investments will ensure reliable operations today—and long into the future.

The Unified Communications Revolution

The prolonged period of working from home has ignited research and critical assessments of the workforce and the workspaces. Video conferencing and collaboration have become vital communication tools that keep today's hybrid workforce connected and productive.

"

Crestron provided us with a diverse portfolio of manageable and easy-to-use solutions that have revolutionized the overall experience across all our offices."

— John Allison, AV Security Systems, Engineering Manager, Young Living

Massive demand for video meetings has resulted from the pandemic. **Microsoft Teams® provided 2.7 billion meeting minutes on March 31, 2020, a 200 percent increase** from 900 million on March 16, 2020. Video calls in Microsoft Teams **grew by over 1,000 percent in that same month**. "We saw more than **200 million Microsoft Teams meeting participants in a single day, generating more than 4.1 billion meeting minutes**," reported CEO Satya Nadella.

75 million daily active users

Microsoft Teams now has more than 75 million daily active users, and two-thirds of them have shared, collaborated, or interacted with files on Microsoft Teams as well. Nadella said.

Certified devices

It's important to use Microsoft Teams certified devices. Not only because they offer the same user interface and user experience no matter the room size. Microsoft Teams certified kits and devices give you peace of mind, as they have been tested and designed specifically for Teams. This means that they will be up and running through every update. Using non-certified devices could break this tight integration and compatibility. It might work one day, but after a service update over the weekend, it might not work on Monday morning.

Crestron's Ecosystem for Microsoft Teams Rooms

Crestron builds technology for every way people work everywhere in the world— from desktop to boardrooms, offices to multinationals. Our technology adapts to what you already have and prepares you for what you'll need for the challenges of today and tomorrow. Platforms, devices, and systems are designed to improve communication and collaboration. All managed by a cloud-based system for easy-deployment, monitoring, and upgrading. Crestron's ability to create faster, better, and simpler solutions so people can work faster, better, and more productively.

Video Conferencing Solutions

Desktop. Tabletop. Front of room. Custom spaces. On site or off, Crestron Flex Video Conferencing solutions make collaborating easy and productive. Intelligent audio and video ensure everyone, in-person or remote, participates equally. Seamless integration with localized and networked AV makes content distribution, sharing, and conferencing effortless.

Spaces may differ but your needs remain the same–effective, and productive collaboration. With Crestron Flex you can walk into any space, confident you'll have high performance audio/video, easy access to video conferencing, wireless conferencing, and smart room control. Desktops to training rooms, home offices to global headquarters, Crestron Flex connects everyone reliably, expertly, securely, and seamlessly.

Crestron Flex Phone provides a premium voice-over-IP phone solution for use with Microsoft Teams. It offers wideband HD voice quality and full-duplex, hands-free speakerphone capability in an elegant desktop design. Each phone can be synced with a Microsoft Teams account with contacts, schedules, voicemails, and other preference settings appearing on the phone's touch screen.

Crestron Flex Mini Tabletop is a conferencing solution designed for small workplaces both in corporate and home offices. With native Microsoft Teams software, the Crestron Flex Mini Tabletop is ideal for newly converted or dedicated small workplaces. The tabletop collaboration system features a sleek and sophisticated design with a 40% reduction in size, without sacrificing high-performance audio and video quality found in the tabletop series of devices. It is easy-to-use, deploy, and mange.

Crestron Flex Tabletop is a best-in-class audio and video conferencing solution, and brings every option to the table, simply and effective. The Crestron Flex Tabletop supports both native, one-touch join for Microsoft Teams software and BYOD for all other platform software, all with just one room. Now every room can handle every type of meeting on any kind of platform.
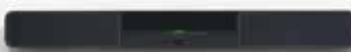
Crestron Flex Soundbars raise the bar with exceptional audio and video quality in huddle rooms, small and medium meeting rooms. Every word is heard by adaptive beam forming mic array, while intelligent video ensures that everyone has an equal seat at the table.

Control Solutions

There is an increased demand for more control and improved user experiences in meeting spaces. The experience needs to be about more than just the interface, it needs to be as dynamic as any smart device while supporting a broad range of enterprise applications.

Crestron 70 Series Touch Screens support a broad array of applications and customizable interfaces to deliver the experience demanded by users today.

