THE IT PRO GUIDE TO
AUDIO
COLLABORATION

ITPro.

in association with

SHURE
SOUND EXTRAORDINARY

WELCOME

Technology has completely revolutionised how we communicate. From microphones to telephones, radios and speaker systems, we've been able to connect with each other – across vast distances – for over 100 years. Doing so has helped businesses, too – and ongoing developments in the AV space continue to deliver clearer, higher-quality audio, allowing organisations to communicate seamlessly with collaborators wherever they are in the world. Now, as we begin emerge from the COVID-19 crisis, keeping our businesses connected and working together effectively is more important than ever. It's easy to take this for granted: run a meeting with faultless audio and everyone moves on with their day. Encounter problems and it can disrupt the flow and outcome of a collaboration. Quality audio is essential. In this IT Pro report, we will cover everything from the benefits of investing in top-quality audio for your businesses, to the mechanics of designing a space to make the most out of your meetings. We hope you find the report interesting and informative. Thanks for reading.

Maggie Holland

Maggie Holland
Editorial Director, Dennis B2B

ABOUT SHURE

With a history of innovation that dates back to 1925, Shure has turned a passion for making great microphones and audio electronics into an obsession. The company has played a part in many of the defining events of the last century, and continues to set the worldwide industry standard for superior, reliable microphones, headphones, software and conferencing solutions for every space from the boardroom to the stadium.

Learn more at shure.com

CONTENTS

THE EVOLUTION OF WORKPLACE TECHNOLOGY

## The office of the 21st century is reshaping how we work.

The workplace is transforming. The rise of agile and remote working practices, increasing decentralisation and an unprecedented and previously undreamed-of level of connectivity has been enabled by rapidly evolving technology, while at the same time pushing it to develop faster and faster to meet the demands of the 21st century. As the workplace reconfigures in the wake of COVID-19, it is vital to keep on top of the latest changes to meet today's challenges.

The connected workplace
The move towards agile working and hotdesking, as well as growing businesses setting up new hubs across the globe, has had an understandably dispersive effect on the internal functioning of organisations and how colleagues work together. But thanks to new technologies, in many ways we are better connected to our co-workers than we ever have been, with greater control over our environments, data and the systems at the heart of our businesses.

The Internet of Things (IoT) is building an intelligent workplace that promises cost savings, increased efficiency and a responsive working environment. For instance, IoT enables micro-targeted climate control, adjusting air conditioning and heating to match each employee's preference. IoT devices and sensors can gather data on lighting and other forms of energy usage too, helping to refine them and make savings that are friendly to both the environment and operating costs. New 'smart
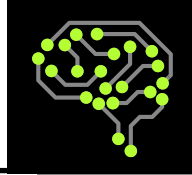
offices' are being built to incorporate IoT from the ground up – for instance, Deloitte's Amsterdam office 'The Edge' is billed as "the world's greenest building" thanks to its 28,000+ sensors which measure the building's climate and advise staff where they should sit based on their specific needs.

Artificial intelligence is also beginning to play a role in the workplace, with business expenditure on AI-based technologies set to rise annually from $12.4 billion globally to $232 billion by 2025 according to KPMG. Far from a dystopian vision of robots stealing our jobs, workplace AI is positioned to tackle menial and time-consuming tasks, freeing up employees' time to focus on the responsibilities that really matter.

Virtual assistants are being developed that will manage schedules, transcribe meetings and quickly source new data that could help

$232 billion
projected global business spend on AI-based technologies by 2025

answer any questions that arise. Not only will this free employees from fiddly meeting admin, but it also has the potential to uncover hidden business intelligence and insights that might have otherwise gone undiscovered or unnoticed. Sparing workers from repetitive tasks will unlock their creativity and allow them the freedom to focus on the meat of their roles within their organisation.

Strong lines of communication are a must for any productive business, and in this world of globalisation and agile working, the quality and clarity of our interactions is more important than ever to ensure that systems run smoothly and efficiently across a physically scattered network. The speed and reliability of communication has been revolutionised to keep up with this changing paradigm. Developments in audio-visual technology allow colleagues to see and speak to each other anywhere in the world, promoting close collaboration and personal connections even if people aren't sharing the same physical space, and maximising the effectiveness of company-wide meetings. Thanks to high-quality audio solutions, workers can speak across distances as if they were in the same room, avoiding the myriad sound issues long-associated with conference calls. Major company meetings can be conducted between offices without having to worry about employees traveling from one physical location to another.

Other tools have emerged to improve our intra-business communication, frequently taking advantage of the cloud to make sure that we are – in some cases, literally – all working on the same page.

