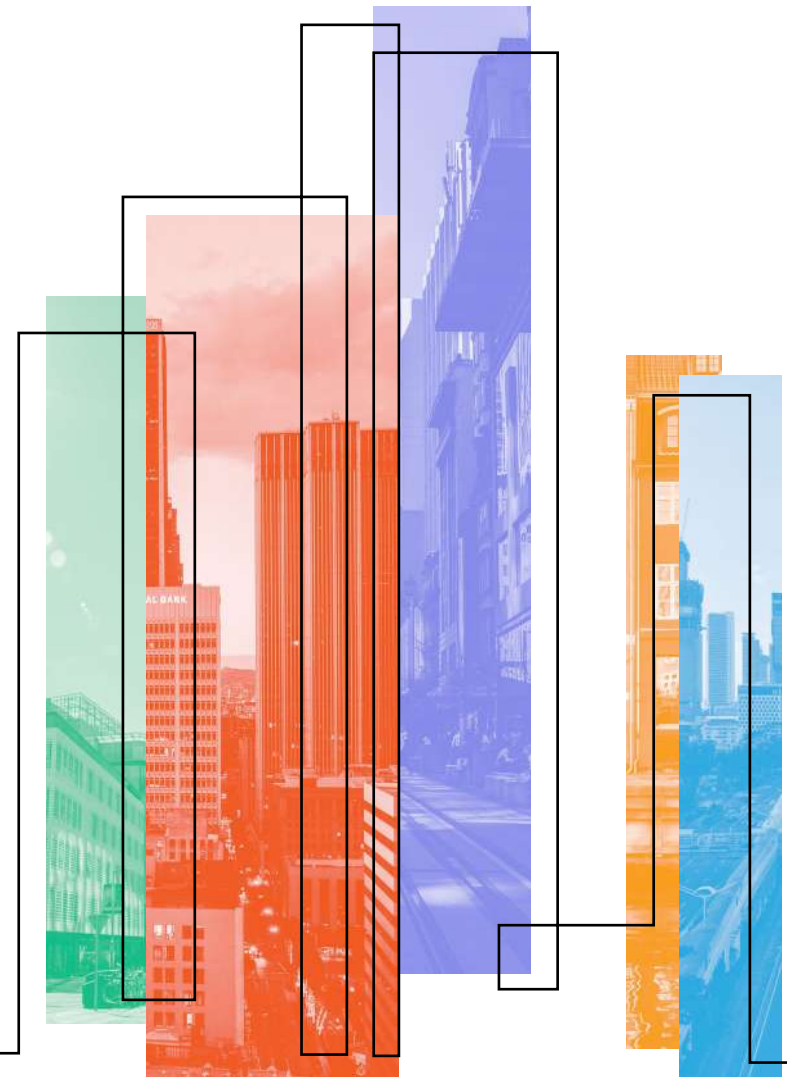# Future of offices:

in a post-pandemic world

In just a few months COVID-19 has changed how and where we work, forcing different and flexible ways of working. As we start to settle into a new normal, we look at the short and long-term trends and developments that will impact the kind of workplaces we will inhabit in a post pandemic world, not to mention the opportunities these present.

In this report we look at some of the arising themes and thinking from our Property teams around the world. Each global region is emerging with a fresh set of experiences and insight around what impact this is likely to have on us all.

COVID-19 has accelerated pre-existing trends in the commercial property sector – from health and wellbeing to activity-based working.

ARUP

Future of offices:
in a post-pandemic world

COVID-19 has accelerated a range of pre-existing trends in the commercial property sector around health and wellbeing, activity-based working, flexibility and the drive for better space utilisation. Sustainability, smart buildings and the digital workplace are also reshaping the commercial offer. Taken together, these trends and developments will profoundly impact the kinds of workplaces likely to be needed in a post-pandemic world.

In this thought-piece we explore how workplaces in the Americas could change in the years following the lockdown and look at developments in how people may work together both remotely and in the same physical location.

The global pandemic has exposed the fragility of many of our systems and created a high degree of uncertainty and potential for great change in its wake. The commercial property sector has not been immune to the accelerated impacts of COVID-19 and the Foresight team in partnership with our global property team has set out to identify what the new normal will look like for commercial property post COVID-19.

The pandemic has generated many questions for commercial property owners, developers and tenants alike: what is the role of the workplace? It is to be expected that some of the changes we are currently experiencing are temporary in nature while others will leave lasting impacts.

In this thought-piece, we first describe some of the ways that work in the Americas has changed under the pandemic. We then delve into the implications of these changes for the commercial property sector.

The commercial property market in the Americas will look very different in a post COVID-19 future.
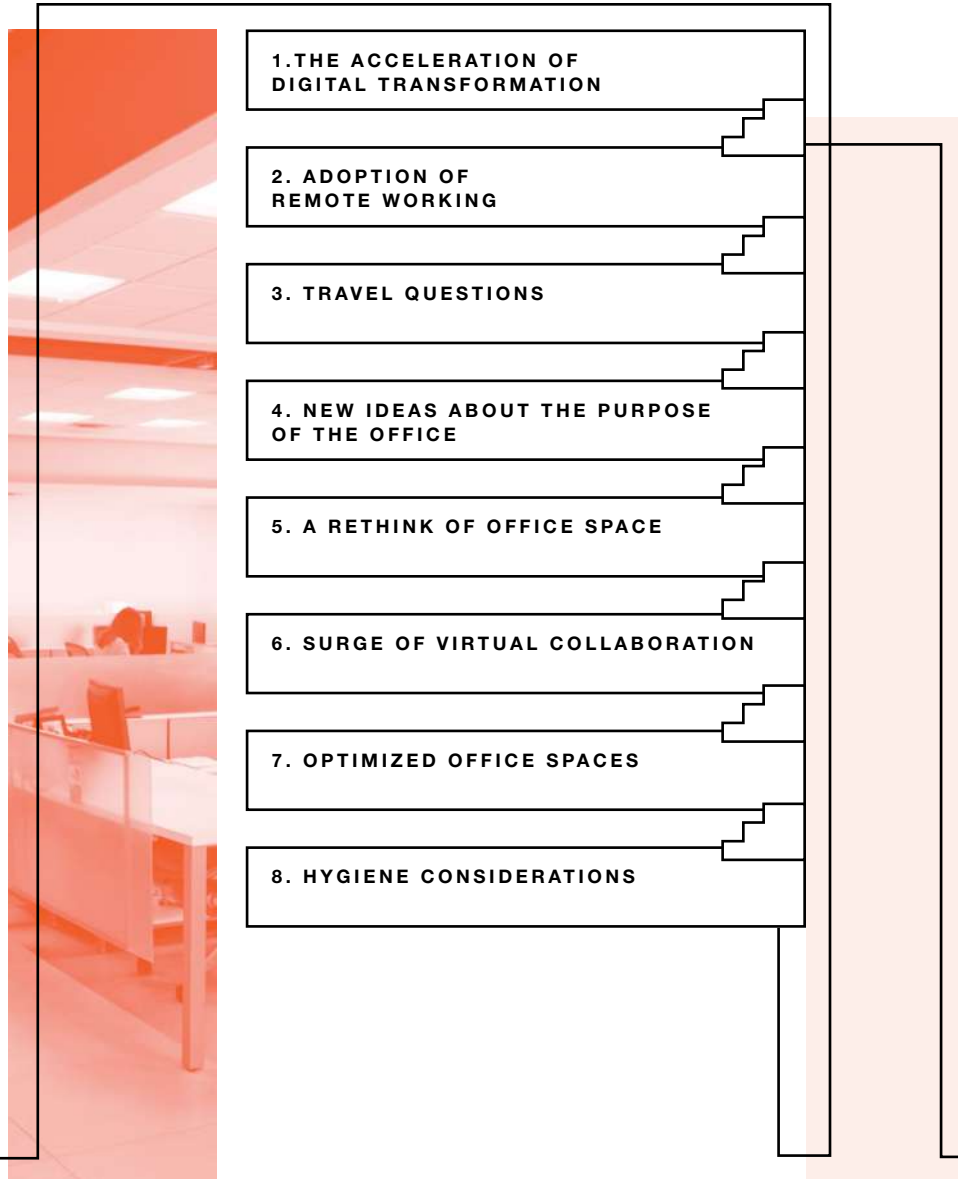
Ways the pandemic changed workplaces in the Americas

Today's pandemic is not the first time a global disease has ground business to a halt in the Americas. The so-called Spanish Flu of 1918-20 brought business to a standstill in many American cities. In New York City, for instance, the mayor introduced new laws which forced businesses to stagger working hours in order to reduce the chances of infection.

The coronavirus has had an equally disruptive effect on business. What changes has it introduced, and how permanent will they be. Here are eight key changes that have occurred in working life in the Americas:

1. THE ACCELERATION OF DIGITAL TRANSFORMATION

2. ADOPTION OF REMOTE WORKING

3. TRAVEL QUESTIONS

4. NEW IDEAS ABOUT THE PURPOSE OF THE OFFICE

5. A RETHINK OF OFFICE SPACE

6. SURGE OF VIRTUAL COLLABORATION

7. OPTIMIZED OFFICE SPACES

8. HYGIENE CONSIDERATIONS

1. THE ACCELERATION OF DIGITAL TRANSFORMATION

From physical to virtual spaces, there is an increasing number of platforms that make up what we can consider to be the 'workplace', or the space where we perform our work. The number of platforms to perform work tasks have evolved rapidly as our society becomes more interconnected through digital and physical platforms. The COVID-19 pandemic has only accelerated the demand for remote tools that allow for virtual environments.

Many view the working conditions during COVID-19 lockdowns as demonstrable proof that remote working can be successful, thus accelerating the trends of digital transformation. Staff have had to quickly upskill on a variety of digital platforms, and this new fluency will likely influence our ways of working and our physical workspaces moving forwards.

This factor will inevitably change the role of current physical working environments and will increase the demand for technological developments that can help us track and manage resources and reduce capital and operational costs.

Consideration for the acceleration of digital transformation

Sincerely Media
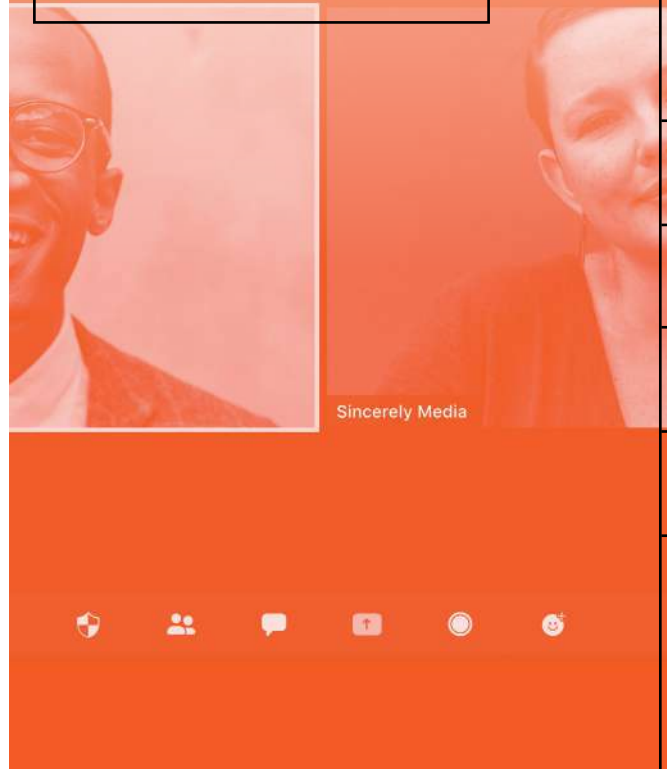
Are we going to be travelling less for meetings?

Do we need as much conference room space?

What are the types of work activities that can best be performed at home and in the office?

What is the role of the office? To promote an organization's culture? To attract talent? To meet and form social bonds? To host clients?

Will flexibility on remote working policies attract more talent?

Will candidates' living circumstances be taken into account in the hiring process?

Will employers offer home utilities coverage as part of benefits packages?

Who will be responsible to ensure that staff have an ergonomic working space at home?

How will the office work culture be carried online?

> ❝
>
> We've seen two years' worth of digital transformation in two months."
>
> Satya Nadella
> *Microsoft CEO*

2. ADOPTION OF REMOTE WORKING

Millions of workers across the Americas began working from home during the pandemic. Remote working was already a growing trend in the US, with five million people (3.6% of the U.S. employee workforce) working from home at least half their work week in 2018.

Remote working reduces operating costs as "…a typical employer can save about $11,000 per year for every person who works remotely half of the time," according to Global Workplace analytics. Meanwhile, staff have the ability to choose to work in locations with lower cost of living or move to retirement-friendly locations like Florida.

Remote working can happen in a variety of modalities from all staff working remotely, to a percentage of staff remote, or have staff work remote on specific days, a hybrid between working in the office and at home. There could even be an adoption of working from home on specific days of the week, such as 'remote Fridays'. If more personnel work from home one or two days per week, their personal desk usage might be reduced. This could encourage business owners to turn to the use of hot desking or hoteling, potentially balanced by additional space dedicated to office amenities and increased footprints of each desk to enable physical distancing.

3. TRAVEL QUESTIONS

The challenge of getting to and from the office after the COVID-19 pandemic recedes will likely affect how often people go to the office. Those who can walk or cycle to work might still consider working from central offices, but those who have long journeys or commutes that require public transportation might become accustomed to working from home or in an office space close to their homes.

