Collaborating in the New Normal

The surge of connecting rooms and people

The world is changing, and the way we work is changing with it. Since the beginning of the global COVID-19 pandemic, more people are working remotely, more employers are hiring remote talent, and more companies are continuing their digital transformation to support this new normal.

As a result of this sudden shift, more enterprises are under pressure, not only to support their current remote workforce, but to stay on the cutting edge of emerging technologies that keep business running in an era of increasing uncertainty.

But this new void has created a unique landscape of opportunity. From newly developed remote work solutions, digital collaboration technologies, and state-of-the-art conference and meeting room spaces, these new innovations will continue to deliver for its customers who increasingly find themselves in the new norm.

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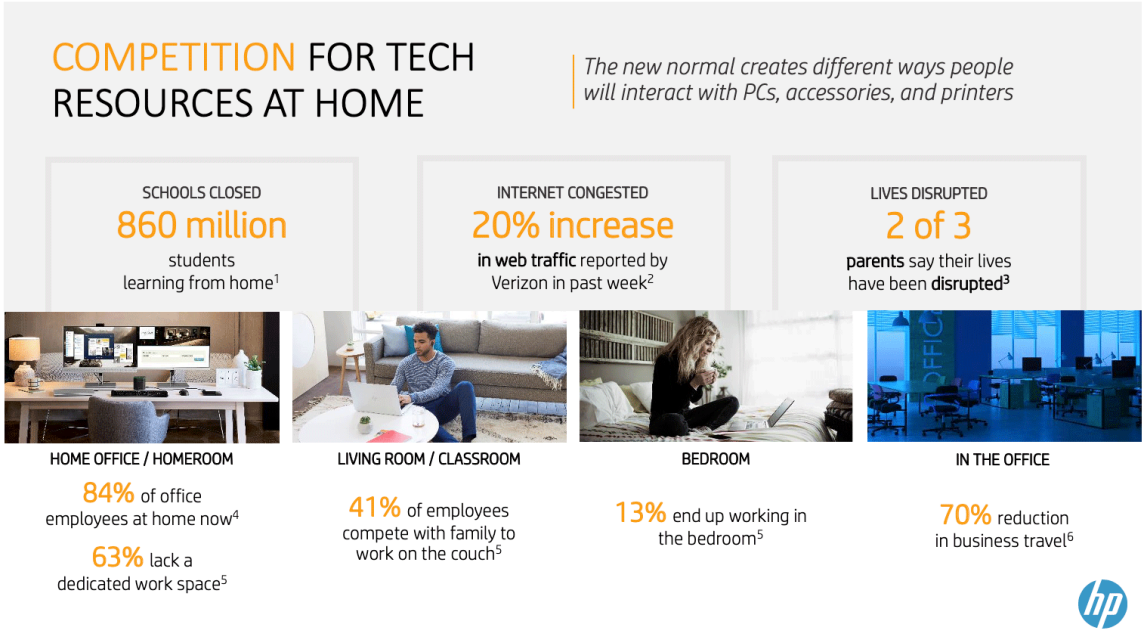
Work is changing – for the better

There's nothing new about remote work, or as we used to call it, *telecommuting*. But with the onset of COVID-19, commercial organizations are scrambling to stay ahead of the game by embracing remote work as a major norm for its workforce, while cutting back office spaces and business travel.



In a recent survey conducted by HP[7], 54% of companies stated they plan to cut back on travel permanently after COVID-19. As a result, employers have been rushing to equip their workforce with the tools they need to maintain productivity away from the office. Items like notebooks, broadband hardware, multiple displays, headsets and webcams, and virtual collaboration software have all seen increases since the pandemic.

According to an HP survey[8], 46% of remote workers lack a dedicated workspace at home. This means most workers are competing with their family members for the kitchen table, dining room table, or the living room couch—some even having to resort to working from their bedroom or garage.

IT administrators have also felt the brunt of this quick transition to remote work. These professionals have had to deal with an influx of remote communications into its corporate network as employees logging in through VPN inadvertently strain bandwidth.