File sharing systems and collaboration tools like Slack, Trello, Dropbox and Google Drive are replacing email as more intuitive and flexible ways
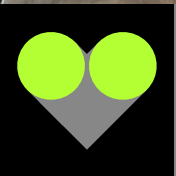
Deloitte's smart office 'The Edge' contains over

28,000
built-in IoT sensors

of managing workflow and cooperating on multiple projects.

Wi-Fi coverage has greatly increased the viability of these cloud-based solutions and communication systems, and the arrival of 5G promises high speeds and reliability that will allow employees to keep in touch wherever and whenever they need to be.

The challenges

It's to be expected that the evolving workplace will bring its own set of fresh challenges, and organisations must be aware of the dangers as well as the benefits of these new systems. Employees and employers will need to adopt new behaviours to make the most of these developing technologies – and to ensure the security of the business.

The increasing dependence on the cloud – as well as Wi-Fi networks for colleagues working outside the office – can leave organisations vulnerable to cyber security issues if IT infrastructure is not properly managed. Investing in the most up-to-date technology – either directly or via an MSP – is key to keeping up with the latest cyber threats and taking advantage of new solutions devised to counter them. Virtual private networks (VPNs) and antivirus packages add an additional layer of protection between your systems and the ever-increasing number of external threats.

Employee education on the threats facing organisations from password breaches to phishing and ransomware attacks has become an equally vital part of keeping your systems and data safe.

British organisations suffer a cyber attack

EVERY MINUTE

according to Beaming

Employee awareness doesn't end at cyber security, either. With the huge changes to the workplace already discussed, it's crucial to keep workers informed on where they stand in relation to these developments, and to empower staff to understand which are the right tech tools for the job. Company culture is as much subject to evolution as these more tangible systems, and must be recognised as a key aspect of the development of the organisation as a whole.

The need for great audio

Amidst these momentous changes, this report will be looking specifically at communication and best-practice in audio tech. We will explore why investing in great audio is an essential part of building a business of the future and maximising the effectiveness of collaboration both within and between organisations. It will also include chapters on the specific technology powering the audio evolution and the best ways to take full advantage of it.

THE ARGUMENT FOR GREAT SOUND

Make audio a priority if you want to have effective meetings.

Perhaps it's the emphasis on video that stems from years of talk about video-conferencing, but for too many organisations audio is often seen as a secondary priority. It's all too easy to focus on high-definition cameras and screens and neglect the crucial role of sound. Yet the latter is, if anything, more important.

"If audio doesn't work, you don't have a meeting," Jim Schanz, vice president of global sales for integrated systems at Shure, told Inavate. "But if video drops, you can still have a conference. We're really trying to get the message across that audio is absolutely the most important part of any meeting or conference that you're going to have."

This doesn't mean that video is unimportant, but successful long-distance collaboration means creating an experience where it feels like you're all in the same room. Audio and video need to form one coherent whole.

This is particularly crucial for organisations communicating across regions or around the globe. Delivering clear sound, reducing crosstalk and minimising latency ensures a more effective meeting. What's more, when local teams get the same great audio as head office, it helps maintain the sense that you're all working together in one unit. Organisations serious about their global communications need to think about making this a reality in every meeting room; it's no good putting the perfect audio system in the boardroom if voices from elsewhere are near-unintelligible.

It's also vital that all participants can be heard clearly. If some voices come through better than others, there's a risk that ideas and information will be lost or opinions misrepresented.

SHURE

Filtering out the noise

Here, though, organisations face a challenge. You need the voices in the meeting to be heard clearly over any background noise in the room. But many boardrooms and meeting rooms suffer from poor acoustics, which can make speech more difficult to understand. Hard surfaces and echoes leave voices sounding thinner and brighter, while reverberations can create layers of competing sound. Few meeting rooms are free from ambient noise – from air-conditioning systems and laptop fans to sounds leaking through from outside. It's hard to collaborate when you can't hear each other clearly.

Meeting these challenges isn't easy. Partly, it's a question of finding an audio system that will work inside each room to distribute sound evenly, clearly and with minimal echo, so that everyone involved can hear everyone else. You need to select the right speaker for your purposes, and consider adopting technologies that emphasise

speech over background noise, intelligently processing the incoming audio and lifting the voice out of the overall sound mix.

More traditional audio expertise can also help, particularly when it comes to microphones and where they're placed. Getting the microphones and the positioning right – and using echo- and noise-cancelling technologies – can play a huge part in creating an audio environment that works for everyone involved.

The professional microphone market was forecast to exceed

$1.8 BILLION

in 2019 by Futuresource Consulting

CONFERENCING AUDIO PROBLEM SOLVING

In third party research conducted by Illuminas on behalf of Shure, AV buyers and users identified their top three meeting frustrations as background noise (51%), technical difficulties (45%) and echoing (43%). To keep such issues to a minimum, you should consider the below six points. Find out more about the results of this survey at **everyvoice.shure.com**.