4. NEW IDEAS ABOUT THE PURPOSE OF THE OFFICE

The office space was once centred around access to shared infrastructure: copy machines and files, then computers, printers, and network connection. Now, with cloud storage and the move to paperless workplaces, the office is coming to be seen as a place to form social bonds, create corporate culture, host clients, and attract talent.

5. A RETHINK OF OFFICE SPACE

If half of an office's employees are going to be working from home on any given day, then tenants may not want to pay for an office filled with unoccupied desks. This may result in the reduction of individual office spaces, making companies reconsider their office layouts in the long term and shift away from assigned spaces for individuals.

Depending on the types of work that staff need to perform, and given the high cost of rent in major cities, companies might not be able to justify the cost of square footage. Besides considering working from home as a tool for attraction and retention of talent, it can become a strategy for saving money while reducing the cost of real estate.

6. SURGE OF VIRTUAL COLLABORATION

The development of ubiquitous technology has allowed organizations to perform collaborative tasks virtually. Mobile devices have similar memory and computing power as desktop PC's, allowing us to work away from our desk. There is improved fluency with virtual and platform-based collaboration tools by staff, especially those of younger generations. Technology like mobile virtual desktops may replace bulky laptops and computers, enabling mobility inside and outside of an office building.

Digital collaboration platforms have created an opportunity to explore a virtual, augmented and mixed reality, along with new platforms and digital services for collaboration and communication at work. These tools are leading to new ways of working and sharing with colleagues, clients, and customers.

7. OPTIMIZED OFFICE SPACES

The pandemic also presents an opportunity to accelerate the use of smart building technology, which will ensure workplaces are designed in such a way as to reduce the spread of airborne disease. Advances in building operating systems, smart components, and sensors are enabling spaces with a high degree of flexibility and adaptability. These can also help to support optimization of space use, workspace allocation, and physical distancing.

8. HYGIENE CONSIDERATIONS

Post-pandemic, touch-free technology in offices will become increasingly important and could potentially be adopted in elevators, security access, etc. During periods of outbreak, some buildings may implement health screening processes at their security gates. This can manifest in the wider use of sensors and voice recognition. The adoption of touchless technologies can not only prevent potential disease transmission but can also be coupled with technologies that can support space usage tracking, optimization, and maintenance.

In this section we have seen how the pandemic has changed workplaces. Next, we explore what this will mean for companies' office space requirements.
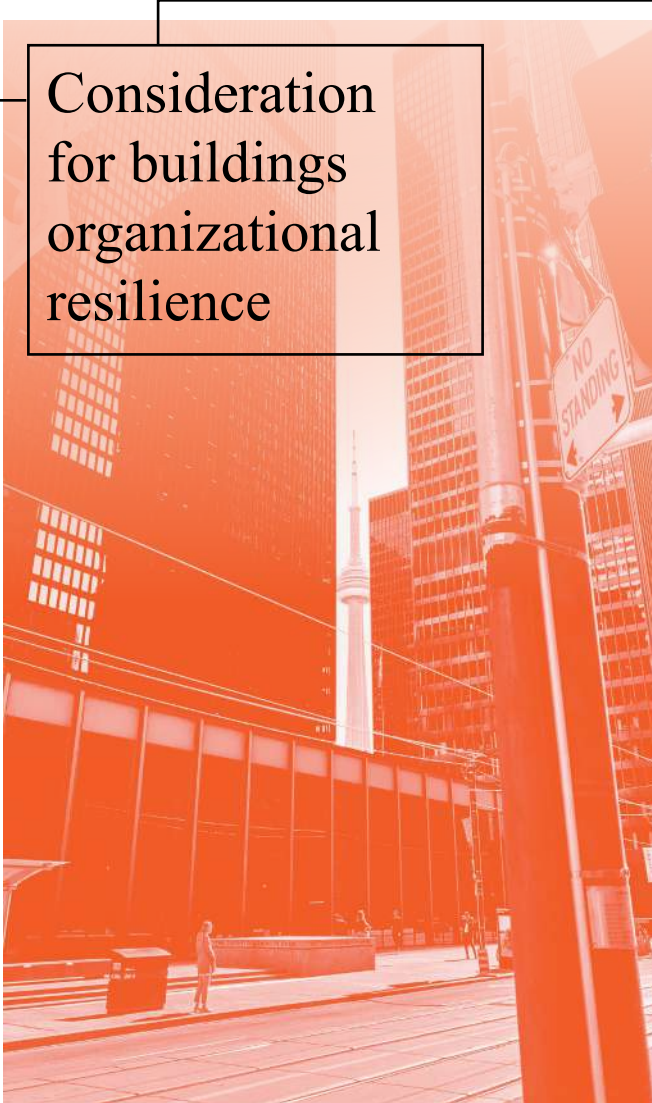
What workplace changes will mean for commerical property companies?

10

How should commercial property firms analyse the impact of the changes we have identified? What will these developments mean for the way their customers do business? In this section, we describe some of the ways that leaseholders will change.

THEY WILL BE MORE FOCUSED ON BUILDING ORGANIZATIONAL RESILIENCE

The pandemic represented an enormous disruption to organisations across the Americas, 'blindsiding' them and causing enormous damage. Most will be heavily focused on avoiding the chance of this ever happening again.

Once solution here is to create resilient operating models, which prepare organizations to anticipate and respond to the changing nature of their business, allowing them to 'bend, but not break' and ensure business continuity. A resilient organization is one that is able to operate in the face of threats, embracing disruption and mitigating risks including those related to economic instability, security, the effects of climate change, and changes in the supply chain, among others.

Consideration for buildings organizational resilience

How will corporations achieve business resilience in the face of future pandemics? Through decentralization of space and increase in satellite offices? Or avoidance of multi-tenant office buildings?

Will there be an increase in co-working spaces in suburban areas for those who work remotely?

What type of resilience skills will companies look for in candidates?

What type of resilience and wellbeing cultures will talent look for in companies?

What are measures that organizations should consider to create work spaces that provide a sense of safety and cleanliness for employees?

How can landlords work with their tenants to better understand their needs and concerns and find ways to create a safe and positive workplace?

What new services will landlords need to create to promote workplace wellbeing? Will janitorial services, UV lighting, air filtration systems be a higher priority moving forward?

As tenants shift to personal car use and bikes for their commutes, will offices need to add additional bike racks and parking?

THEY WILL VALUE FLEXIBILITY OF SPACES, SYSTEMS, AND OPERATIONS

The pandemic left many firms struggling with cashflow problems, paying high rent on offices they were not using. This has been a distressing experience, and they will increasingly want to push for a more flexible model.

In the future workplace, owners and operators will need to design for a range of modalities to ensure business resiliency. This would mean designing spaces, operations and systems for normal scenarios, pandemic scenarios, climate crisis scenarios, and even multi-hazard scenarios. Additionally, part of a resilient model is the ability to pivot and respond to demand.

In the face of a disruption, businesses may need to find new types of clients or industries, and these pivots may affect their office space priorities and needs. Flexibility can be applied as a design principle across office furniture layouts, seating plans, and building systems to be able to adapt to these different scenarios or modes.

For example, the operation of building HVAC systems to minimize viral spread implies either heavier filtration, more outside air, or both.

These measures typically run counter to energy reduction (and climate change mitigation) modes. Systems need to be designed for offices to operate in a variety of modes and easily transition from one mode to another.

THEY WILL BE LOOKING TO EXPAND DEFINITIONS OF 'THE WORKPLACE'

As more and more businesses embrace the concept of remote working, we can expect companies of all sizes and in different geographies to opt for more decentralisation. Why demand everyone to travel to a central office when this is no longer necessary? Decentralization to include satellite offices allows employees greater flexibility and choice, and builds organizational resilience through diversification.

One challenge with satellite offices, however, is that they are frequently smaller and in shared office buildings. Some companies may choose to keep a centralized HQ, in the case that this allows them more control as a sole tenant.

In either case, now is a critical time to think about the optimum location (or locations) of offices. Do you invest in office space closer to where people want to live or closer to hubs of economic opportunity? Employers may develop a flexible toolkit of workplace offerings to allow employees to choose for themselves.

One way of making this possible is the concept of 'digital concierges'. The digital concierge is the interconnectivity of clusters of spaces spread over a portfolio of assets, which are governed and accessed through apps or other interactive platforms. This helps make an otherwise discrete group of spaces and environments part of a cohesive whole.

THEY WILL DEMAND OFFICES WHICH OFFER INCREASED SUPPORT OF HEALTH AND WELLNESS

The global pandemic has undoubtedly brought health and hygiene concerns into sharp focus, and it is therefore very likely that companies will expect office spaces to conform to the highest standards of health and wellbeing.

The quality of the indoor environment can have a significant impact on the health and wellbeing of occupants. For example, thermal discomfort not only potentially puts health at risk, but also impacts people's ability to function effectively. Active design, or the encouragement of physical activity and health, is increasingly being embedded into the design of spaces. As part of benefit packages, companies provide more resources for mental and emotional support.

There is also an increased emphasis and inter-co-worker empathy relating to work-life balance. An increasingly user-centric mindset necessitates a holistic approach to workplace well-being, which might include air and water quality factors as well as nutrition services and policies. This spans across spaces like meditation rooms and daylighting, to programs like mindfulness classes, to policies on flexible work hours.

Employers are drawing inspiration from the hospitality sector to design and program their workspaces for employee satisfaction. In the short term, as a response to the coronavirus pandemic, there is a need for offices to support their people in feeling safe, healthy, and resilient as they return to work. This may involve visible and more frequent daily cleaning practices to contribute to a sense of safety.

In the next section, we explore how the demand for social interaction will mean offices continue to exist – even if they may look different to what went before.

The office is not dead –
importance of social interaction

© Adam Rouse Photography

COVID-19 has impacted the world in an unprecedented manner, affecting public health, the global economy and increasingly the way in which people behave and interact with each other and with businesses. While many media headlines have declared the death of the office, others who have weathered previous crises are less certain.

"Will the role of the workplace change and how?" Many employers are considering just this question as they assess their leases and high costs of rent. In the short term, the role of the workplace will need to evolve to meet the needs of new social behaviours and norms around physical distancing. However, it is quite likely that, once a vaccine is introduced, physical distancing and imposed quarantine will give way to a need for community and social gatherings – even though people do not strictly need to be at the office to work.

It is worth remembering that an entire generation of business startups and entrepreneurs had a chance to work from home after the financial crisis of 2008, and yet they did not. They wanted social interaction, a place to focus and share ideas, meet people,

and interact. Working from home will be more prevalent but mixed in with social interaction provided by the office.

This introduces some intriguing possibilities for the potential future purpose of these spaces. In this section, we describe how the purpose of the office could change.

THE OFFICE WILL BE ABOUT PERSONAL CHOICE

Now that employers and employees have accepted the viability of working from home, offices of the future will become increasingly about personal choice, and whether staff feel confident about the safety of their work environment and the productivity that can be achieved either from home or from the workplace.

In both the short and long term, these choices will be driven by personal experiences and preferences. The lasting impacts of COVID-19 will largely depend on human behaviour, as we balance the need for safety and the need for social interaction. Companies and HR teams will not force people back into the office or to work in a place where they feel

uncomfortable. Instead, companies should consider enhanced cleaning techniques, more distancing and increased choices for employees across a campus (providing places for focus, collaboration, learning, socializing and respite), better air filtration systems, and more access to outdoor space.

The impact of the pandemic will likely have a long-term effect in the psyche of the generations that have endured it. People will have a sense of a shared struggle and will be sensitive to the needs of their peers. These new interpersonal dynamics will likely augment the desire for social interaction and cohesion between co-workers in the office space. This pandemic will therefore not incite a return to closed offices and full-height cubicle partitions; people who are coming to the office are doing so for social interaction, and it is not viable to refit offices in this way for many organizations.

THE OFFICE WILL BE A KEY TOOL FOR ATTRACTING TALENT

The lockdown has been relatively easy for the baby boomer generation who own homes, have extra space and are settled. However, it is important to remember that many younger workers live in shared accommodation and cannot be fully productive in them. What's more, going to the office is an important social activity, for making friends and, indeed, meeting romantic partners.

Employers will continue to compete for top talent and will look to locate themselves in areas which are attractive to staff. In the future, employers will also need to be savvier in attracting employees by balancing workplace efficiencies with quality experiences and amenities. There will be a greater need for hospitality-inspired spaces which promote a greater degree of flexibility and activity-based programming. This could lead to a reduction in dedicated desk spaces and an increase in interactive and collaborative spaces.
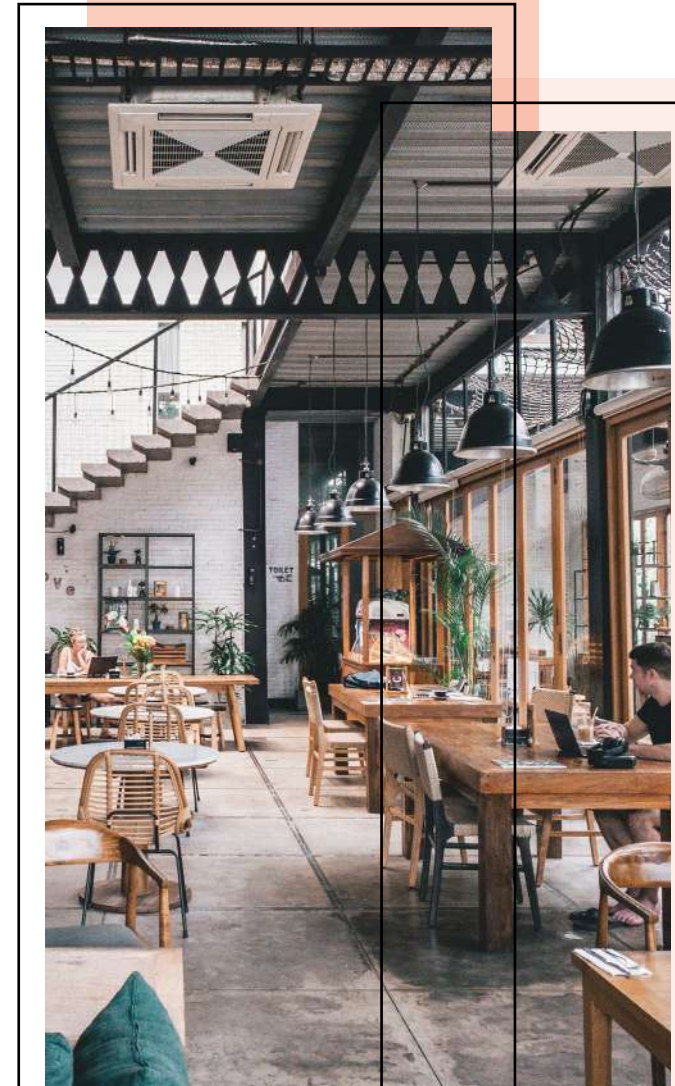
How will the greater appreciation for work-life balance be reflected in the new work environment? What new amenities will owners and employers need to introduce?