Few were prepared for what COVID-19 would bring, but when it comes to remote work, we haven't been completely in the dark. While cloud service providers have been experiencing larger loads on their infrastructure, they appear to have been able to scale their systems more easily than on-site systems.

Remote work is becoming the new normal

Companies are embracing telecommuting, and with the right tools at their employees' disposal, are finding that remote work is both a cost and health benefit to its workforce.

And the number of employees making the transition to a fully remote scenario is increasing. A recent Gartner study[9] of chief financial officers (CFOs) and finance leaders shows that almost three quarters of the organizations plan to have 5% to 20% of their employee workforce who previously were not working remotely, to remain permanently working from home post-COVID-19.

Gartner CFO Survey Reveals 74% Intend to Shift Some Employees to Remote Work Permanently

Global Workplace Analytics[10] estimates 25% to 30% of the US could be fully remote in three years as a direct result of the COVID-19 situation.

An HP IT decision maker (ITDM) end user study[11] conducted in April 2020 found that 56% of employees will want to keep working at home as much as they want even after the pandemic is over.

56%

Employees will want to keep working from home after the pandemic is over.

HP ITDM/End User Study April, 2020

And as these numbers will likely increase, employers are on the lookout for better technologies to help employees maintain a safe, efficient, productive remote workspace.

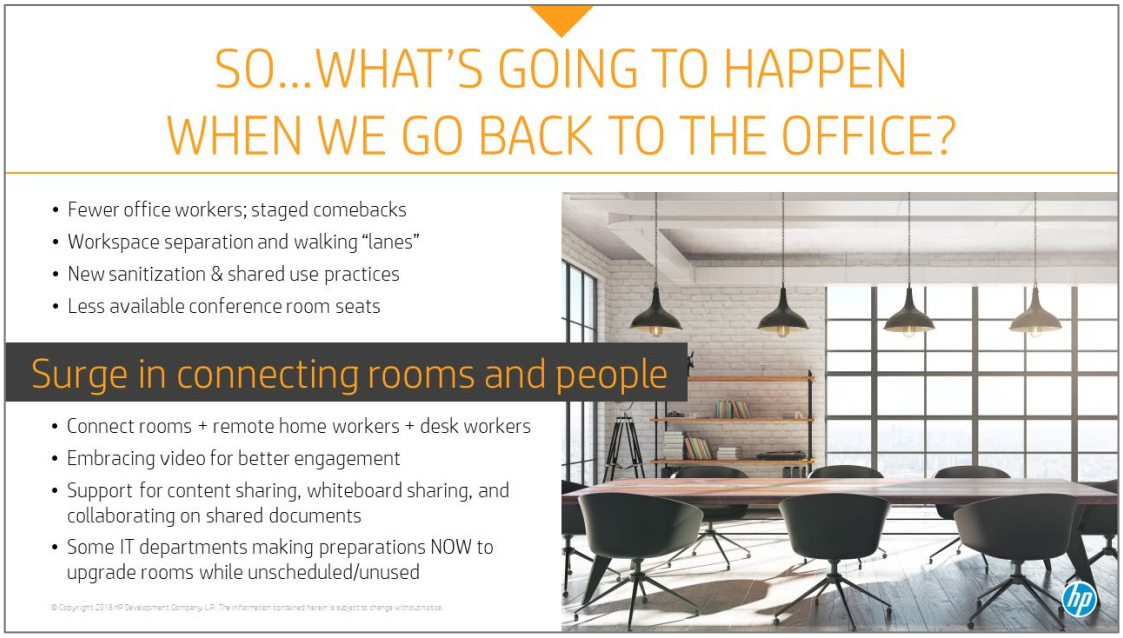
As more companies make their digital transformation toward a remote workforce, video conferencing software has become a significant tool to maintain a strong, virtual workforce. Companies have long feared that by removing employees from their respective office spaces, they would be sacrificing collaboration, communication, and productivity. But with new virtual collaboration solutions – from a basic private chat and sharing capability to large-scale team meeting rooms – enterprises have found it easier to make the leap to a fully functional remote workforce.