- Training: Make sure that teams are well trained and comfortable with equipment, or you might find that they actively avoid taking advantage of it. A few minutes helping them to understand the mics and how to use them will help build confidence and make for better meetings.

- Checks: Does software need to be updated? Is a crucial service down? Ensure that any issues have been identified and fixed beforehand to avoid troubleshooting cutting into meeting times.

- Phones and laptops: Phones and laptops should be shut down or muted, and if someone leaves their phone on vibrate they need to put it in a pocket, not on a hard surface next to a boundary mic.

- Volume: Make sure you've got your levels right. Turn up the speakers too far or turn up the mic gain, and it's too easy to setup a vicious cycle of echo, distortion and even feedback.

- Investing: Provide the right tools for the job. Cheap consumer grade audio or insufficient miking can seriously impact meetings productivity. Investment in high-definition video should be matched with a quality audio setup customised for each particular meeting space.

- A backup plan: Prepare and test the equipment and everything should work, but it never hurts to have a backup plan, especially when you're dealing with remote participants. Make sure they have a number to call in or have an alternative meeting service in case of problems.

SHURE

Four business benefits of great audio tech

High-quality audio technology can improve more than just sound quality. We've broken the additional benefits for businesses into four core areas:

Increased productivity
Most teams work more effectively and reach their goals faster when their members can interact naturally and frequently. A quick chat often gets you answers faster than a string of emails. Conferencing technologies can bring complementary skills together and drive innovation.

If you're a global organisation, it makes sense to collaborate with equivalent teams in other regions, or tap resources that aren't available locally. Sparing key employees and team leaders from travelling to meetings allows them to spend more time managing their teams or projects.

Better audio technology also makes it easier to capture what's being said in meetings, so that concerns can be tracked and ideas pulled out and followed up.

Reduced overheads
The overheads of business travel for the sake of meetings soon mount up. Get the right technology in place, though, and you can replace many physical meetings with voice or video conferencing – saving money and a whole lot of time.

Better internal communications
Whether it's stand-up team meetings or inter-departmental meetings, it's crucial that everyone involved can hear each other and understand the points being raised, whether they're physically in the meeting room or not.

Good audio technology helps keep speech intelligible and makes it easier to follow the flow of conversation, grasp the details and keep track of the overall tone. More effective, dynamic and useful meetings can help boost employee satisfaction and team camaraderie and build a wider sense of ownership of projects or objectives, not to mention help resolve conflicts and break down silos between teams or departments.

Create opportunities for flexible working
The CIPD's UK Working Lives 2019 survey found that 54% of UK workers were already working flexibly to some degree, while the last CBI/Pertemps Employment Trends survey notes that 99% of businesses felt that flexible working was important to competitiveness, business investment and job creation. Better audio technology can support this by connecting workers that can't be physically present in the same room, and by delivering an experience that makes them feel a part of the same team.

SHURE

THE TECHNOLOGY BEHIND AUDIO CONFERENCING

Master the tech that brings you better sound.

One of the challenges around audio conferencing is that it's an area where IT professionals might have to move out of their comfort zone and develop some understanding of technology and terminology they haven't encountered before. It's all well and good knowing your Intel Xeon from your AMD Epyc, but understanding acoustics and DSPs is something else entirely.

Understanding microphones

The first thing to get to grips with is microphone form factors. Handheld or wearable mics work for broadcasts or large-scale presentations, but aren't practical for meeting rooms involving multiple participants. For audio conferencing, there are several options worth zeroing in on: boundary, gooseneck, ceiling and table array microphones.

Boundary microphones are designed to be placed on flat surfaces, usually picking up sound from two or three feet in front of the mic. These are popular in meeting spaces because they're unobtrusive, and multiple boundaries in the right spots will cover the entire conference room.

Gooseneck mics ensure clear audio for each person in a meeting. The extended necks put them close to the audio source – the speaker's mouth – and away from anything that will generate unwanted noise or block the microphone. However, the drawbacks include each individual speaker requiring their own microphone.

A ceiling microphone, meanwhile, is mounted or embedded in the ceiling to catch any sound from below. These are great for picking up the entire room, and also benefit from keeping tables free of clutter and out of meeting attendees' way. They work well for medium to large sized conference rooms, and solutions like Shure's Microflex® Advance™ MXA910 Ceiling Array Microphone with IntelliMix® DSP are an increasingly popular choice.

If you need to cover a smaller meeting room then the Shure Microflex® Advance™ MXA310 Table Array Microphone is a wise choice (see illustration on page 12). This features tech

that captures table-level sound and reduces background noise. With its built-in automatic mixing, every voice is captured clearly from anywhere in the room.