Will work performance increase when providing more opportunities for staff to have flexibility?

How can organizations use office space for social cohesion?

How can property owners work with retail tenants to make it viable for them to exist?

How can organizations give back to their surrounding community and contribute to neighborhood vibrancy?

Consideration for the acceleration of digital transformation
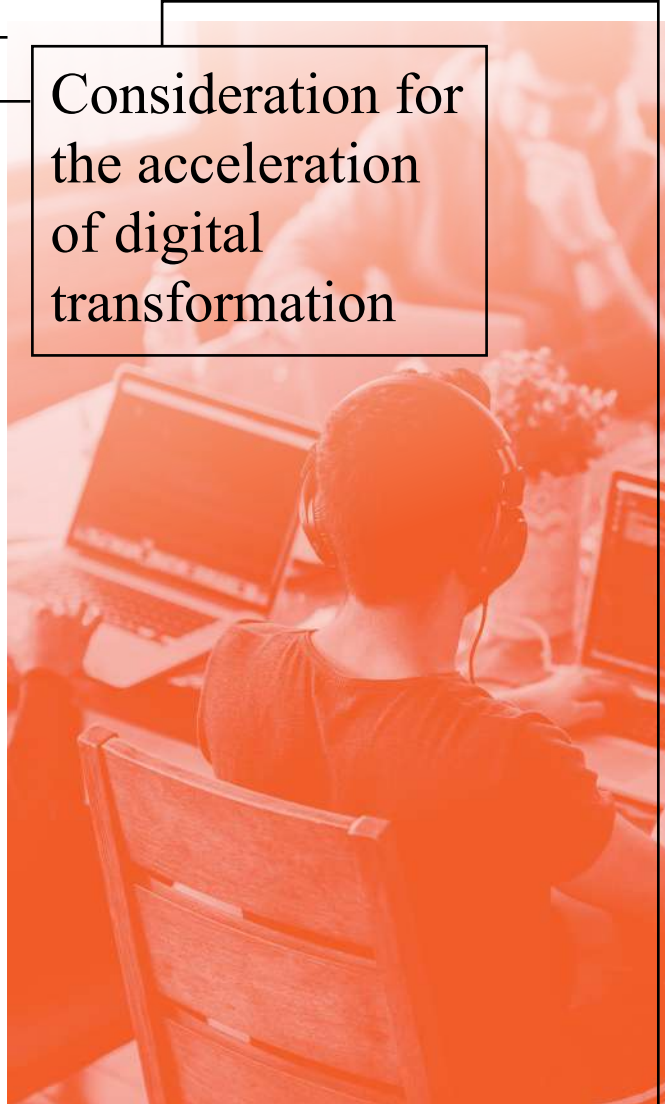
COMPANIES AS NEIGHBORHOOD ACTIVATORS

Companies have an opportunity to activate the streets they occupy and to contribute to the economic and social vibrancy of their local ecosystems through economic incentives, which make their areas attractive to local retailers which in turn provide desirable amenities to their building tenants.

Remote working, cloud-based working, and paperless workplaces are creating the opportunity to redefine the role of office spaces. This is an opportunity for workplaces to be much more engaged with their neighbours and contribute to the surrounding neighborhood, whilst enhancing employee experiences and ensuring business resiliency.

Conclusion

In this think-piece, we have described some of the key ways that office work in the Americas has changed during the pandemic and lockdown. We have explored some of the short and long term effects that these changes will have on the commercial property sector, and investigated some of the potential future ways of working this has introduced.

The Americas region has long been a source of innovation when it comes to office design and layout – introducing concepts like open-plan offices and a major force behind the recent development of co-working spaces in the WeWork model.

This current crisis has underscored the point that there are alternative ways of working to what went before and they could produce benefits for companies, employees and the wider community. The commercial property firms that identify the most significant trends stand to gain from this new world of work.
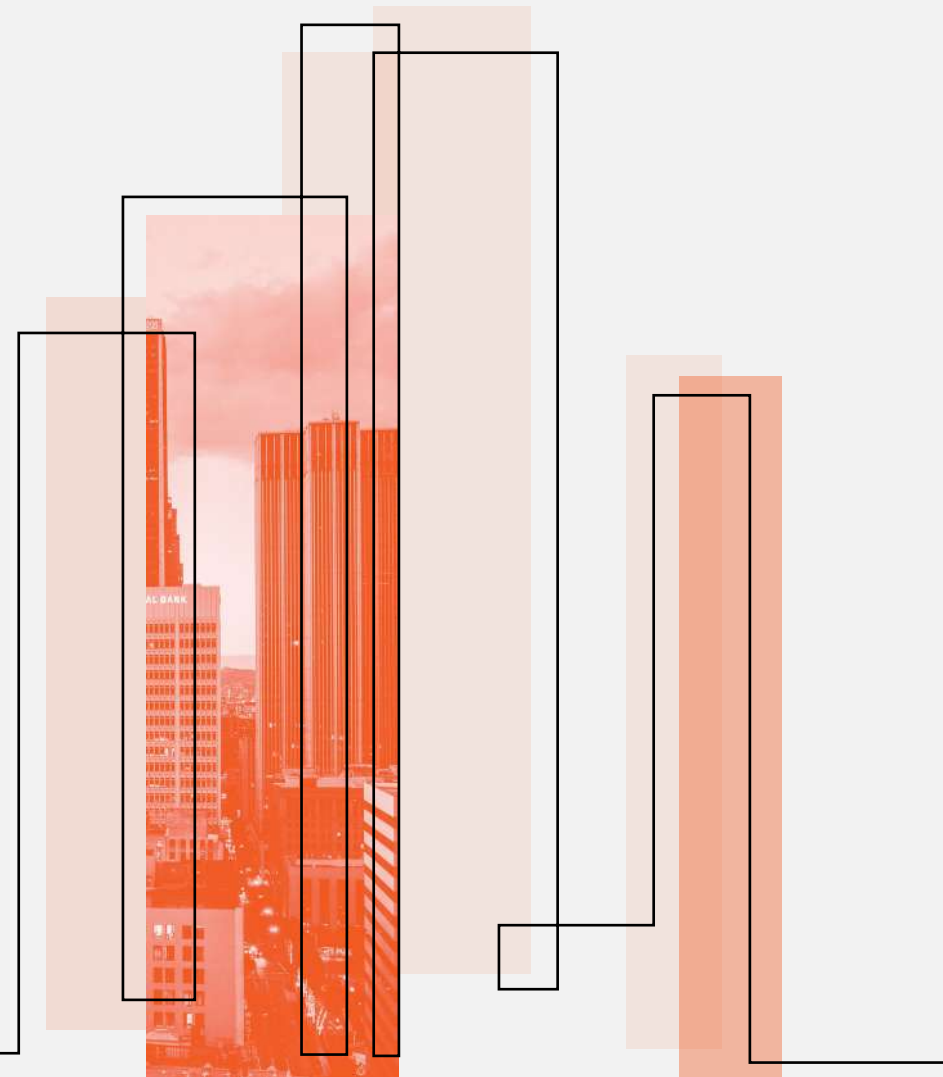
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ARUP

Future of offices:
in a post-pandemic world

COVID-19 has accelerated a range of pre-existing trends in the commercial property sector around health and wellbeing, activity-based working, flexibility and the drive for better space utilisation. Sustainability, smart buildings and the digital workplace are also reshaping the commercial offer. Taken together, these trends and developments will profoundly impact the kinds of workplaces likely to be needed in a post-pandemic world.

In this thought-piece we explore how workplaces in the Australasian region could change in the years following the lockdown and look at developments in how people may work together both remotely and in the same physical location.

As we look across the Australasia Region, there have been many different levels of disruption, inconvenience and government responses to the crisis. Most offices across the region were closed with workers required to work from home. As offices re-open they will need to respond to their specific contexts so workers can return safely.

If a long-term view is taken, there is great opportunity to rethink office space across the region and use this crisis to transform the future office to be more healthy, flexible, sustainable and inclusive. This pandemic has required strong action to address, but by approaching this health challenge in an integrated way we can shape a world that is more resilient.

We begin by exploring the impact of the COVID-19 pandemic on countries in the region and then investigate what this means for offices.

© Earl Carter

What will happen to large offices in central urban locations once we reach a post-COVID recovery phase?

Different pandemic outcomes for offices across the region

"

The coronavirus is not only a health crisis of immense proportion — it's also an imminent restructuring of the global economic order."

McKinsey and Co[1]

Across the Australasia region, different governments took different approaches to the outbreak. What did these responses mean for office work in these countries?

AUSTRALIA AND NEW ZEALAND

The geographical isolation and swift actions of Australia and New Zealand enabled them to close their borders, shut down overseas travel and control the spread of the virus. However, as lockdown measures are relaxed potential outbreaks of the virus will need to be managed for months or years to come.

Unlike other regions affected by the outbreak, the low density living typical in Australia and New Zealand allows people to work from home relatively comfortably. Therefore, office spaces in these countries will need to comprehensively respond to health concerns and compete with the convenience of working from home to encourage the workforce back into central offices. Providing flexibility, healthy building features and excellent user experience will all be key to retaining these spaces. Office parks are likely to have increased demand.

SINGAPORE AND MALAYSIA

Singapore was praised for its efforts tackling the COVID-19 outbreak which included contact tracing of all cases with strictly enforced isolation for everyone known to be in contact with the coronavirus. Unfortunately, cases increased later, causing tighter restrictions to be put in place with an 8-week 'circuit breaker' requiring work from home from the April 7.

In Malaysia a Movement Control Order that was put in place in mid-March has helped to flatten the curve and control the spread of the virus[2]. Almost all the economic sectors and businesses have been open since May 4 along with a gradual relaxation of interstate travel restrictions also allowing interstate travel for work.

INDONESIA

There are strong concerns for countries such as Indonesia that are highly populous and have low quality healthcare. Low rates of testing in Indonesia are thought to have resulted in slow action and a poor understanding of the true spread of the virus[3]. These countries have high density living and more profound socio-economic divides.

Homes in these countries are less likely to enable working from home for extended periods and therefore see a quicker return to the office. Virus outbreaks will be harder to contain, making these countries more susceptible to major disruptions. Offices will need to focus heavily on controlling disease spread including ability to isolate areas, temperature monitoring and additional cleaning.

In the next section we explore the interplay between the pandemic, health concerns and people's expectations of office work.