The new conference space

While some companies may make a full leap to working remotely, many will return to work at smaller numbers, enacting policies of a voluntary return for portions of its workforce. As companies make that return, the legacy workspace will undergo an inevitable transition.

With fewer workers stationed in the office, office space density will undergo a transformation with new a layout and new real estate through digital consolidation. The expansion of open office concepts and new office space configurations, such as hot desking, are likely to arise. More employers can expect a surge in conference rooms that can quickly provide a meeting, conference, or collaboration space between individuals and groups of employees.

Offices will transition to suit workers who return, who must then connect and collaborate with others virtually. Meeting rooms and collaboration spaces will need to support in-person attendees, internal desk workers, remote workers, and others transitioning between mobile and desktop applications. Rooms must be updated and retrofitted to support audio and video conferencing, and whiteboard sharing and collaboration.



With the ever-increasing demand for video caused by more remote work, the ability to see meeting attendees and observe their reactions, behavior, and nonverbal communications will be ever more important. Likewise, the capability to easily view, share, and interact with content between room and remote participants will be critical. Sharing screen information from laptops and whiteboards, as well as ideating or collaborating with shared documents and applications is equally critical. Yet many conference rooms are not equipped to support video conferencing and collaboration.

The key will be to connect everyone while creating a more immersive and engaged experience.

The conference room will undergo a transformation. From layout to frequency of use, the conference room as we know it will change – and must support the changing workforce, both in and out of the office.

Face-to-face-only gatherings, previously requiring a large conference room, will be augmented for smaller, in-person attendees, with the inclusion of more remote participants. In the near term, conference rooms will likely incorporate social distancing conditions with fewer seats per conference room being accessible. A large conference room designed for 20 people may now only support 8 people, with similar limits for participants for medium and small conference rooms.

This new lower-capacity configuration will create conditions where meetings will be held with a combination of in-room attendees, those who join from their desks, and of course, remote workers. With fewer face-to-face-only meetings and/or lower-capacity conference rooms due to social distancing, scheduling will consider various attendee personas and conditions.

Room personas

In preparation for this transition, HP has defined specific room personas to assist IT managers with building out conferencing and collaboration solutions.

Common room personas are **focus rooms**, **open huddle space**, **huddle space/small rooms**, **medium rooms**, and **large meeting rooms**.

The following provides a guideline for ITDMs to classify their room types and use cases per room.

Focus rooms

The **focus room** is typically a one- or two-person room to accommodate ad hoc meetings and conversations with remote participants from the office. Closed-off to offer privacy and minimize noise coming from outside of the room, these rooms can typically be used without reservation, but may also be digitally-reservable depending on policy. HP typically sees two common use cases (or workflows) associated with a focus room: a) bring a laptop into the room or b) just an individual in the room.

The optimal focus room setup includes a large format display with a webcam, docking station, full-sized keyboard, mouse, and either audio headset or mic/speaker system. The most common practice is to connect a notebook into the docking station with a single cable to activate all of the peripherals in the focus room. Users can launch a meeting invite, run the appropriate conferencing application, and join a meeting, or they can also use the notebook and docking peripherals as an expanded workspace.

Open huddle spaces

The **open huddle space** is an area designated in the office environment host team meetings, stand-ups, and quick ad hoc gatherings to collaborate and communicate. These rooms are typically non-reserved spaces to allow team members to meet locally and share content with fellow team members via a large format display and/or whiteboard. Team members can share content either individually or simultaneously, from their notebooks, to the front-of-room display via wireless sharing technology.

This space could also be equipped with a webcam, mic and speakers, and a conferencing endpoint device to enable remote workers to participate with local employees.

Huddle room/small conference rooms

Most organizations have gone away from building out large, expansive conference rooms, favoring smaller huddle rooms and conference rooms for employees to reserve or use on an ad hoc basis. An enclosed huddle room typically supports up to three or four people, with a maximum of six. Small huddle rooms would include a front-of-room display (42 in to 55 in) to view content locally, as well as participants and content when in a conference meeting. The room can be fitted with a video conference endpoint with a camera, mic, speaker, and the ability to do HDMI ingest from a notebook.