Jargon busting mic talk

When dealing with microphone setup, it also helps to be aware of terminology you'll encounter like acoustic echo cancellation, automatic gain control and automatic mic mixing. These must be taken into consideration for crystal-clear audio conferencing.

Acoustic echo cancellation, frequently abbreviated as AEC, is the process of stopping you hearing your voice 'echoing' back on a conference call. Andrew Francis, Manager, Applications Engineering at Shure, says of AEC: "Without it you'll find that when you talk you'll hear yourself back on your loudspeaker or on the far end of the telephone. In a very short space of time it becomes very uncomfortable. AEC processes stop that from happening."

Automatic gain control, meanwhile, is an audio process which levels out the volume of participants in a room. This prevents you from manually adjusting the volume on individual speakers, instead automatically raising the volume of quiet talkers and bringing down louder voices for a more even output.

Automatic mic mixing is crucial if you're in a room that has multiple microphones. "One of the [microphones] will always be the best for a given talker in that space, and our automatic mic mixing algorithm will do that process for you," Francis explains. "The benefit is that the closest mic to the talker will pick up the most direct sound and the least amount of reverberant room sound. The far end participants of a VC call want to hear as much direct sound from the person talking as possible. Too much indirect or room sound reduces the intelligibility of a talker making them difficult to understand."

All of the above can be addressed with Shure's IntelliMix® Room, a software-based DSP (digital signal processor) that can run on any Windows 10 PC and is optimised for Shure network microphones. Francis says of IntelliMix's underlying tech: "[It's] a suite of software processing tools which help to enhance the audio coming from your meeting rooms, specifically with microphone pickup. We're all familiar with poor sounding audio on conference calls, whether it be too much background noise or the person on the far end complains that they can hear themselves back. Or the microphones just sound too roomy, or like you're in a box. The processes of automatic gain control, automatic microphone mixing, noise reduction and acoustic echo cancellation all work together as a suite of products to help you combat these problems"

By understanding your available mic options, where to position them in the room and the common terminology you'll encounter, you'll be well on your way to creating your ideal conferencing audio environment.
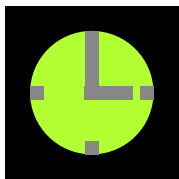
The cost of poorly organised meetings in the UK in 2019 was

$58 BILLION

according to a study by Doodle


THE RIGHT AUDIO FOR THE ROOM

Business audio isn't a one-size-fits-all deal. Different types of meeting room bring different requirements and challenges, while you also need to consider the number of people involved and the style of any meetings that take place in that space.

Small meeting rooms: These make up nearly half of the meeting rooms in Western Europe and North America, but they're tricky. You could be struggling with four to six people meeting inside a confined space with stark, reflective surfaces and a difficult acoustic profile. Opt for low-profile boundary microphones or gooseneck microphones to minimise obstructions.

Conference rooms and boardrooms: Larger meeting spaces have their own acoustic challenges. Not only will you often have a lot of glass, wood and other reflective surfaces, but an area where style is crucial and where clutter isn't tolerated. These are a natural fit for table array microphones like the the Shure Microflex® Advance™ MXA310 or next-generation ceiling arrays like Shure's Microflex® Advance™ MXA910 Ceiling Array Microphone with IntelliMix® DSP. Here clutter is minimised and each array can handle multiple participants.

Huddle spaces: Informal meeting areas in open-plan workspaces pose the biggest challenges of all. There's no way to screen all background noise and space is at a premium, so it's often best to cover permanent huddle spaces with area miking, using one or two condenser mics placed overhead. In other cases, discreet boundary mics and table arrays such as the Shure MXA310 can be used on the table. It's crucial to keep things easy, informal and out of the way.