The impact of the lockdown on workers
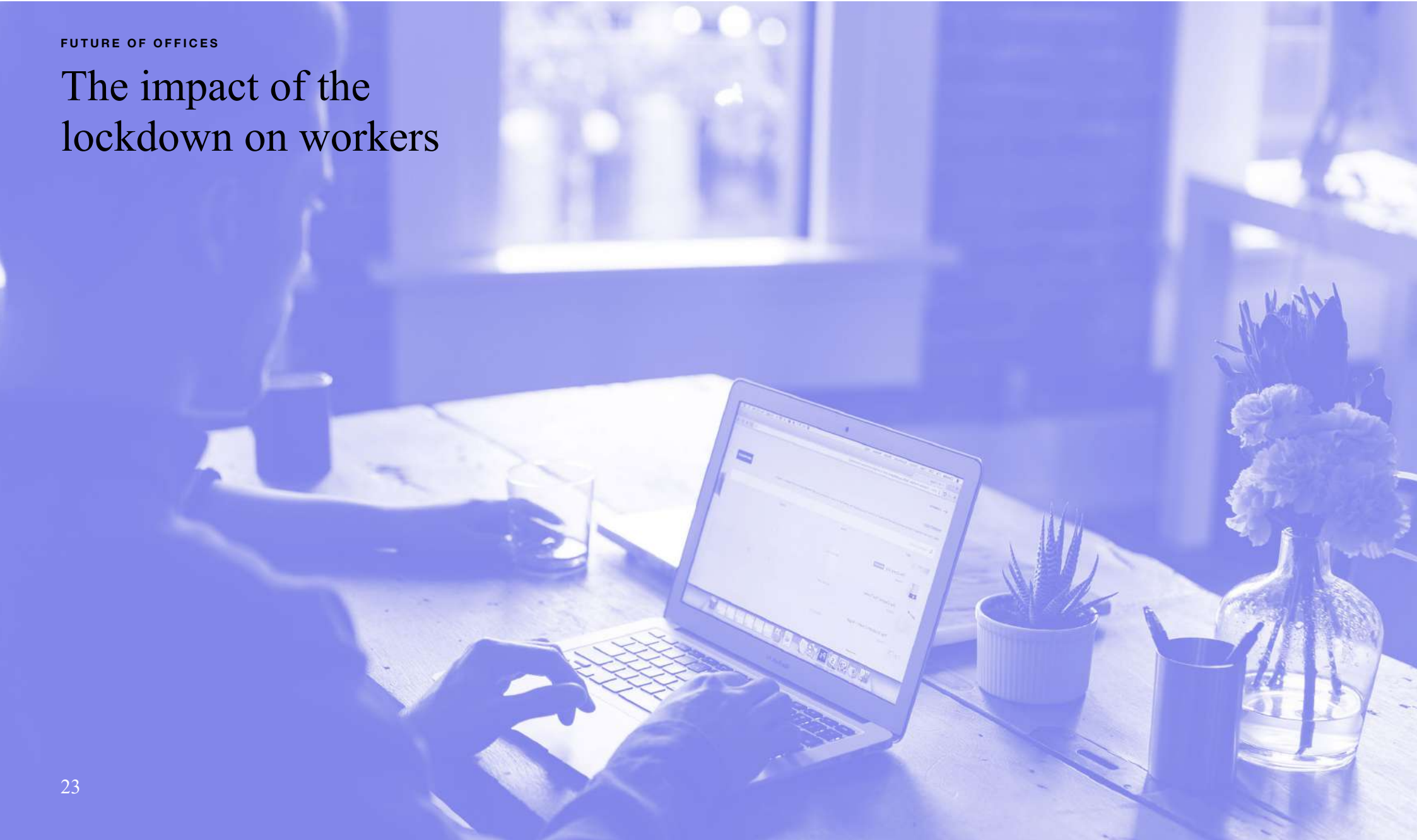
The lockdown has represented an enormous change in millions of people's lifestyles across the Australasia region. In this section, we describe what this change means for workers – and what they will come to expect from the office.

During the initial lockdown, most office workers will have changed to a work from home situation. Many may have needed to improve their home offices so that they were more comfortable and expanded their use of online communication tools so that they could work efficiently. A good proportion enjoyed the opportunity to reduce commute times and spend more time with their families. If working from home is well managed, then many benefits can be experienced including flexibility which is highly desired by modern workers[4].

However, some employees find prolonged working in a non-ergonomic setting negatively affects their health and wellbeing.

Those who are used to working in a well-designed workplace will experience these downsides to working from home[5]. One survey during lockdown found that there was an increase in musculoskeletal complaints, a decreased focus on diet and wellbeing including increased alcohol consumption, more cases of poor sleep and increased risk of exhaustion and increased mental health issues with people who worked from home[5].

This mixed picture indicates that the lockdown is unlikely to threaten the existence of traditional offices. While it is true that many workers have valued the opportunity to work remotely, many more have struggled and will look forward to a return to the workplace.[6]

In the next section, we look at how people are gradually returning to the office in the region and the kinds of obstacles and challenges to expect.
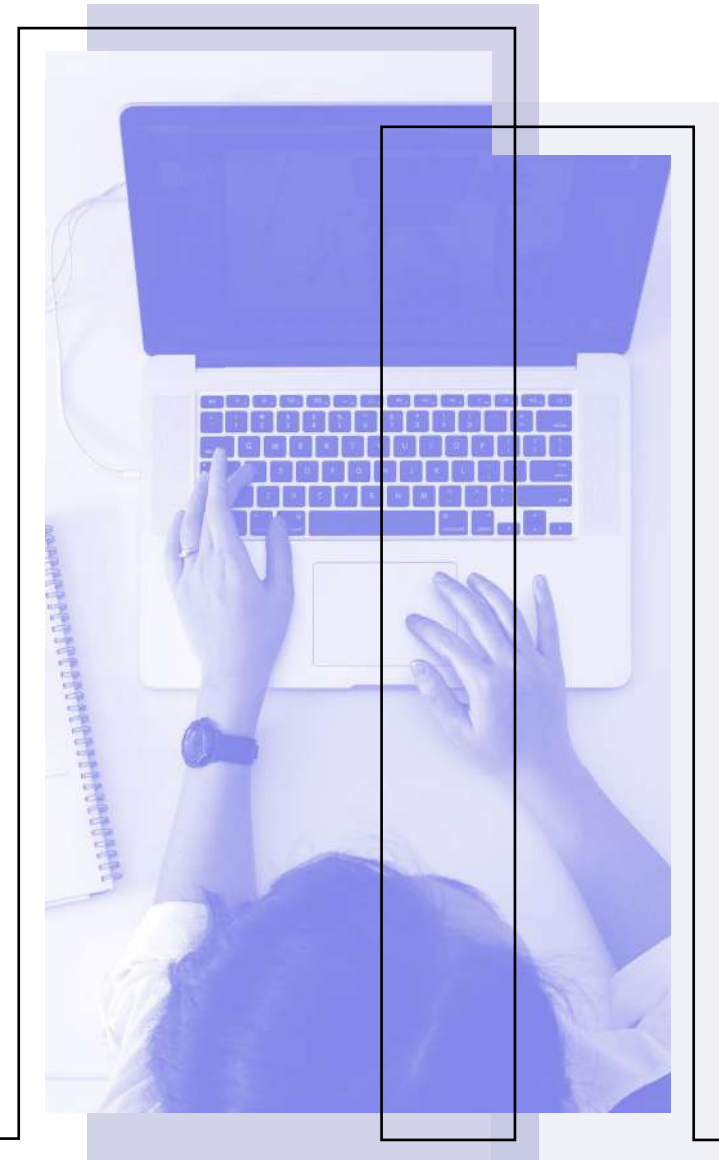
Back to the office
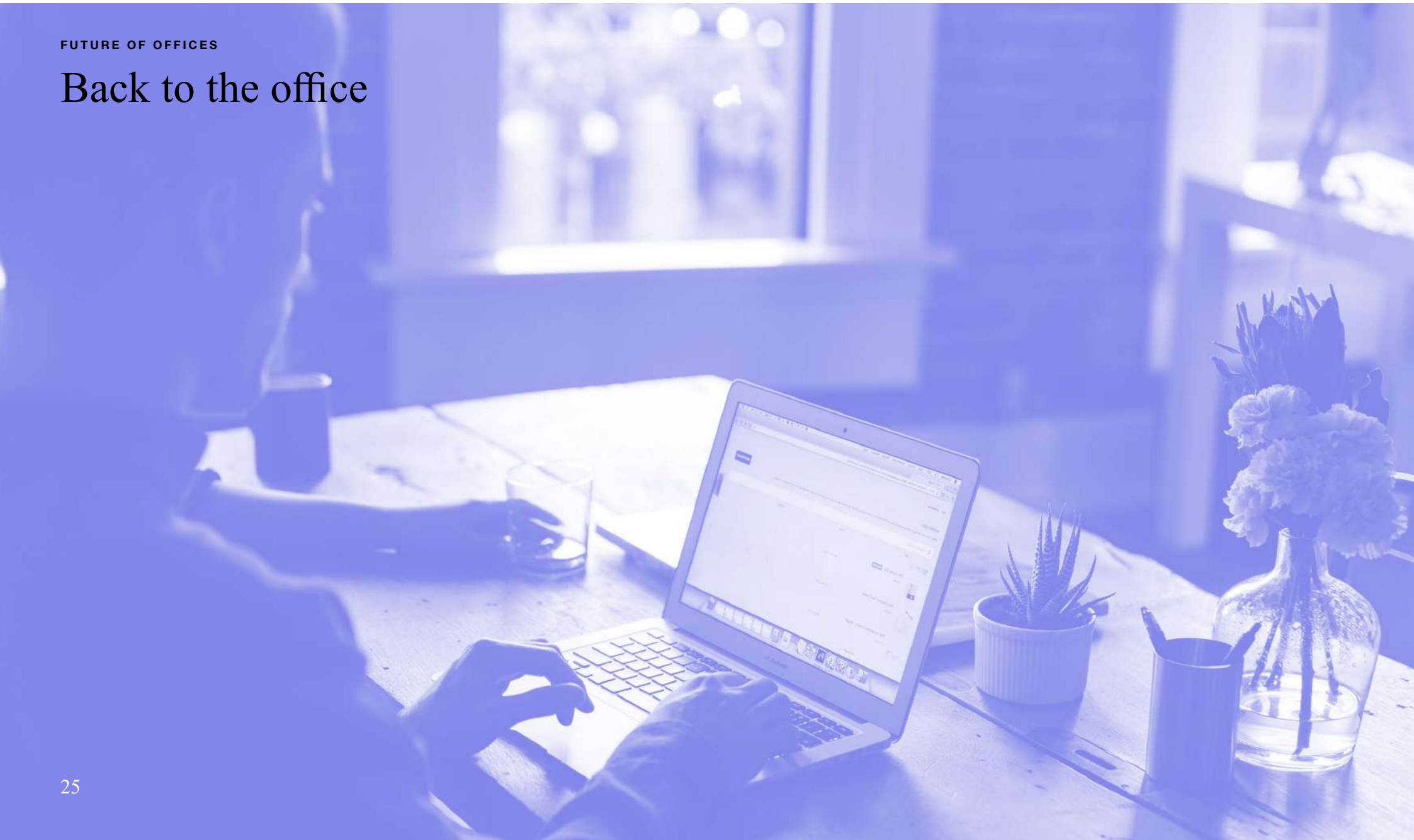
In Australia the estimated cost of the lockdown has been AUS $4b each week[7]. As the number of new cases falls, governments across the region will be keen to restart their economies and encourage a reopening of cities and towns to reduce further economic impact. But it will not necessarily be an immediate 'return to normal'.

The number of people returning to the office and amount of time that they spend there will vary greatly depending on individual needs and adaptability of office spaces to both address these needs and operate within government policies.

Not only will office spaces need to meet minimum government requirements, but they will also need to give workers the confidence that the office is a safe environment. In late April, a survey of the Singaporean workforce reported that just 10% of people wanted to return to the office after their 8-week shut down, however 46% of people also indicated that they were less productive when working from home[8]. Since this time sentiment has been changing and there is an increased interest in returning to the office. In Brisbane, a survey in late May suggested, around 74% of people would like to return to the office in some capacity[9]. To make this happen employers will need to give workers confidence that it is safe to return and demonstrate the benefits of a centralised office over working from home.

It is likely that due to Australia's and New Zealand's more spacious living arrangements with better access to outdoors and larger homes this change might be slower than in more populous countries or denser cities.

A new normal

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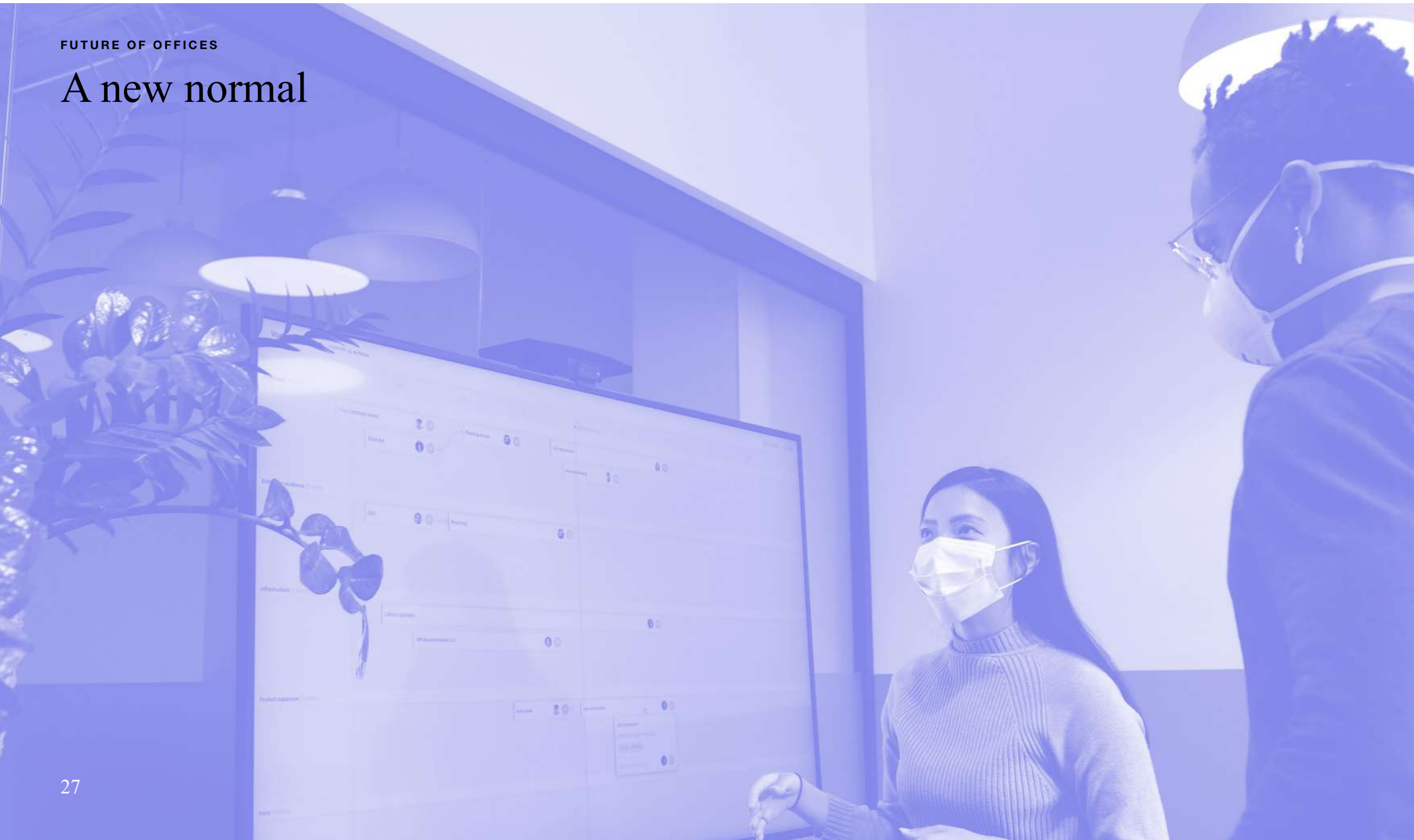
ADAPTING TO A NEW WAY OF WORKING

South Australian company Detmold normally specialises in food packaging. However, in the midst of the pandemic, it pivoted its business to create 145 million face masks for medical staff[10] demonstrating just how important adaptability is.