For these smaller conference rooms, two different audio experiences can be designed: a center-of-table audio experience or a front-of-room audio experience. For a center-of-table audio experience, conferencing endpoint supports built-in speakers and microphones. These replace the traditional speaker phone, allowing all participants to speak and hear via the endpoint placed in the center of the table.

For a front-of-room audio experience, a speaker/mic/video bar unit is mounted either below or above the front-of-room TV display. This unit would then be connected to the video conference endpoint device mounted either behind the TV display or beneath the conference table. All audio is directed to and from the front-of-room display with camera.

Upon entrance, a center-of-room touch screen control displays the scheduled meetings, and with a single touch, the participants in the room can join the meeting and begin a video conference with remote participants.

Medium and large conference rooms

Medium conference rooms are defined as rooms that accommodate approximately 6 to 12 people. Large conference rooms accommodate between 12 to 20 people. Both are generally reserved for meetings and for video conference sessions via the organization's calendaring system. These rooms come equipped with one large-format TV display at the front of the room, or possibly two side-by-side displays, as well as a video conference camera mounted and centered above or below the displays. Content can be shared locally, taking up the entire screen for a maximum display. If in a remote conference meeting, the display can show both content and participants together.
For conference meetings, rooms equipped with two displays allow for content to be shared on one display and remote participants on the other.

For a medium-sized room, an all-in-one endpoint unit could be used, similar to the small room system using the microphones and speakers built into the endpoint placed in the middle of the table. Alternatively, a table-top microphone and speakers or table-top microphones and front-of-room speakers can be deployed, and depending on the audio system selected, can be connected to the conferencing endpoint device mounted beneath the table or behind the TV display.

For large-sized conference rooms, table-top microphones can be daisy chained or spoke-hub connected to capture the audio across a large table surface area. Depending on the audio system deployed, the speaker device can be placed on the table, at the front of the room, or next to the TV display(s). Another option is to deploy a system with ceiling microphones and speakers tuned specifically for the room. The conferencing endpoint would be mounted beneath the table and connected to the audio/video peripherals.

The typical workflows for medium and large conference rooms include one-touch joining into scheduled meetings, audio and video conferencing, wired and wireless content sharing, phone dial-in and out, and presenting content locally. Another common use case is to be able to share content from a medium and large room's dry erase board with the remote participants, through a mounted content camera, via the conferencing endpoint.

Room requirements

IT managers may want to consider the following summary checklist in preparing for the transformation of their conference rooms to support the surge of connecting rooms and remote workers:

- What unified communication platform is in use today or what platform is the organization transitioning to? For example, Microsoft Teams, Zoom, etc.
- How many rooms do you have companywide?
- How many of those rooms are small, medium, large, or other room personas?
- What is the table layout for each room?
- Is there a preference for a center-of-room table audio experience or a front-of-room audio experience for each room type?
- What camera angle is required to see all participants in the room? For example, if the table is in the center of the room, is a camera field of view (FOV) of 90° to 120° sufficient? Is a camera with a 180° FOV required for rooms with tables that abut the front-of-room TV display?
- Is there a cable conduit, or sufficient cable path, between the front-of-room display and camera and the conference room table?
- Confirm the workflow and use cases required for meeting rooms:
  - Easy room and meeting scheduling
  - One-touch join to start meetings
  - Audio conferencing
  - Video conferencing
  - Content sharing: Wired and/or wireless from laptops and mobile devices
  - Whiteboard sharing
  - Phone dial-in and out service
  - Other advanced workflow considerations like meeting recording, transcriptions, translations, etc.