SHURE

THE PERFECT MEETING ROOM SETUP

There are many types of meeting rooms, from small huddle spaces to boardrooms, but the principles of configuring your space for audio are largely the same – you want to create an environment that supports and enhances the audio signal while reducing noise. To do this, you need to think about the acoustics of the room and the audio technology you choose. In this example, we're looking at how you might configure the most common meeting space, a small meeting room.
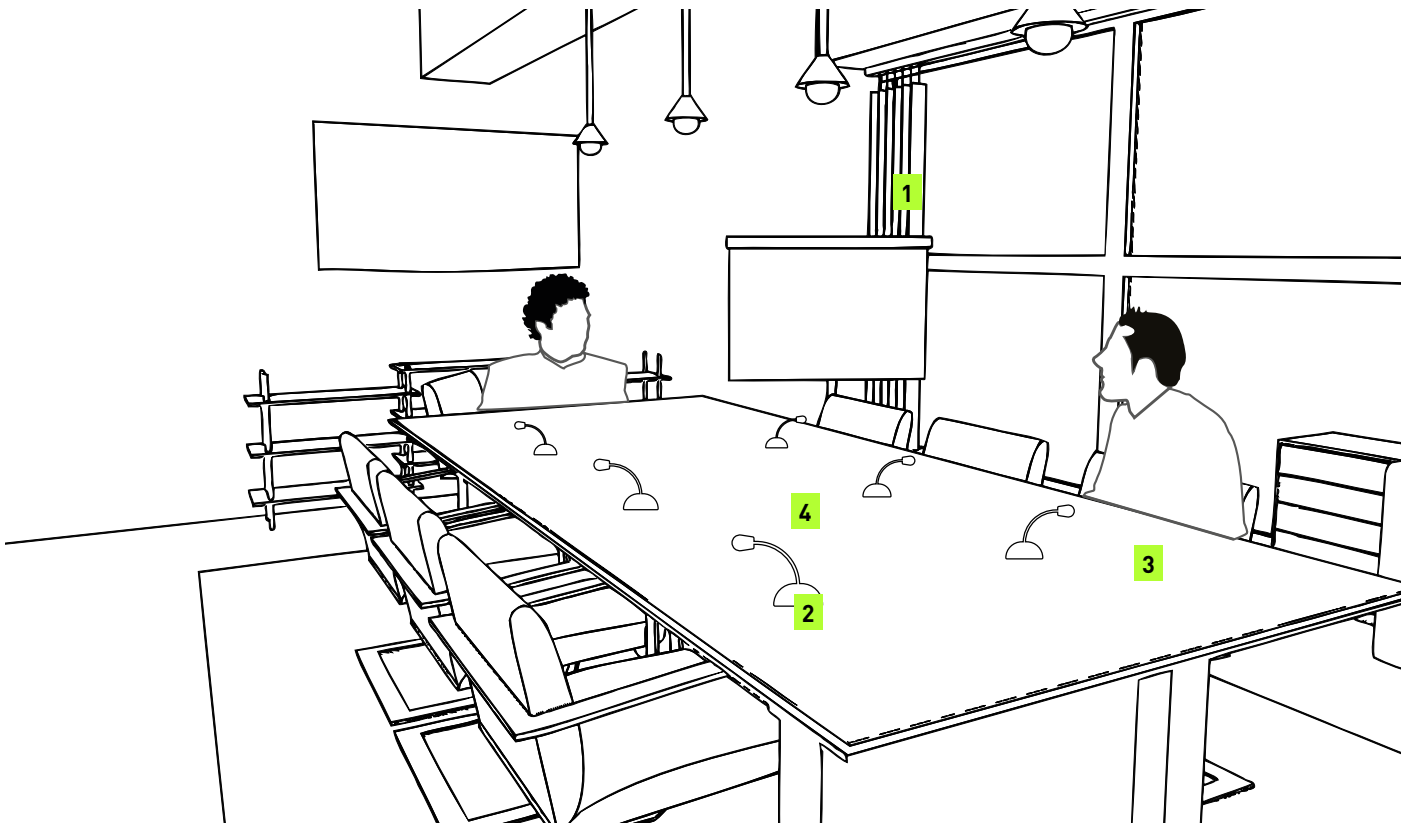
1 If your meeting room is located near a busy road or loud office area and has thin or glass walls, soundproof your space using materials such as sound-absorbing panels and heavy curtains, while other soft furnishings will help to reduce feedback through reverberation. There are ways to reduce ambient room noise by adding treatments that complement your room's aesthetics.

2 Think about which type of microphone best suits the space. Directional and array microphones are a good choice for noisy environments, as they avoid picking up background noise in the signal.

3 Clear the desks! A simple way to reduce internal noise is to encourage employees to keep personal belongings – such as laptops, mobile devices and notepads – away from the microphone.

4 Wireless technology can be really handy if the room will be used for multiple purposes. If the tables can be moved around to create different setups, cables and fixed microphones can quickly become a pain, so you might benefit from wireless tabletop mics or ceiling-mounted microphones.

SHURE

WHAT DOES THE FUTURE HOLD FOR BUSINESS AUDIO?

We spoke to Jim Schanz, vice president of global sales for integrated systems at Shure, to find out.

Are firms finally beginning to get the message that, for collaboration and video meetings, audio is every bit as important as video?

I think audio still isn't considered as important, although we're starting to see some change there. Now, with the liberation of video conferencing and, certainly, the trends towards soft codecs, video conferencing is no longer a nice-to-have – it's a necessity. People are beginning to understand that, if you lose video in a video conference, you can still have a conference. If you lose audio, you're not going to have any scope for conversation. At home, we have high-definition and 4K video and we can see the difference in quality, and that also holds true in the corporate world with video conferencing. With audio, the difference isn't always so obvious, and a lot of users don't know how good it can be. But when intelligibility is given up, they notice. That's something we – and other manufacturers – need to make clear.