In the aftermath of the pandemic, all companies will need to consider their ability to change, not only in the short term but over the years of potential economic downturn that usually follow pandemics. Those with a good understanding of all the skills of their staff and which can mobilise diverse online teams quickly will be best placed to respond to economic stimulus.

Companies may have increased demands on digital connectivity and flexible office spaces to achieve this adaptability. As people move back into offices it is more than likely that working from home will increase and travel will be considerably restricted compared to pre-COVID-19 times. Offices will need to digitally adjust to embrace this new way of working.

The need to move work online has highlighted the need to digitally transform. Companies which were able to quickly move to work from home arrangements were able to adapt quickly and maintain momentum. This has allowed these companies to act as advisors for others that were less digitally ready. Additionally, companies that are digitally connected will be able to achieve a collaborative and inclusive experience for all staff.

IN PRACTICE: AGILE WORKING

Agile project management methods enable self-organising teams to run projects to plan, and to operate in an aligned way whether working online offsite or offline onsite. Work is planned in small batches, with limited amounts of 'work-in-progress' tasks. A notable feature of Agile is the morning stand-up which enables teams to plan their day, quickly communicate issues, remove blockers and transparently share task status. These methods are well suited to this challenging time, enabling distributed teams to continue to co-ordinate and deliver complex projects.
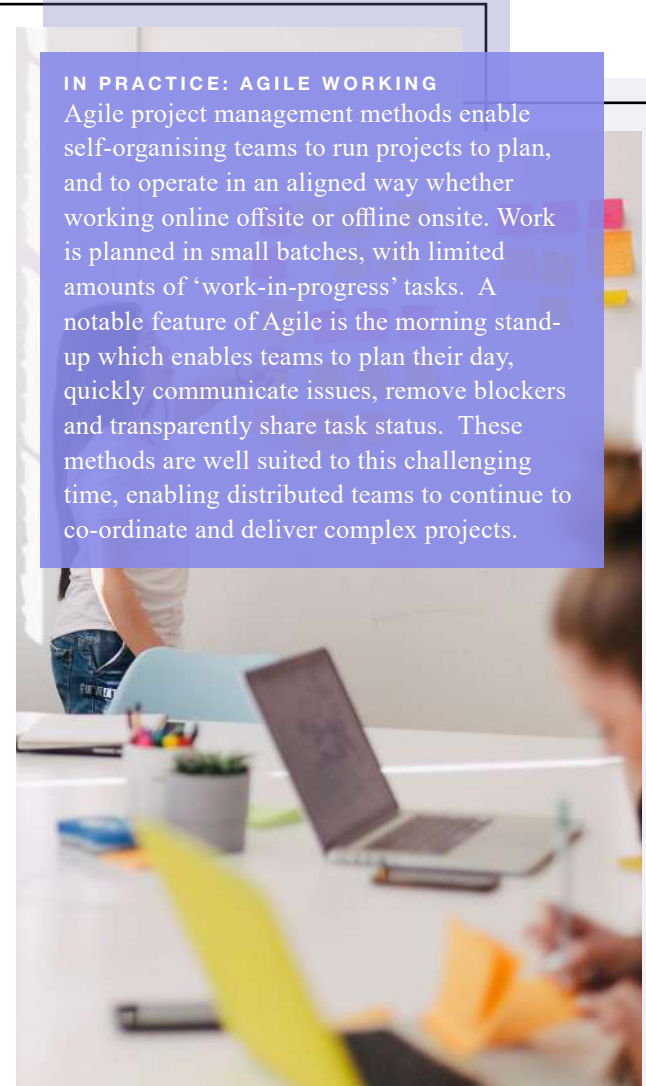
Coworking hubs have become a common part of office buildings too. They provide flexible space for start-ups, entrepreneurs and small companies with the ability to pick up extra staff from the waxing and waning of larger office tenants. With the COVID-19 crisis it is likely that people will not feel safe to use shared office space with people they do not know. CBD-based co-working spaces may therefore suffer.

The hub and spoke model or 20-minute neighbourhoods have been a re-emerging trend as they take pressure off public transport and can enable good urban design. This crisis is likely to further encourage this resurgence of suburban office hubs where workers can access the higher quality office facilities near home when required. This would support local communities and provide an economic boost within these local areas.

However, a word of warning before rushing 'head long' into a new remote working model. Companies must understand the effect that more remote working may have on their workforce. Many companies attract staff through their values and culture practices (e.g. training, on the job learning and mentoring) which tend to be more tangible in a formal office setting. Finding ways to continue these practices will be important for corporate culture, particularly as more staff time is spent away from the workplace.

Companies will have to ensure that their values are still understood and put into practice with a more distributed workforce. It is also important that employers can understand the aspirations of the staff, help them grow, recognise leadership and maintain the support for their staff. Many aspects of corporate culture are different in the digital environment.

What will these changes in working styles mean for the actual layout of offices themselves?

THE NEW NORMAL FOR OFFICE SPACE AND LAYOUT

With lockdown restrictions starting to lift across the region, offices will start to reopen and will need to think about how they can, on a case by case basis, meet government hygiene requirements in all areas. With a vaccine estimated to be over a year away, and the World Health Organisation cautioning that one might never be found[11], it's likely that waves of restrictions could be in place for at least 12-18 months.

People will still want to go to a central office to socialise and collaborate, but this might be more of an occasion than an everyday occurrence. Offices will need to provide high quality, healthy and productive workspaces to make them worth the commute on a regular basis.

UNCERTAIN TRANSITION PERIOD

When offices start to reopen for the wider workforce they will be required to meet government restrictions as well as providing workers the confidence that they are in a safe and productive working environment so that they see the value of going to the office. The restrictions have the strong possibility of being uninviting, frustrating and non-collaborative but simple measures and good design should allow for these procedures to be introduced in a way that still provides a positive user experience.

Managing arrival and circulation within the office will be the biggest challenge for offices. Staggered start times will reduce demands on public transport and lifts. Hygiene stations will need to be easily accessible. Access points to the building may need to be reduced so that each point can be monitored and information from all visitors will need to identify that they do not elevate risks for others in the building.

Some offices may consider installing thermal imaging cameras to identify people with elevated temperatures. If this occurs it should be clearly communicated, and staff should be encouraged to check their own temperatures before leaving home to reduce incidents on arrival at the office. Although this measure could be a positive move to give confidence that unhealthy people are not entering the building, if poorly managed this could result in a poor user experience.

> " Property managers have a crucial role to play in enhancing safety and mitigating the pandemic. In the longer-term, health and wellness will play a more prominent role in informing building design."
>
> Evan Choo
> *Executive Director, Head of Property Management CBRE, China*
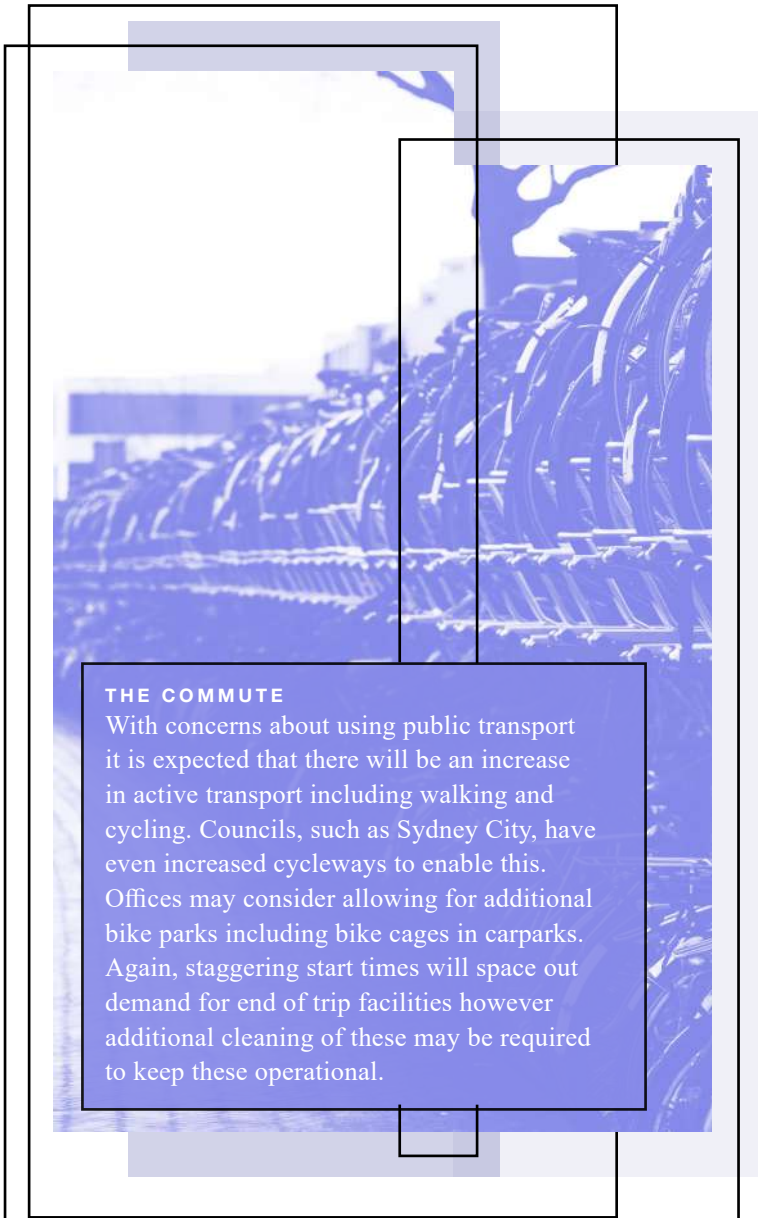
THE COMMUTE
With concerns about using public transport it is expected that there will be an increase in active transport including walking and cycling. Councils, such as Sydney City, have even increased cycleways to enable this. Offices may consider allowing for additional bike parks including bike cages in carparks. Again, staggering start times will space out demand for end of trip facilities however additional cleaning of these may be required to keep these operational.

PHYSICAL DISTANCING AND FLOOR MANAGEMENT

In the workspace areas of offices, physical distancing will need to be adhered to, meaning that desks may need to be separated or every second desk left unoccupied. As this will reduce the total occupancy, a program will need to be implemented to control staff numbers in the office at any one time.

If desks are shared, then a strict cleaning regime between occupants will need to be implemented. It is likely that this can be done by the staff if cleaning supplies are provided, however professional cleaning is still likely to need to increase to ensure the safety of staff. Offices may choose to zone their desks so that if there is a suspected or actual case of the virus detected then the area required to be deep cleaned may be reduced. This would save costs and reduce disruption.

Circulation zones could be made one way to reduce congestion and these areas need to be clearly marked to show suitable occupancy. Signage and floor markings can be used to remind people about physical distancing and hygiene expectations. Meeting rooms and informal meeting spaces will also be signed to indicate maximum meeting numbers and remind people of physical distancing policies. The office should be set up so that it is easy for staff to adhere to guidelines.

A RETHINK OF EXISTING SPACE, AT LEAST IN THE SHORT TERM

Modern office spaces are not just characterised by workspaces but are a collection of spaces designed to accommodate different tasks, i.e. activity-based working. In the transition period these spaces will be difficult to maintain with their varied uses. Any potential loss of additional functions within the offices will make them less attractive for workers and may influence people to favour working from home instead of returning to the office. It is important for offices to take into consideration that people who are returning to the office will want to catch up with colleagues and be wanting to use communal and collaborative zones.