Designed for anywhere people share information, connect technology, or command a space, the 70 Series Touch Screens deliver responsive, dynamic, and intuitive control. A built-in proximity sensor wakes the screen without requiring any user interaction, and automatic brightness controls ensure optimal visibility under varying lighting conditions.

Room Scheduling Solutions

As hybrid work becomes the standard, businesses must provide the technology necessary to ensure every employee has a space to meet, collaborate, and conduct independent work and be productive. An effective scheduling system prevents the team from wandering around the facility, hunting for a space to work. Scheduling elements to consider include:

Booking– In-office work consists of a mix of hoteling or hotdesking for independent work and meeting space booking for employees to collaborate. As employees come and go on different schedules, managing available spaces needs to be top of mind. Solutions that include both room and desk bookings are optimum.

Availability – A system that can identify the right space and determine if rooms are available for ad-hoc meetings is extraordinarily helpful; solutions that include an external indicator such as a light, panel, or shingle let the team quickly determine if a space is available.

Utalization – To make the best decisions about designing your workplace, you need detailed insights about what spaces are used, how they are used, and by whom. If a system provides the proper data analytics, you'll be able to make more informed planning and budgeting decisions: What type of spaces do we need? How many? Where? To support what activities?

Flexibility – Does the hardware or infrastructure natively support your preferred scheduling application? If your organizational needs change and you want to change software, you should be able to do so without having to "rip and replace" any of the installed devices.

Scanning and Sensing – Does the system include options for badge scanning to start and end a meeting? Can occupancy sensors be added to the mix to gather usage data?

Crestron Room Scheduling makes it simple to locate and book the right meeting space from within Microsoft Teams or Outlook or any other prefered platform. Choose from our complete range—touch screens, indicators, and occupancy sensors—and run it on your prefered software. Only Crestron lets you decouple your scheduling hardware from your software so you can easily change applications as you need.

Room Availability Indicators placed outside meeting spaces, huddle rooms, offices, and other common spaces allow to confirm whether the space is free prior to entering. The act of physically walking into a room will switch the indicator sign to "occupied." These can be used as part of the Crestron scheduling system, or can be combined with the Crestron control platform to customize functionality.

Wireless Presentation Solutions

Hybrid work requires the ability to host a meeting from anywhere, whether everyone is in the room, working remotely, or a combination of the two. You'll need a solution that provides the flexibility to share, present, and host a local or hybrid meeting from one device. Whether you're in a huddle space, auditorium or board room, together with everyone in one location or distributed across time zones, you need a system that efficiently integrates devices for effortless collaboration, presentation, video conferencing, and digital signage throughout your enterprise.

AirMedia® wireless presentation, collaboration and conferencing system allows for completely "no-touch" presenting. Users content-share directly onto the screen in a meeting space from a personal device without the need to touch a screen or plug in a cable. Simply walk into the room, and the occupancy sensor turns the display on automatically. The user can then present, collaborate or join a meeting from their laptop or mobile device. When they are done, they can leave the room and the system will turn off.

AV Distribution Solutions

Presenting high-quality audio and video content in a meeting room or auditorium in real-time is possible. But the number of people in any space is limited, and all-hands meetings are greatly affected. The distanced workforce needs to be able to view presentations from anywhere **across a corporate campus. This can leave the quality of the content displayed and security in jeopardy**.

DM NVX AV-over-IP Platform ensures the same high-quality audio and video is distributed to anywhere it needs to be viewed across the enterprise network. It works with 100% of all existing networks, making it easy to deploy, reliable, flexible, and scalable. DM NVX is the first AV-over-IP solution to receive NIAP and JITC certification and FIPS 140-2 validation (the US Government's most rigorous standards).

Technology Operations Management Platform

With an immediate need for additional collaboration and meeting spaces, it's **challenging to deploy new equipment and systems one-by-one with existing staff.** You need a system that provides a comprehensive view of device lifecycles, which enables you to schedule updates, prepare budgets, and anticipate needs more efficiently. A system that tracks when licenses will lapse with a well-designed, intuitive dashboard.

Crestron XiO Cloud enables support staff to remotely manage the technology in their rooms. You can deploy, manage, and monitor your spaces as well as analyze the usage. Your support staff will be able to administer their rooms at scale without having to visit every room physically, limiting number of employees in any one space.