How do you see COVID-19 impacting video conferencing over the coming years, do you expect it to plateau to some degree?

The impact of COVID-19 continues to unfold, but what is emerging as a clear picture is that more people will be relying on virtual conferencing. Global travel may be restricted, meaning that business meetings will need to take place in conference rooms or huddle rooms. Students may be learning more from virtual classrooms. We're poised to be a leader in providing solutions in this area.

Business audio often seems to be fighting the problem that the most effective microphones are often the most obtrusive. Is this something that you think is changing?

Definitely. The old way of putting microphones in front of everybody, as close to the talker as possible, will continue to yield really good results, but we can't change how people handle microphones around the conference table – how they move them out of the way or open their laptop right in front. It can be better to have the microphones embedded in a device on the ceiling, where it provides an unobtrusive audio capture opportunity where you don't have to worry about speaking right into the microphone or moving to one side.

Here, the advances in DSP allow for considerably more flexibility. There are a lot of smarts being built into these things; it's pretty incredible what we can do today and what I know we're going to be doing tomorrow. A few years ago we started looking at the microphone as part of an overall conferencing system, and thinking about it as a smart, active, acoustic endpoint – a huge shift for a company that's nearly 100 years old. It's really a coupling of what we've learnt over that history and the expertise we've

Recently, we had an update to our MXA910 where we added a DSP to the microphone itself, which also helps simplify the system. People just want really easy to use, all-in-one solutions.

Is there anything in the future that can help mobile or remote workers get a better audio experience when connecting into video meetings and collaboration apps?
We already have some products out in the consumer side of the business that are being used by a lot of remote workers, though they're not purpose-built for that just yet. We've got some USB microphones that work really well and some Bluetooth earphones with integrated microphones. But we've also got some innovative tech we're looking at in this area. There's nothing I can give away right now, but we recognise that trend and, if there's going to be a very positive audio experience, we want to be a part of that.

developed from years of working with audio DSPs. Very few manufacturers today have that acoustic expertise.

Shure seems to have found solutions to many of the biggest problems around business audio. What do you see as the biggest remaining challenges?
The largest have to do with the acoustics of the room. No matter the innovation or the technology we still have to fight with the physics; the difference between a well-thought-out conference room with acoustic baffling and treatment versus a box with glass and concrete is night and day. With all the technology in the world you just can't fix that.
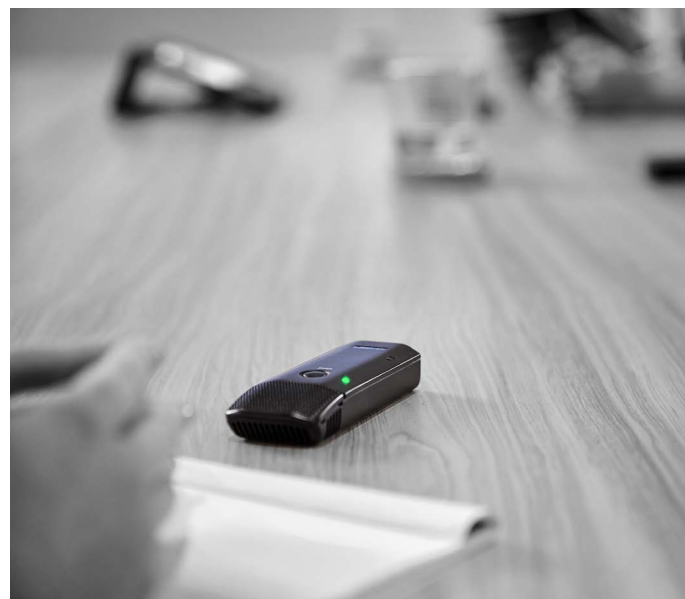
The other is meeting etiquette. Some people don't like having a microphone right in their face – they feel intimidated by it – and you're not going to explain polar patterns to many of the people who use this technology. Those things are out of our control, but we can help with getting the message across. Yes, the microphone's important. Yes, the DSP's important. But you need to be concerned about network bandwidth and acoustics.

There are some things we're doing on the technology side which will help. We're working on some really interesting, innovative technologies and different form factors, like moving the microphone onto the ceiling or in different configurations on the wall.

Are there any hot new technologies in professional or consumer audio that you see coming into the business sphere? What do you see as the next big breakthrough?
The soft codec trend has driven innovation in this space, and – in addition to that – the idea of artificial intelligence and machine learning as a service model. These are all buzzwords, but it's also what we're experiencing in the consumer world. I've already seen integration with Google Home or Alexa as devices that use voice to control a room and, as more users experience that at home, the more they'll expect the same ease-of-use in the office. It'll be just as good or better. It's a very exciting time.