Some considerations that could allow for 'COVID-safe' communal zones include providing movable furniture so people can space out and adding acoustic treatments so they can hear each other well without sitting closely. Collaboration zones should be encouraged in areas that have good access to sunlight and have natural surfaces where viruses do not live for as long.
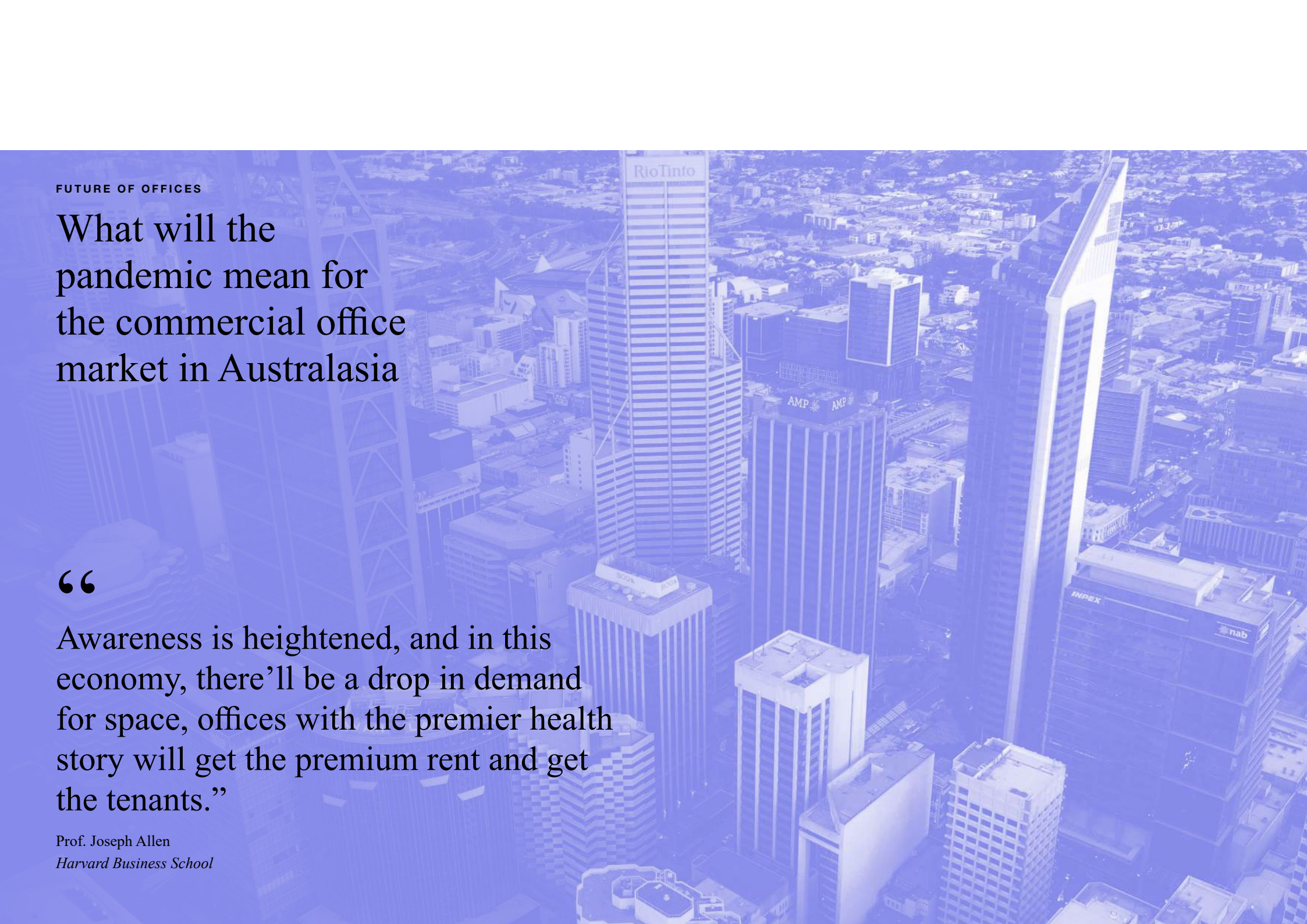
DIGITAL COLLABORATION-READY

Working from home will continue for increased numbers and travel will continue to be restricted. The increase in online collaboration will require further digital enhancement of the office. Improved internet and advanced teleconference facilities ('Zoom rooms') are going to be in high demand so that centralised offices remain relevant and enhance productivity. This transformation will have benefits in the long term as it will improve inclusivity and reduce travel.

The key to a successful office will not only be one that adheres to government protocols but one that enhances experiences. Displays in lobbies or communal areas could provide interesting information and reduce the frustration if queuing is required. Navigating COVID-19 both during and after the pandemic will involve openness to new thinking and experimentation in office design that mirrors tactical urbanism.

Arup's Singapore office provides a range of meeting room options including single person quiet rooms.
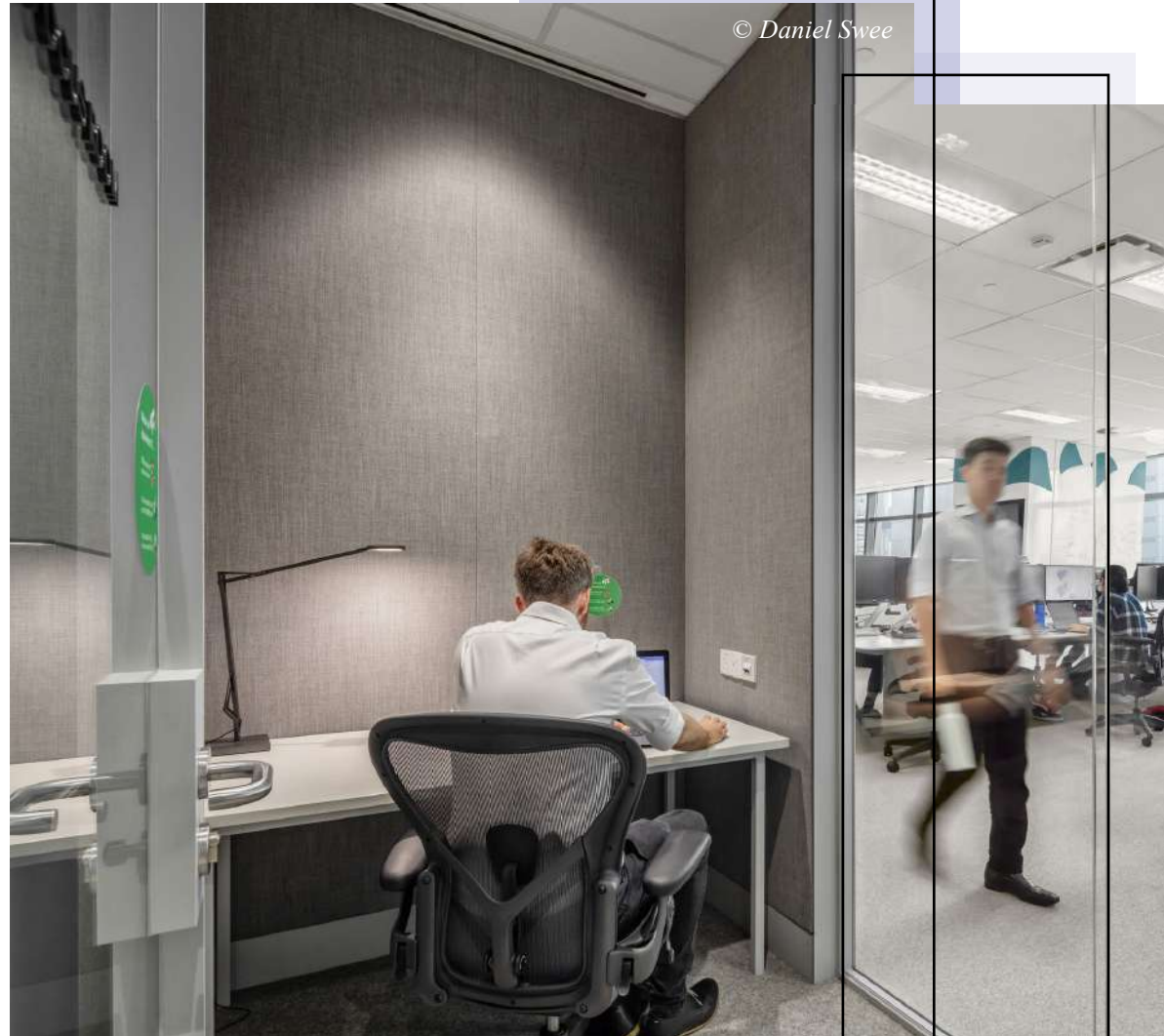
© Daniel Swee

What will the pandemic mean for the commercial office market in Australasia

"

Awareness is heightened, and in this economy, there'll be a drop in demand for space, offices with the premier health story will get the premium rent and get the tenants."

Prof. Joseph Allen
Harvard Business School

Before COVID-19, office spaces were already undergoing positive changes to improve worker health, wellbeing and productivity. Increasing natural sunlight and ventilation, decluttering entries, or improving circulation areas and informal meeting spaces have all been welcome enhancements to many offices.

COVID-19 has elevated awareness of health and wellbeing which will only increase the demand for a variety of office features including healthy building materials and finishes, sit to stand desks, wellness rooms, plants and fresh air. The WELL buildings standard will be even more in demand as it provides a comprehensive, research based, 3rd party verified and holistic framework for offices to address health and wellbeing.

The future of agile working in open plan places will be tested by this pandemic. The trend has been to reduce the floor area per person in offices. However a potential shift away from dense open plan design is backed up by a growing body of research about the deleterious effects on worker wellbeing, collaboration and productivity.[8,9] One study estimated that less than 2.5 hours in an 8-hour work day was productive time[12].

It is also common for workers to share illness at the office via surfaces or air conditioning systems. Physical distancing will give workers the experience of a spread-out workspace. If this new seating arrangement is found to be more productive a return to dense workspaces is unlikely to be tolerated.

There have been several office designs that look to provide a variety of spaces ranging from communal spaces which focus on socialising and discussion, down to quiet less stimulating spaces, sometimes coined 'deep working spaces', where people can focus and be productive.

FLEXIBILITY

In the short term, economic uncertainty will increase the demands for flexibility. Office design should allow spaces to be adapted to meet tenant needs including downsizing if required. Working from home will continue in popularity and digital technologies will be increasingly important requiring future offices to increase spaces that allow for online communication such as mobile office pods.

Repurposing surplus space for co-working hubs is a great way to manage fluctuations in vacancy rates and tap new markets for quality professional office space, but this would only be possible if spaces were flexibly designed. Modularised designs will also allow for more reuse of fit outs which increases sustainability.

Finally, an increase in demand for local office hubs would increase the viability of working from home with people going to a local office for certain meetings or to access office facilities. This would also provide an opportunity to increase local retail and create more connected communities.

Arup's Melbourne office[13] has achieved Platinum WELL Certification under WELL v2 from the International WELL Building Institute (IWBI)'

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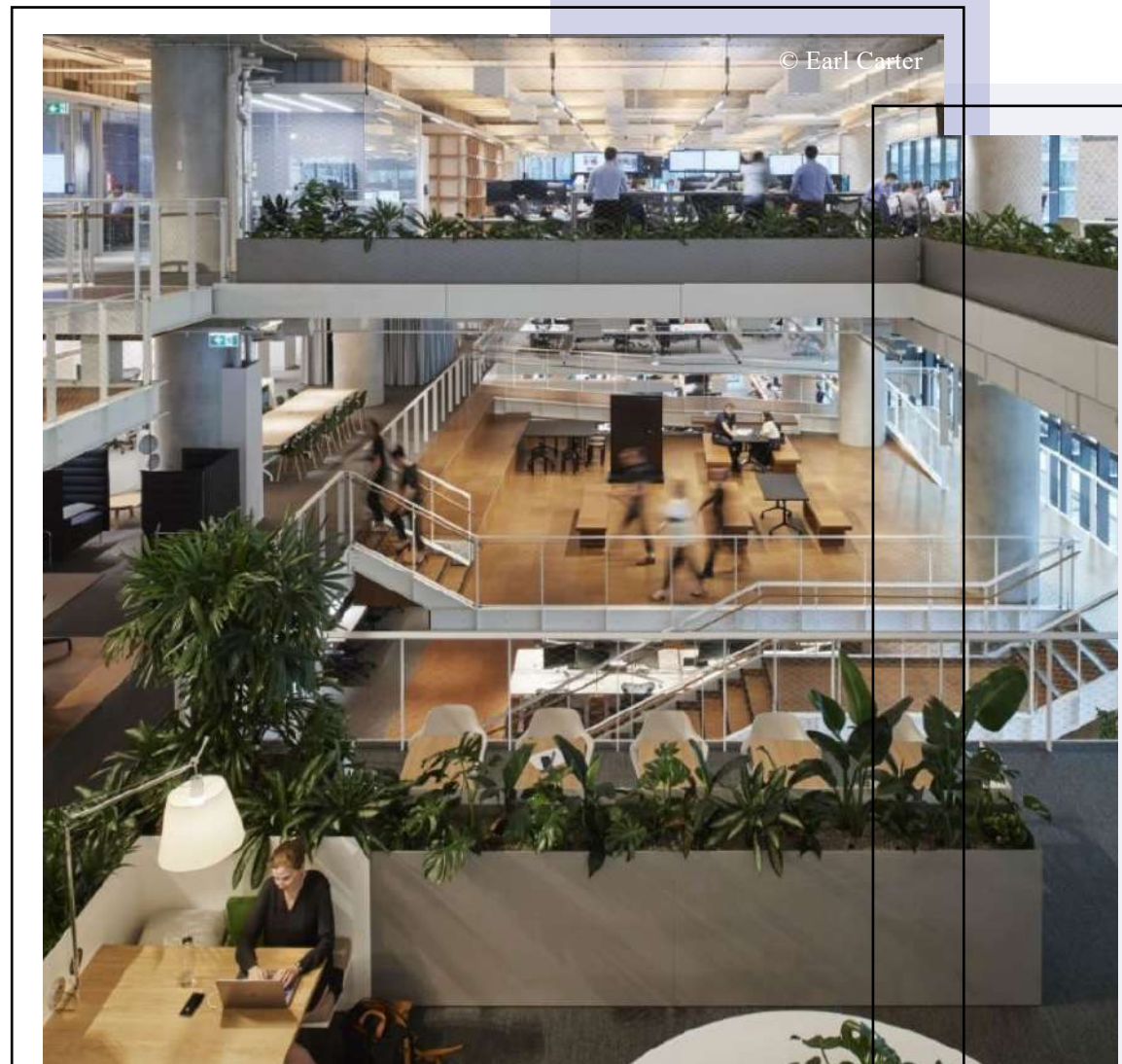
The role of technology
in post-pandemic offices

© Arup

Existing and new technologies can be used to manage challenges associated with the risk of contagion, as well as support for working offsite and reductions in business travel. These range from touchless devices and doorways, productivity and collaboration tools, through to augmented and virtual reality platforms and digital assistants.