The HP Elite Slice G2 portfolio

HP now offers purpose-built conference room solutions centered on the HP Elite Slice G2 portfolio. The HP Elite Slice G2 is an all-in-one device that combines compute, codec control, and inputs/outputs to standard AV peripherals to make it simple, scalable, and versatile to deploy into any size of conference room. The systems are designed to:

- Allow for an easy, one-touch join to get into meetings intuitively and quickly
- Be easy to deploy and scalable to support any size of conference room

- Be secure from IoT malware and BIOS attacks
- Have versatile audio options to support different room personas

Two models are available to support a variety of room types: the **HP Elite Slice G2** and the **HP Elite Slice G2 Audio Ready** with either Microsoft Teams Rooms or with Zoom Rooms configurations. Both Slice G2 units come bundled with a center-of-room control touch display which allows users to quickly and easily access and join their meetings. There is also a compute module with either Microsoft Teams Rooms or Zoom Rooms software preloaded to drive up to two front-of-room TV displays. The HP Elite Slice G2 can accommodate a front-of-room video conference camera, a content camera for whiteboard sharing, and network connections (wired and wireless). It also includes an HDMI ingest module to support easy in-room content sharing into the meeting experience from notebooks and mobile devices via an HDMI cable. Wireless content sharing is also supported.

The units are pre-imaged with Windows 10 Enterprise IoT and HP's Sure Start BIOS protection software to provide the security and protection from malicious malware attacks. The HP Elite Slice G2 can be ordered with either the Microsoft Teams Rooms or Zoom Rooms software to support these two popular, unified communications platforms and are certified for all the workflows and features available to those platforms.

The HP Elite Slice G2 model is equipped with four speakers and four microphones to offer a 360º audio experience with 90dBa speakers. This model also features far field microphones and noise cancellation to clearly pick up voices for small and medium-sized rooms. The HP Elite Slice G2 was designed specifically for customers that prefer a center-of-table audio experience and to replace the speaker phone in a room. With the HP Elite Slice G2, simply add a camera, attach it to the front-of-room TV display and network, and you have an all-in-one conferencing endpoint solution ready to go.

The HP Elite Slice G2 Audio Ready is designed to be paired with certified third-party audio/video peripherals and can support any conference room size from huddle/small rooms to large/custom room sizes. Popular configurations include pairing the HP Elite Slice G2 Audio Ready unit with a speaker-mic-camera bar mounted below or above the room TV display for a front-of-room audio experience. The Audio Ready unit is designed to be mounted beneath the conference room table with the supplied VESA mounting plate, or with the optional 5m center-of-room expansion cable, it can be mounted behind the front-of-room TV display. This creates a clean top-of-table appearance with only the center-of-room touch display taking up the table real estate, and all other components hidden away.

Popular configurations per room persona

The following outlines several recommended configurations that many of our customers have deployed with the HP Elite Slice G2 solution.

Room Solutions / Configurations

Here is a quick guideline to help decide which configuration works best for each organization's conference room needs:

- Select the unified communications platform the organization has standardized on, either Teams or Zoom. The HP Elite Slice G2 portfolio offers products preconfigured with Microsoft Teams Rooms or with Zoom Rooms as separate orderable SKUs.
- Determine the room size to be configured:
  - Huddle spaces with up to ~3 people
  - Small conference rooms up to 6 people
  - Medium conference rooms up to 12 people
  - Large conference rooms up to 20 people
  - Custom rooms such as training, boardrooms, auditoriums, etc.
- For huddle, small and medium-sized rooms, determine if you prefer a center-of-room audio experience. An example is replacing a speaker phone or having a preference for a speaker phone-like experience. Or you may prefer having the audio experience from the front of the room where the TV display is mounted, minimizing the amount of equipment on the conference room table.
  - For a center-of-table audio experience, select the HP Elite Slice G2 with Microsoft Teams Rooms or Zoom Rooms
  - For a front of room audio experience, select the HP Elite Slice G2 Audio Ready with Microsoft Teams Rooms or Zoom Rooms
- For huddle, small and medium-sized conference rooms and a preference for a center-of-table audio experience using the HP Elite Slice G2, you'll want to confirm the location and size of the conference room table to determine which video conference camera is most suitable. If the table is centered in the room, a camera with an FOV of 90º to 120º should be sufficient to cover all the participants on video. If the table abuts the front-of-room display, then a camera with a 180º FOV will likely be necessary. The following is a guideline on popular camera selections for huddle and small rooms paired with the HP Elite Slice G2 with Microsoft Teams Rooms or Zoom Rooms:
  - Huddle spaces: Logitech BRIO 4K camera
  - Small rooms with a table in the center of the room: Logitech MEETUP, Jabra PanaCast, Huddly IQ camera, or Poly EagleEye Cube cameras

