Leeds University Business School Research and Innovation Podcast

Episode 42:   How is office design changing to accommodate hybrid and new ways of working?
Speakers: Dr Matthew Davis, Professor Simon Rees, and Mike Burton.

[00:00:00] **Matthew:** Hello, and welcome to the Research and Innovation Podcast from Leeds University Business School. I'm Dr Matthew Davis. I'm an associate professor in organizational psychology here at the business school, and I'm delighted that in today's podcast episode, we're going to be talking about offices of the future, and particularly thinking about developers and designers and how this might all be changing with the shift to hybrid working and new ways of working. And I'm joined today by Simon Rees.

[00:00:34] **Simon:** Hello, I'm Simon Rees. I'm professor of building energy systems in the School of Civil Engineering.

[00:00:41] **Matthew:** I'm delighted we're also joined today by Mike Burton, who's director for AECOM building engineering, and also director of the British Council for Offices, Board of Management. Welcome Mike.

[00:00:52] **Mike:** Thanks for inviting me. I'd just like to say I'm also a chartered engineer, I'm focused on sustainable design. I work across many areas, not just offices, both in the public and private sectors. Our engineering team in the UK includes 800 people and we're based in 20 offices all over the UK, but I'm actually part of a global organization that employs 55,000 people in every continent.

[00:01:17] **Matthew:** Fantastic. Well, thank you so much for joining us, Mike, and I think I'm right in saying that you're an alumnus of Leeds University. So welcome back as well.

[00:01:24] **Mike:** Thank you very much.

[00:01:26] **Matthew:** Now Simon, we've been working together on the Adapting Offices project for a number of months now. What, are there any questions to, to mind about what might be going on at the moment with COVID and adaptations, that you think are worthwhile exploring?

[00:01:39] **Simon:** Yeah. Sure. So, two years since the start of the COVID19, the national lockdown, I'm sure office users and organizations would have hoped to be moving beyond the COVID 19 restrictions by now. And it seems like we all have to get used to living with COVID and so use offices that might be rather different in order to give some reassurance of COVID security. Mike, do you think office designers now know what needs to change to provide better resilience to infections, like COVID?

[00:02:15] **Mike:** Well, I think now, we've, there's some very significant guidance available now. Whereas previously, you know, two years ago, we didn't really no what to do. And so, so people like CIBSE and the British Council for Offices produce guidance notes for designers, and we also understand better how COVID transmits as well through droplets and aerosols.

And, certainly what I've seen on projects is COVID reviews being carried out. So looking at the opportunities for opening windows, potential for increasing ventilation through natural ventilation, increasing mechanical ventilation fresh air rates, maybe introducing boost ventilation modes, and then also the introduction of air quality sensors as well to look at the air quality within the space.

And then I think finally, the other thing that has been looked at is, are the ventilation systems appropriate that we traditionally put in offices of which have been in the past fan cool units or variable refrigeration volumes that are recirculating systems at high level. And is it better to go for a ventilation system that supplies air at low level, which then removes the contaminants out of the space, out of the occupied zone, where people. And I think, I think that's certainly been considered now and there are a number of new schemes that have been designed that way, but I think there's a wider agenda and, there's a wider agenda about healthier, smarter buildings and more sustainable buildings, but not just in design, but actually in actual performance.

So when the buildings are completed and running, that you can prove that they're a better design than perhaps the current office stock, you know, with a natural day lighting, better views out, the introduction of planting and biophilia and things like.

[00:04:16] **Simon:** Thanks Mike. So, one of the things that's been highlighted by the research carried out during the pandemic has been the risk associated with poor ventilation.

And you mentioned, some of the things that have been done by way of guidance to sort of address that. And some of our listeners may have seen our colleague Cath Noakes talking about, you know, the risks associated with poor ventilation at the Royal Institution Christmas lectures. So some organizations seem to be facing challenges with air conditioning systems that are not performing to modern standards and also assuring the recommended ventilation in offices with natural ventilation.

Now I expect designers know what needs to be done in terms of proper ventilation in new designs. Could you comment on what some of the pitfalls might be for owners and use of older buildings and those thinking about refurbishment?