To address concerns about COVID-19 spreading through offices, entry to elevators, secure foyers, meeting rooms and restrooms will be enabled with motion sensors and in some cases, facial recognition systems. Relatively easy and inexpensive changes such as touchless tapware and dryers in rest rooms should be considered early in an organisation's return to work program. More extensive systems to allow for touchless offices will start to be introduced, especially in new builds and fit outs.

Digital tools can be used to understand and manage office operations - from booking spaces to monitoring physical distancing or contact tracing cases if required. These technologies are likely to have a role in getting offices functional again. This information also has the potential to provide valuable space usage data for ongoing improvement of office spaces. Landlords should consider if they have a role in providing this as a service to tenants and supporting their capacity to adapt more readily to changing needs.

Productivity and collaboration tools, including video calling and online workshop platforms, are already available and their adoption will become more widespread as more online, connected teaming is required. Virtual and augmented reality technology and purpose-built labs can help enhance online designing and complex problem-solving. As demand for these digital tools increases, dedicated office spaces or IT requirements will need to enable their use.

Digital and virtual assistants and artificial intelligence are another class of technologies that may become more commonplace in a post COVID-19 office environment. The economic impacts of COVID-19 have, and will continue to have, negative impacts on employment. Organisations will manage the downturn by downsizing and outsourcing, especially routine functions. The shortfall in capability could be met with emerging artificial intelligence systems and online talent marketplaces like freelancer.com and Upwork.com.[14]

This pandemic has given a push to a more digital way of working, embracing new technologies which will continue to increase in adoption after the pandemic is over.

Conclusion

Health, wellness, sustainability and flexibility have been ongoing trends for offices for many years. The coronavirus pandemic has highlighted the importance of these attributes and accelerated the move to implementing these principles.

When implementing restrictions, it will always be important to make it easy for building users to adhere to requirements and experiment with ways to improve their user experiences. Central offices will have to compete with working from home and local office hubs, but people will still want to go to collaborate and work productively if a high quality of space is provided. The commercial property developers and landlords who recognise what their customers need stand to benefit from these emerging trends.
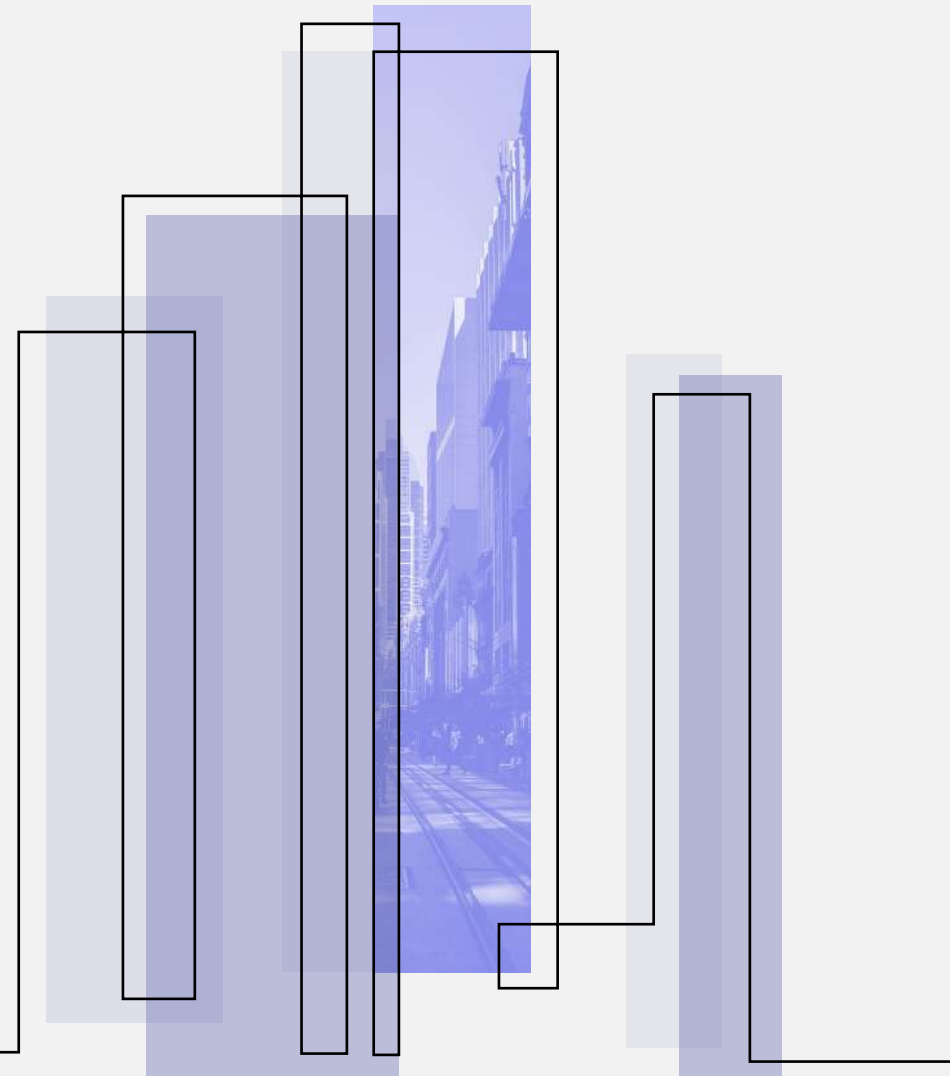
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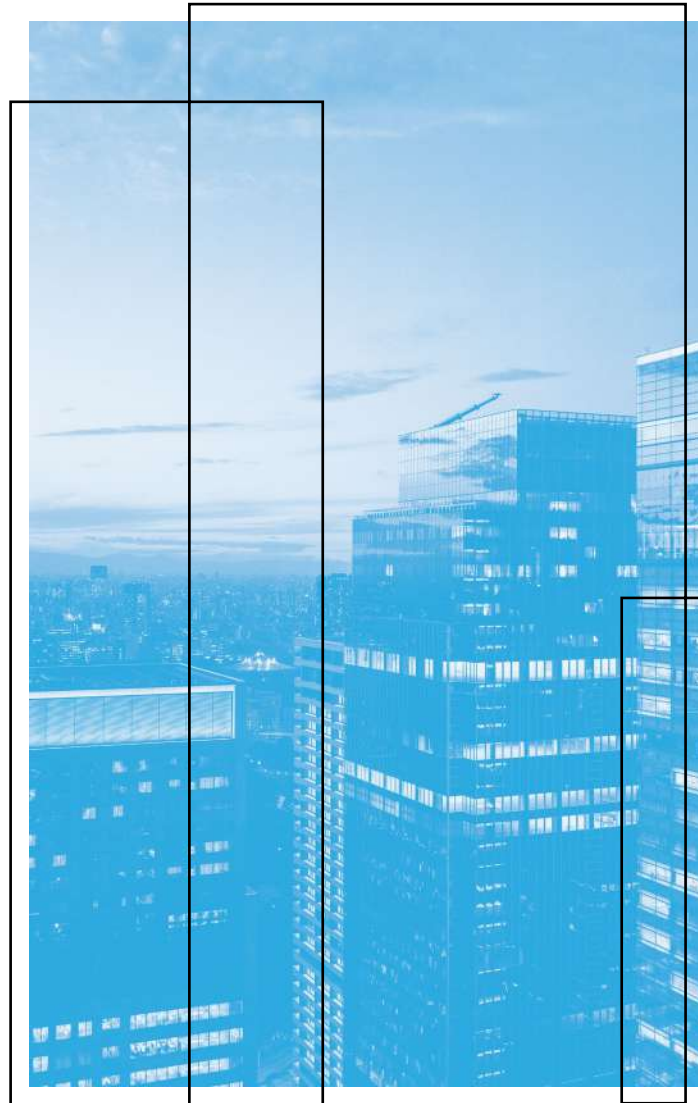
ARUP

Future of offices:
in a post-pandemic world

COVID-19 has accelerated a range of pre-existing trends in the commercial property sector around health and wellbeing, activity-based working, flexibility and the drive for better space utilisation. Sustainability, smart buildings and the digital workplace are also reshaping the commercial offer. Taken together, these trends and developments will profoundly impact the kinds of workplaces likely to be needed in a post-pandemic world.

In this thought-piece we explore how East Asian workplaces could change in the years following the lockdown and look at developments in how people may work together both remotely and in the same physical location.

The commercial property market in an uneven East Asian region will look noticeably different in a post COVID-19 future.

When reports of a novel coronavirus in Wuhan began to emerge in late 2019, the majority of governments in East Asia implemented effective pandemic action plans which helped contain the spread of COVID-19. In almost all countries, this involved lockdown of a wide variety of businesses and millions of employees were asked to work from home where possible.

A culture of remote working had already been growing in East Asia before the crisis struck, although its prevalence lagged other regions[1]. However, with lockdowns imposed across much of East Asia, hundreds of thousands of businesses gained first-hand experience of work from home (WFH). What impact might this experience have on the commercial property sector?

It seems reasonable to expect that remote working will become a more established pattern across East Asia as countries emerge from the initial crisis. This is because:

THE IMPACT OF 'SECOND WAVE' INFECTIONS WILL HAVE A DEBILITATING EFFECT

When initial lockdowns eased in East Asia, many workers returned to offices. However, a 'second wave' of infections triggered a return to home working in many places. In Hong Kong, for instance, government workers were sent back home to continue remote working after an initial reopening[2].

PROOF THAT REMOTE WORKING IS FEASIBLE

Tens of thousands of businesses now have first-hand experience of allowing employees to work remotely and this has largely been a success, thereby reducing concerns about remote working that many employers held.

POTENTIAL COST SAVINGS

With expenses in everything from energy to broadband usage to office rent reduced, many organisations will see remote working as an opportunity to cut some of their biggest financial commitments.

In this thought piece we first establish how the coronavirus has affected East Asian economies and we then explore the impact these changes may have on the commercial property sector.

COVID-19's impact on the economy will change the commercial property market

To establish how the pandemic may affect the commercial property, we first need to understand how the outbreak has affected economies across the region.

Perhaps the most obvious impact is that the rise in unemployment as businesses are forced to lay off workers. For instance, the unemployment rate in Hong Kong hit 4.2 per cent in March, the worst level in 9 years – similar rises are seen across the region. As the coronavirus takes a steep toll on the economy and the workforce, many will not have jobs to return to.

This will likely feed on through to the commercial property sector – in the short term office rentals will almost inevitably drop. If we take the 2003 SARS outbreak as a guide, commercial property rentals in Hong Kong and China dropped to historic lows in the aftermath of the outbreak (although they soon rebounded).

However, COVID-19 has happened in a very different world to SARS, where the technology to support remote working has improved drastically. Employers have realised that working from home is possible and employees are questioning the need to travel to an office. It is therefore likely that some of those who are still employed will now permanently work from home, and some employers will choose to downsise their leases or look for flexible office space rather than long-term leases.

It is also likely that the outbreak will accelerate trends that were already emerging. In Singapore, for instance, the Urban Redevelopment Authority had taken steps to decentralise the CBD, creating a number of satellite business centres around the city[3]. This kind of trend can be expected to accelerate because people are likely to want to avoid cramming into public transport and all working in a central location.

In the next section we describe in more detail the potential impacts on ways of working in East Asia.