    - Small rooms with a table that abuts the front-of-room TV wall: Jabra PanaCast
    - Medium rooms: Logitech Rally or Poly EagleEye IV USB cameras

- For huddle and small conference rooms with a preference for a front-of-room audio experience, the following speaker-mic-video bars make a perfect pairing with the HP Elite Slice G2 Audio Ready with Microsoft Teams Rooms or Zoom Rooms endpoints. This configuration also makes for a clean conference table with only the center-of-room touch console on the table and the HP Elite Slice G2 Audio Ready installed beneath the table. Another space-saving, optional configuration is the 5m extension cable, behind the front-of-room TV display:
    - Huddle/small rooms: Logitech MeetUp or Poly Studio

- For medium- and large-sized conference rooms, two popular configurations are recommended, either the Logitech Rally Kits or the Poly Trio configurations with the HP Elite Slice G2 Audio Ready with Microsoft Teams Rooms or Zoom Rooms.
    - The Logitech Rally Kit includes a Rally speaker and Rally camera for the front of the room, a Rally Mic Pod for the tabletop, and a table hub and display hub interconnected with an Ethernet cat6a cable for connectivity between the table components and the front-of-room TV components. The Logitech Rally Plus Kit adds an extra speaker and microphone for larger rooms. Both kits can be expanded to support up to seven (7) microphones for very large room configurations. The HP Elite Slice G2 Audio Ready unit can be mounted beneath the table with the Logitech Rally table hub, with only the microphone(s) and center-of-room touch display on the tabletop. At the TV end, the speaker, camera, network, etc. would be connected to the Rally display hub installed behind the TV.
    - The Poly Trio 8500/8800 and Poly EagleEye IV USB combination can support medium- or large-sized rooms. Configuring the Poly Trio into USB compatibility mode turns the Poly Trio into a USB audio microphone/speaker peripheral connected to the HP Elite Slice G2 Audio Ready with Microsoft Teams Rooms or Zoom Rooms unit. For larger room configurations, up to two Poly Trio extension microphones can be added to the Poly Trio for expanded audio performance. The Poly EagleEye IV USB camera (or optionally the Poly EagleEye Director II USB camera) is mounted on top or below the front-of-room TV to complete the configuration.

Manageability, service, and support

The HP Elite Slice G2 portfolio of products include several management features and options to best maintain the systems once deployed, namely HP Lifecycle Services, HP Manageability Services, and HP Security Services. HP Lifecycle Services includes HP Care Pack services to service and support the HP Elite Slice G2 systems with helpdesk, on-site repair services, and extended warranty coverage.

HP Manageability Services includes HP Proactive Management and Adaptive Device Management services. HP Proactive Management includes HP TechPulse, which is an analytics platform to monitor the HP Elite Slice G2 systems with a cloud-based analytics engine, which allows for proactively identifying issues and enabling remediation at scale. Built into each HP Elite Slice G2 is the HP Sure Start technology to protect the endpoint from any malicious malware attacks on the BIOS. This includes an auto recovery mechanism should the BIOS be compromised. HP Sure Start can be managed with the HP Manageability Integration Kit (MIK).

In addition, the HP Elite Slice G2 portfolio of products are supported in the Microsoft and Zoom management portal systems for those respective administration, management, update, and support features and functions.

Conclusion

Get started now for the surge, and requirements, to connect rooms and remote workers.

As the COVID-19 crisis begins to subside and with the return of some workers into the office, now is the best time to prepare for the pending surge of connecting rooms with remote workers. While conference rooms are vacant, it is a perfect time to plan, design, test, and transform your meeting environments to support the "new norm." Using these conference room guidelines and room configuration recommendations should help prepare your organization as employees return to the office.

For further information:
https://www8.hp.com/us/en/desktops/business/elite-slice.html
https://www8.hp.com/us/en/solutions/smallbusiness/collaboration-solutions.html
Contact your HP sales or partner representative.

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