[00:05:12] **Mike:** Well, the eighties and nineties typical offices were sealed boxes. And so therefore, you know, to actually introduce natural ventilation is impossible without reclaiming those buildings. So therefore it's important to look at the existing ventilation

systems and make sure that they're operating correctly as designed and the FM team understand how they're supposed to work. And something that we've introduced is to go back to buildings that we designed a while ago and go and meet those FM teams and explain how, how they were intended to work and help them with any issues with those systems. We've felt that that's been quite a useful thing to do.

[00:05:59] **Matthew:** Just for the benefit of people listening, who might not be as familiar with building services and operations. FM I think would mean Facilities Managers wouldn't it.

[00:06:08] **Mike:** Yes. Yes. So the people who are operating the building and making sure it's working properly for those occupants. Yeah. And then, so just in terms of those systems, is that you're just making sure they're working properly. And what we're finding is there's equipment that isn't maintained or operating correctly. And they just need to be a little bit of a rethink about better funding for the operation and maintenance of systems in buildings.

[00:06:39] **Simon:** Yeah. So this is something of a familiar story in terms of building energy performance. When you go back and look at how a building is really performing, then, you know, things have got changed over the years or somebody who's familiar with what was changed when, but then, you know, all that knowledge gets left when somebody changes job. And although buildings are supposed to have logbooks, aren't they, to record where things have been changed. Whether anybody knows where that is or whether it's kept up to date can be quite a challenge.

[00:07:12] **Mike:** I think things we do if we've picked up, is, is there, the knowledge is lost. And to go back and almost relearn, but also learn about how the people who are currently in the building are operating that building and making sure things are operating correctly. I mean, for instance, it's quite a famous project we're working on in London where, when we went back five years after completion and they were running some of the plant at the weekend when the building wasn't occupied. And we pointed that out and managed to save quite a lot of energy, from the way that building was operated. And it's just checking these things are working properly.

[00:07:55] **Simon:** Yeah, I guess some of this sort of health checking will, could well improve energy performance as well as ventilation performance. Let me ask you something a bit about changes in office technology. So there's been a great deal of investment in, you know, adopting more sophisticated online tools and learning how to use them.

So as people go back into offices, it seems like hybrid meetings with some people online and others in the office are going to become quite a common thing. And now some technology is emerging to make this easier. I wonder what you think might be needed to be done in terms of providing the right sort of spaces in future offices for these sorts of meetings.

[00:08:36] **Mike:** Yeah, certainly it's, I think many of us have been in hybrid meetings where the technology hasn't worked very well for us at all. And there are many companies now investing in the right equipment for meetings. And certainly there are some meetings that you can do to hybrid now relatively successfully. And we're certainly using more technology. I'm seeing like smart boards and things like that for communication tools. Obviously the use of cameras in a space are really important and having close microphones to all the people who are in their virtual or the office meeting room.

I still think there's still a need for face-to-face meetings when you're really trying to collaborate and get the best ideas between a team. And, I'm not sure we've managed to get the technology in place yet to replace that.

[00:09:37] **Matthew:** That's really interesting Mike, what you're seeing in terms of the balance between I guess, larger, technology equipped meeting rooms for bigger hybrid meetings versus smaller group meetings or individual pods. How's that starting to look across office space?

[00:09:53] **Mike:** Yeah, there's certainly more pods, individuals, single person pods being created in the workplace now to allow you to do a Teams or Zoom meeting with other people. And that certainly being created in a lot of the office spaces that we're designing all the refurbishment suite carrying out.

And then there's also the technology being put into the main meeting rooms and a lot more meeting rooms being created to allow those collaboration meetings to happen as well. And an issue that is appearing is acoustics around those spaces and making sure that if you're working independently on your own, that the acoustics in this space allow you to do that.

So, there's a lot more concentration on the absorption within the spaces and making sure that you're not disturbed when you're working in those environments.