Crestron XiO Cloud allows you to establish standard room configurations and remotely deploy them to individual or groups of rooms at the same time. Firmware and software updates can be pushed remotely to individual, groups, or all devices at once. Event schedules can be established to turn rooms on in the morning, off in the evening, and account for weekends and holidays. At the same time, Crestron XiO Cloud can identify threats and breaches, especially on networks with BYOD options.

Crestron XiO Cloud automatically collects room and device usage data and generates reports to drive better planning and budgeting. It provides granular info about what technology is used down to individual button presses — including how it is used (e.g., connectivity methods), and how often devices are used.
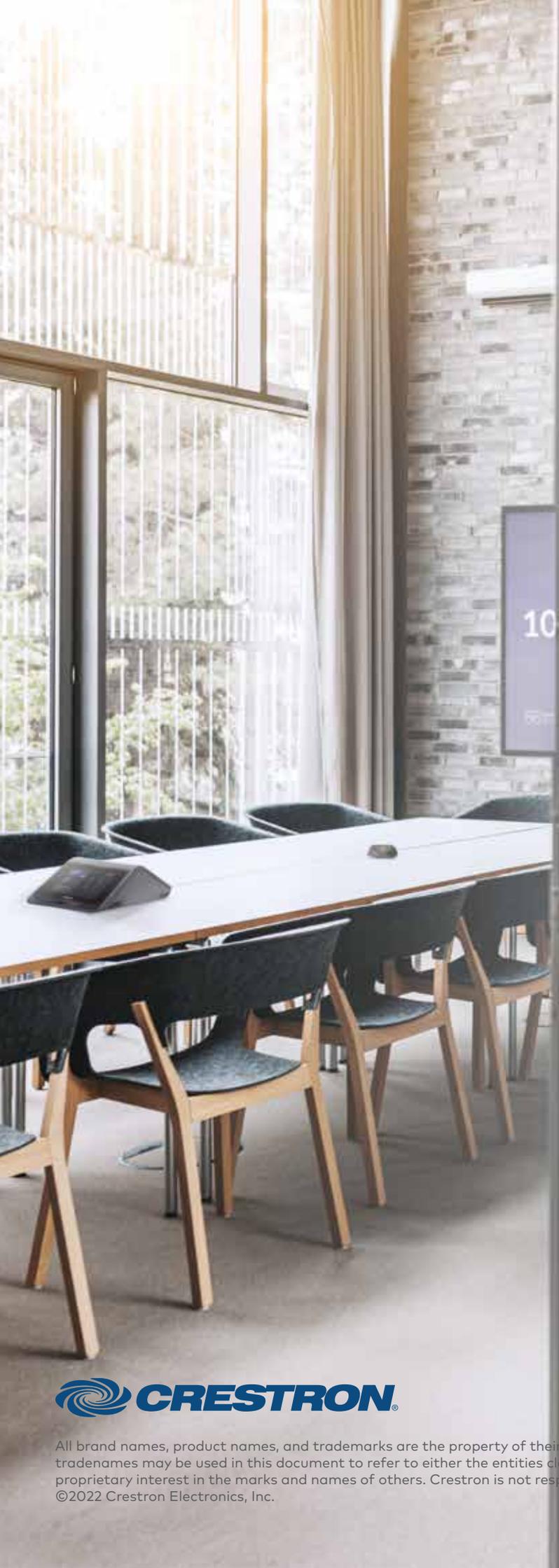
Our Mission

At Crestron we build technology for every way people work, everywhere in the world—from desktop to boardrooms, offices to multi-nationals. Technology that adapts to what you have and prepares you for what you'll need. Platforms, devices, and systems designed to improve communication and collaboration. All managed by a cloud-based system for easy deployment, monitoring and upgrading. At Crestron we create faster, better, simpler solutions so people can work faster, better, and more productively.

Our products are backed by more than 90 fully staffed offices that provide 24 x 7 x 365 sales, technical, and training support across the globe. In addition to our World Headquarters in Rockleigh, New Jersey, Crestron has sales and support offices throughout the U.S., Canada, Europe, Middle East, Africa, Asia, Latin America, and Australia.

Discover Crestron's ecosystem for Microsoft Teams by visiting crestron.com/flex