SHURE

CASE STUDY: PROVIDING FLEXIBILITY AND CLARITY TO KPMG'S U-COLLABORATE SPACE

How KPMG utilised Shure's Microflex® Advance™ MXA910 ceiling array microphones.

Unlike conventional sound reinforcement systems, Shure's voice lift solution boosts the frequency range most critical for intelligibility, restoring the natural speech level for far-end participants within a room by increasing speech levels. The effect is so subtle that participants only notice the difference when the system is turned off.

KPMG's U-Collaborate space is a bespoke, innovative environment that combines problem solving expertise and powerful SME insights to help clients overcome complex challenges, such as strategy, transformation delivery or a new operating model. It has the ability to host live events of up to 120 participants all working rapidly in parallel to co-create effective solutions, delivering months of work in just one to three days.

"A lot of the work we do is actually conversation," says Paul Guy, collaboration solutions engineer, KPMG. "It's people talking to people, from different parts of the business, understanding their different vantage points.
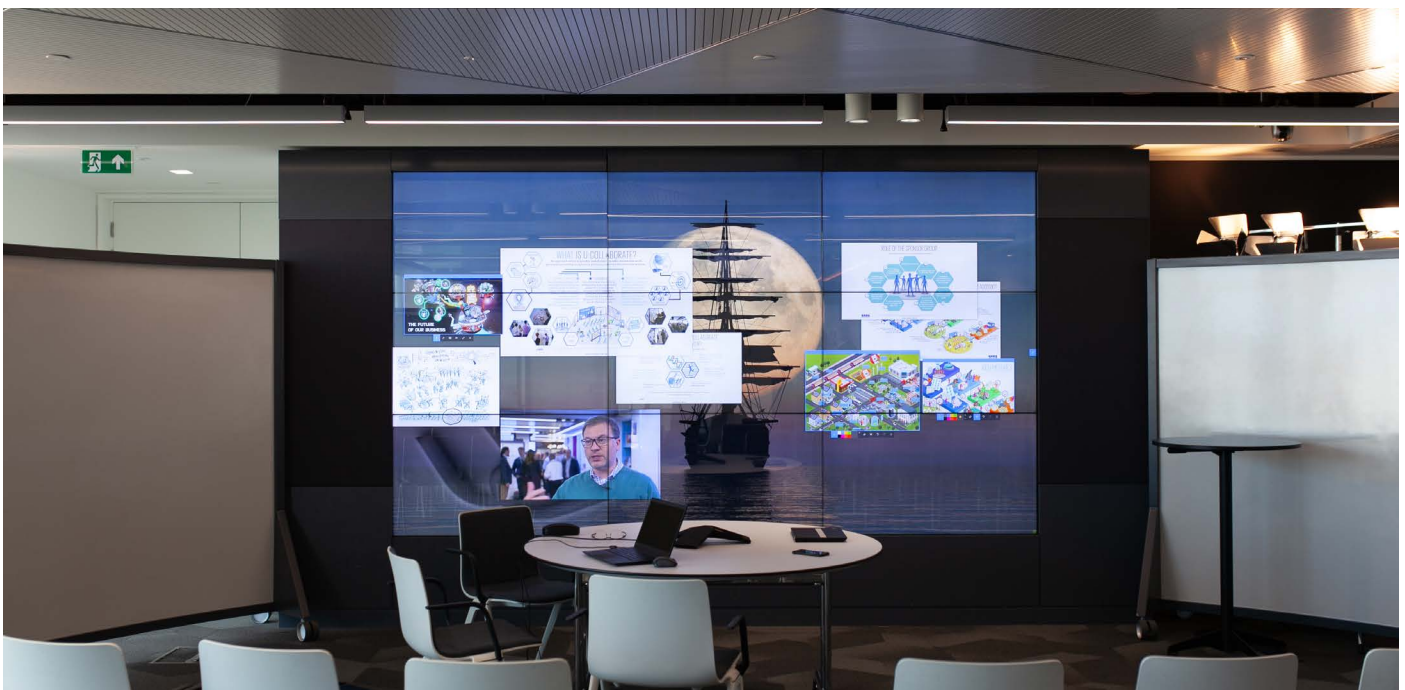
We need to make communication very easy."

When it came to choosing a system to allow easy, flexible communication within the KPMG meeting room – which is a very large event space capable of seating 80 people at a time – the company approached AV specialist Pro AV to find a single solution that could cope with the complex issues surrounding the installation, with voice lift also a requirement of the project.

"KPMG contacted me to come up with potential solutions which would alleviate the requirement for handheld and lapel microphones during a normal session," explains Jon Maguire, client direct sales manager, Pro AV. "The quality of the MXA910, in my mind, is superior to anything out there on the market."