[00:10:46] **Simon:** So after working from home for many months, it seems like people have had more of a chance to reflect on what works for them in terms of room environment, technology, ergonomics, comfort, and so on. So in the past office environments have been rather uniform, not much attention has being paid, it seems, to things like neurodiversity. Can you tell us how designers are trying to address issues like this?

[00:11:16] **Mike:** Yeah, I think there's quite a few issues that have come out of the working from home is that to make the office attractive, that you're going to commute and travel and go in to the office space, is there's been more of a focus on almost hotel standards on the quality of spaces and making them different and creating, you know, really good shower facilities and changing facilities.

Um, the role of the reception area being more like a concierge facility. And also the desking was traditionally, you know, quite high-occupancy desking, you know, is now you know, much lower occupancy because people are not comfortable about sitting next to each other. And then also putting really good IT support within the office space as well to make, make sure the things working correctly. Coffee points, social interaction spaces, and a lot more sort of events around the reason why you're coming to the office. So, I use the term, in fact AECOM use a term called "travel with purpose". So what is the reason for you going into the office? You know, what specifically the reason for doing that.

And then I think the other thing that's happened is, you mentioned about neurodiversity, which I think is a new term, in the design of offices. And, we just finished last year the BBC's new headquarters in Cardiff. And that was the first building where we employed a specialist in neurodiversity to advise on the design of the building. Just in case people aren't aware of neurodiversities - ADHD, dyslexia, and autism.

And, I didn't realize that apparently one in eight people are considered neurodiverse in the UK. But fewer than 50% of those people know that they have any concerns about neurodiversity. So designing a building around those is really, really important. And I'm, I'm told neurodiverse people are, you know, high energy; they are creative thinkers, they excel in a crisis. So they're really important as part of the workforce, but we haven't, before designed buildings around their needs. And so, for example, the pinging of a phone is a real irritant. And so having a quiet space where there aren't there isn't, you aren't disturbed about that, but then also if there, if there are other people talking, that's a disturbance as well.

So actually a background noise level and the office area, have become quieter because of, because of the lack of people on phones and things like that. So stopping noise is really important. Colours and patterns, natural materials is really important. Biophilia is important.

You know, the terms I used before about natural, daylighting views. Wayfinding is really important. So knowing where you're going, so you can see a way in the way out where the, the T points, you know, that you have this follow the same route to your desk. All these things are really important when you're designing around those areas.

And I think that's coming more into projects where we're talking about designing around health and wellbeing in buildings.

[00:14:46] **Simon:** Yeah, it's interesting how acoustic environments might have changed quite a lot. And, you know, being in an environment where phones are ringing all the time, it's going to be something of a thing of from the past. I can't remember the last time we actually used a desk-phone.

[00:15:02] **Matthew:** I was going to say, Mike, as a psychologist that makes me very happy to hear all the things you were just talking about there in terms of designing for, I guess neurodiversity in mind, but also, I guess more generally in terms of good design, I think, and flexibility and variety of spaces for the different preferences we know that people have as well, beyond those with specific needs. I think that's such a positive kind of move in in the design space.

I wonder if I could ask a quick question, Mike, because we're coming towards the end. I just want to ask what the role of the British Council of Offices is at the moment in terms of informing some of, I guess, this new area of design, thinking about these new trends and, and ways of designing. Is the BCA playing a role in this?

[00:15:42] **Mike:** Yeah, very much. So actually the BCO is all about research in the workplace and communicating that research. And there's been a number of works on the post-COVID office, on the cost of net zero and sustainability. And, the new guide will be updated to reflect some of these thoughts, but there's been some pretty good publications put out there now, which is actually free to us all, all to use.

And it's very important debating area around refurbishment about new offices and the new workplace. And obviously attracting people back to the office.

[00:16:26] **Matthew:** Fantastic. Well, thanks so much for joining us today, Mike, and thanks to everybody who's listened to today's show. If you'd like to find out more about our Adapting Offices research project, the link is in the episode show notes. But thanks very much for listening and we hope to see you at a future episode.

[00:16:43] **Simon:** Bye-bye.

[00:16:43] **Mike:** Bye. Thanks very much.

UNIVERSITY OF LEEDS

Leeds University Business School