"There's a whole group of people that view a microphone with horror," adds Guy. "The great thing about using the MXA910 with voice lift is they take all of that away. You no longer have to give out microphones to people; all they have to do is talk and they're picked up immediately. It's made collaboration much easier."

The flexibility of MXA910 means the system is also more than adequate for use in video conferencing situations, especially when bringing in a remote participant, with the MXA910s used alongside the voice lift system.

"That discussion is as though the person was in the room. It's only when you turn it [voice lift] off that people notice the difference," reveals Guy.

Shure's MXA910 excels at focused conversation because it features Steerable Coverage™ and built-in automatic mixing, helping capture every voice with pinpoint accuracy anywhere in the room.

The automatic positioning feature in Shure's Designer System Configuration Software makes it easy to adjust lobe coverage, so businesses like KPMG get the most out of the meeting conversation.

The MXA910 can easily connect to the vast ecosystem of Shure and third-party networked audio devices like Dante™ and AES67.

Shure Network Audio Encryption can be enabled when used with the IntelliMix® P300 Audio Conferencing Processor or Shure Audio Network Interfaces, which utilise AES-256 technology to protect confidential content.

SHURE

COVID-19 AND THE FUTURE OF MEETING SPACES

Keeping safe and connected during the pandemic and beyond

The impact of the 2020 coronavirus pandemic has challenged and transformed working practices across the world, essentially beginning a global experiment in remote working. In many organisations, teleconferencing has become the chief tool in enabling communication, from company-wide huddles and high-powered business meetings to casual catch-ups and social breaks among colleagues. It has allowed many of us to continue operating without too much disruption despite suddenly finding our networks removed from the office environment and scattered across potentially vast distances.

Even as lockdown begins to lift, how we communicate will not go back to how it was before. Organisations have had to seriously consider the rules and regulations that must be put in place when staff members start returning to their offices – with government advice on social distancing needing to be incorporated into how formerly routine workplace activities are managed.

This includes meeting spaces and how we use them. The size and design of conference rooms will play a major role in how we mitigate the risk of spreading the virus, as will how people enter and occupy these spaces. Technology will continue to play an important role, enabling new, safer working practices.

The new situation has raised some serious questions about the necessity of in-person interactions, and with global travel severely disrupted (and in many cases impossible), the need and justification for international travel in various situations is going to be put under the microscope. Interacting with colleagues and collaborators will remain as vital in the post-COVID-19 world as it has ever been – but how will our meetings be changed by the pandemic?

Managing our spaces

The return to the office is going to be a challenge for any organisation. Employees will want to feel that they can go about their business without putting themselves at risk – maintaining sufficient social distancing and rigid hygiene standards. Governments have issued extensive guidelines to follow to ensure that your workspace is safe – guidance which naturally includes how we operate in meeting rooms.

Organisations are encouraged only to include participants in a physical meeting whose presence is essential. Maintaining suitable social distancing will inevitably decrease the capacity of even your largest meeting areas, and smaller meeting rooms may not be usable for face-to-face catch-ups (restricting their use to teleconferencing for a single person) for the foreseeable future.

When it comes to teleconferencing, it is vital that the setup is optimised ahead of meetings to prevent the possible spread of the virus as attendees fiddle with microphones and other hardware so that they can be heard properly. Array microphones like Shure's Microflex® Advance™ MXA910 for ceilings, or MXA710 for both walls and ceilings, are a great choice for reliable sound pickup from a device that does not need to be moved or touched. Coupled with Shure's IntelliMix® digital signal processing, consistent audio quality can be enhanced in all types of acoustic environments.

AV teams should test the setup in advance to ensure the optimum setup of microphones so that all attendees are properly captured and meetings can run as smoothly and consistently as possible.

Transformative tech

Technology will be key in creating safe and easy-to-use meeting spaces in our post-coronavirus world. Tech has advanced to the point where, with the right equipment and systems, users will be able to have a completely hands-free experience that will minimise the risk of spreading infection.

Understandably, there has been a huge boom in interest in hands-free solutions in 2020. What was once considered a 'nice to have' bonus is now an important aspect of workplace setup, as things like touchscreens, remote controls and handheld microphones have become potential vectors for COVID-19.

Apps are available that allow users to control the systems within meeting rooms, from screens and remote logins to microphone setup – and with auto-connect functionality, these systems will function smoothly and seamlessly. Alternatively, the advances in voice-activated software and natural language processing will permit anyone to engage with meeting room systems without even needing specific apps set up on their devices.

At this time, it's hard to predict exactly what the future of the workplace will hold, but these technological advances will create meeting rooms that will combine more efficient, intuitive and integrated systems with the safety and caution that the future working environment demands.

Technology will be key in creating

SAFE AND EASY-TO-USE MEETING SPACES

in our post-coronavirus working world