The pandemic will change how we work
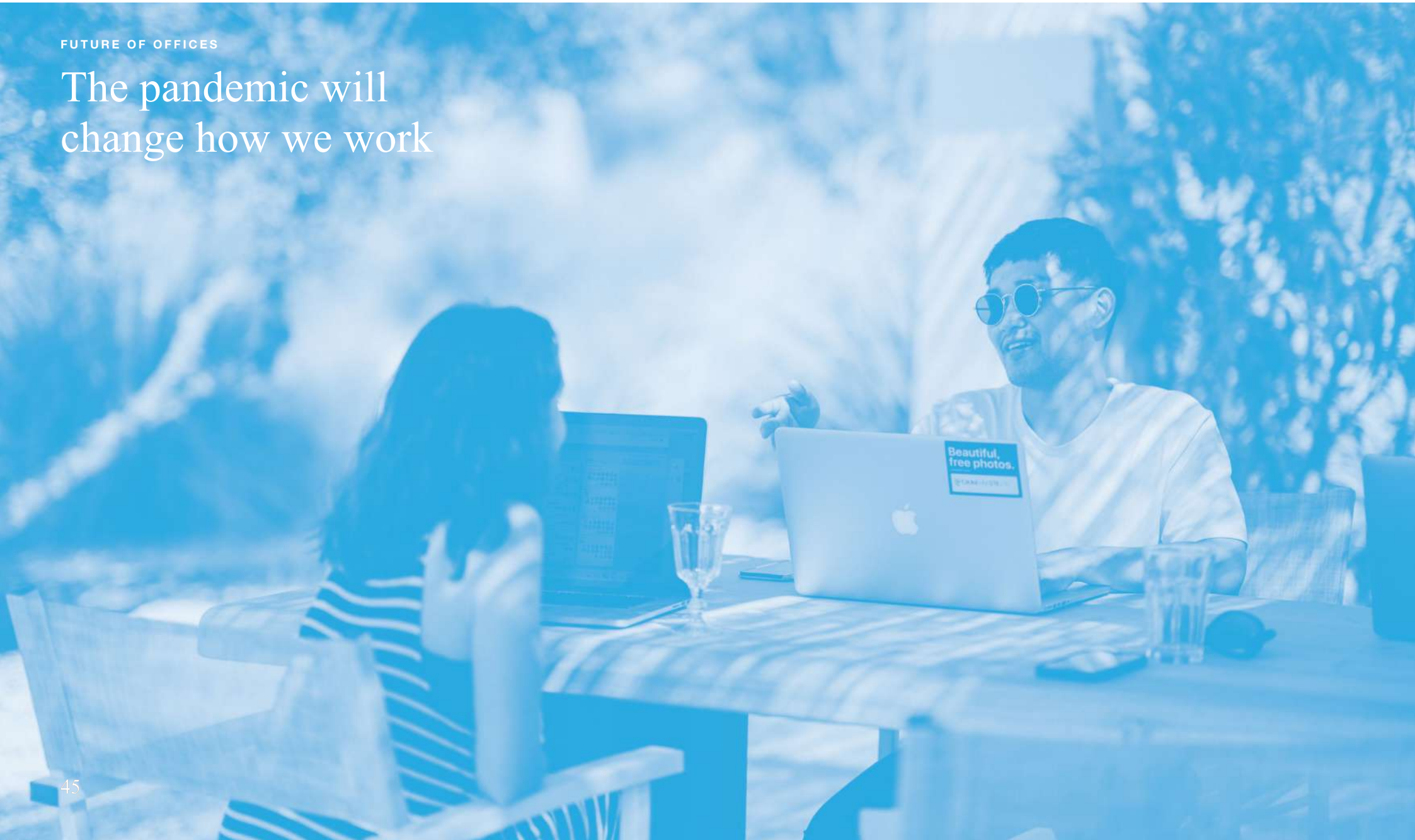
East Asia is an enormous region with distinct economies, levels of development and working cultures. It is therefore impossible to generalise for a region of several billion people. Nonetheless, there is strong reason to believe that the pandemic will have a significant impact on working styles. Here, we describe some of the factors that commercial property companies need to consider.

ACCEPTANCE THAT REMOTE WORKING IS FEASIBLE

COVID-19 has already pushed millions of people in East Asia to work from home and data suggests that this will increasingly become part of the normal worker's day. It is predicted that 30 percent of people will work from home multiple days per week within a couple of years according to a new Global Workplace Analytics[4].

Employers have now realised that employees can be productive when working remotely. Many are observing that time saved from commuting almost equalises the loss of productivity due to environment change, technical issues and lack of face to face collaboration.

CHANGE IN ATTITUDES TO OFFICE SPACE

If there is a shift toward blending remote and in-person work, this is likely to push corporate clients to reconsider the amount of office space they buy or lease.

SHORT TERM EFFECTS OF A RECESSION

It is now widely expected that a deep recession will impact the East Asia region, like the rest of the world. Commercial property firms are already seeing tenants ask if they can delay rent payments, leaving landlords to cover their mortgages and negotiate with banks.

PERSISTENCE IN POPULARITY OF OFFICES

While the remote working trend will certainly be important, it is likely that in many countries this trend is being overexaggerated. Ultimately, work from home is not for everyone and many people in the region do not have a suitable home working environment. It is not uncommon to share space between three or four generations, where junior workers are often living with their parents. For many, this makes permanent remote working undesirable (see chart).

Even if Hong Kong enjoys the world's second fastest fixed internet broadband speed, focus work may be near-impossible when space is limited. As the COVID-19 situation is slowly easing in Hong Kong for instance, we have seen a large cohort of employees happily returning to the office, despite the commute or potential health risks.

NEITHER HERE NOR THERE

One possible trend is the emergence of employees working neither at home, cafes, nor at the office, but in a new type of co-working space that allows for a safer, more private, less social environment as Singapore's decentralised CBD project shows.

**WHAT'S YOUR BIGGEST STRUGGLE WITH WORKING REMOTELY?**
State of Remote Report 2020[5]
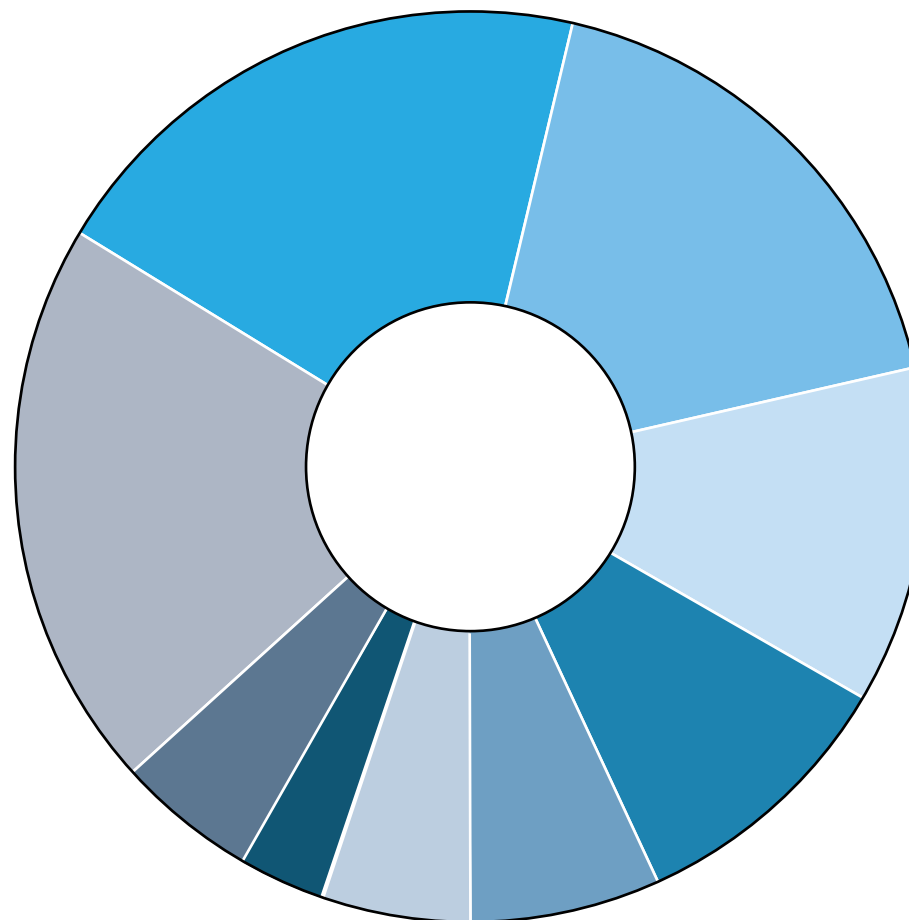
20%	COLLABORATION AND COMMUNICATION
20%	LONELINESS
18%	NOT BEING ABLE TO UNPLUG
12%	DISTRACTIONS AT HOME
10%	BEING IN A DIFFERENT TIMEZONE TO TEAMMATES
7%	STAYING MOTIVATED
5%	TAKING VACATION TIME
3%	FINDING RELIABLE WIFI
5%	OTHER

In the next section, we explore what these trends might mean for offices of the future.

Different perspective on the workplace
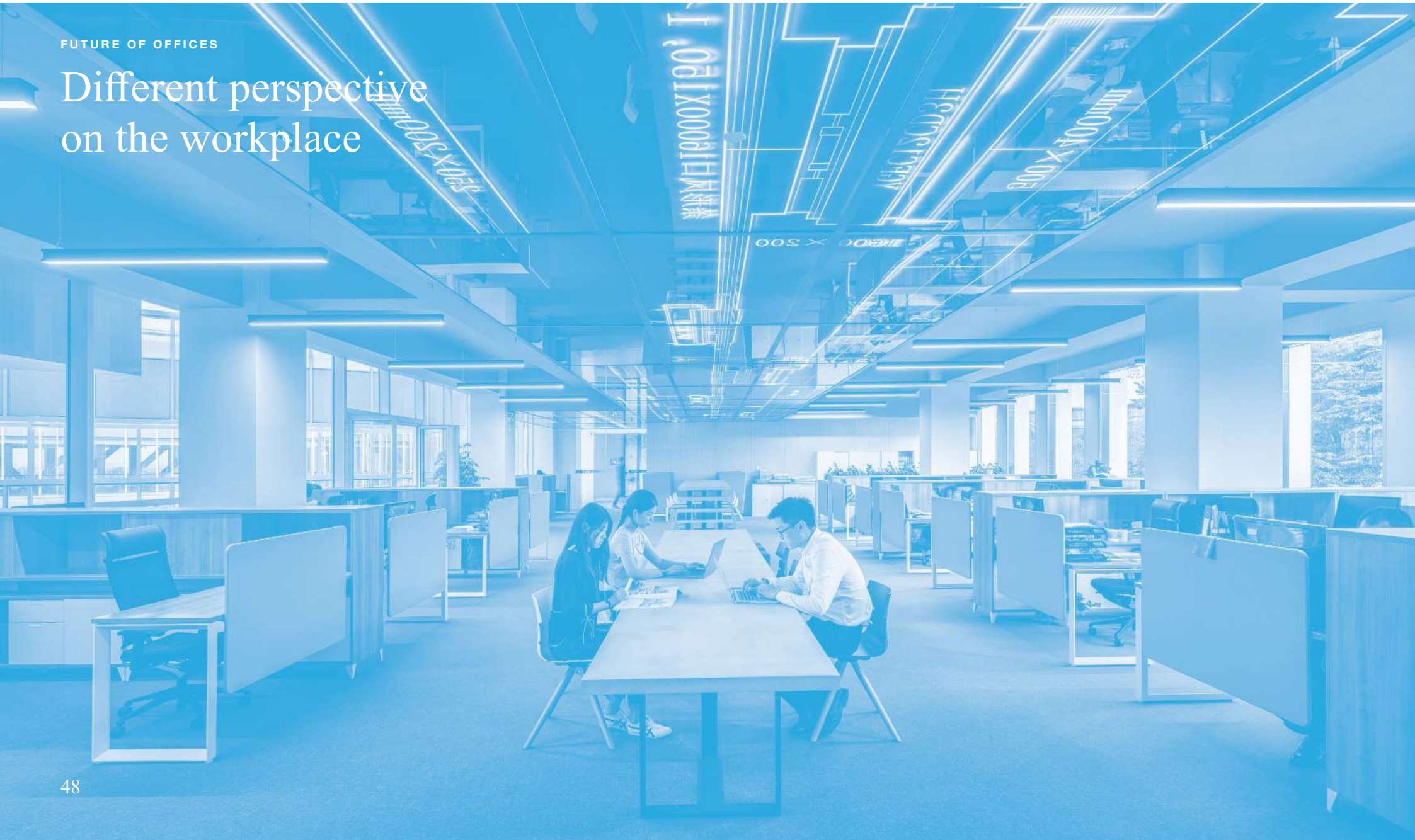
The COVID-19 pandemic's most immediate impact will be on office rental prices. However, unlike earlier crises, where the market rebounded to 'normal' fast, we expect the lockdown experience to have a more significant impact on what offices are for in East Asia.

There is no reason to believe that offices will disappear after the crisis (indeed, in countries where lockdowns have lifted, workers are filing back to offices as usual). They also remain popular in East Asia - a 2020 Gensler Research Institute Workplace Data Survey[6] found that given the choice between home, a coworking space, a coffee shop or a well-designed office-style workplace, the office is still the place people want to be.

Ultimately the pandemic is a fork in the road. We have an opportunity to redefine what an office is, or choose to continue with the pre-existing model.

In the following sections, we look at the implications of several new types of office space which have recently started to emerge across the region. Today, we are still in the 'paradigm' of traditional corporate offices, yet the examples below provide some indication of what the future could look like.

PLACE: With decreased cash flow and investment appetite there likely will be opportunities for more retrofit projects, addressing ageing infrastructure and participating to urban regeneration.

WELLBEING: Arup has developed modelling and analytic capabilities that help illustrate the risks facing clients and develop solutions at different scales for possible immunity to the pandemic, such as for example new ways to quantify physical distancing to its people movement simulation software.

TECHNOLOGY: Many of the technologies used in China during the outbreak weren't new. For years China has been an early adopter in the rapidly growing sector of proptech, tenants can benefit from insights to rethink their interior layouts, optimise the number of desks as well as the use of meeting rooms and staff areas.

GERM-FREE OFFICE: Arup has developed with University of Hong Kong a plug and play IoT antibacterial system that protects spaces with smart air quality monitoring system combined with VUV-based photocatalytic air purification device.

When WeWork opened offices in Beijing Fun in 2018 (an urban regeneration site popular among culture-seeking young people and tourists) it marked an important moment in how office life is perceived in Asia's biggest economy. People at these sites are working in refurbished historic buildings with an antique look but stylish interior, surrounded by unique and inspiring architecture and an environment which reduces the feeling of performing a job inside a regular high-rise office building. Right across East Asia, employees are beginning to experience what it is like to work away from traditional CBD's and 'standard' offices.

At the same time, we are seeing opportunities for workplaces located in smaller urban centres or suburbs closer to where people live as people express frustration with the traditional commute (not to mention fears of disease spread on public transport). This could potentially lead to different types of headquarters going along with decentralised team structures towards a Team of Teams structure (see graphic).

A long-term shift from a highly centralised workplace model to one characterised by constellations of innovation nodes, where workers congregate to use facilities, collaborate or compete can be anticipated. Developers who
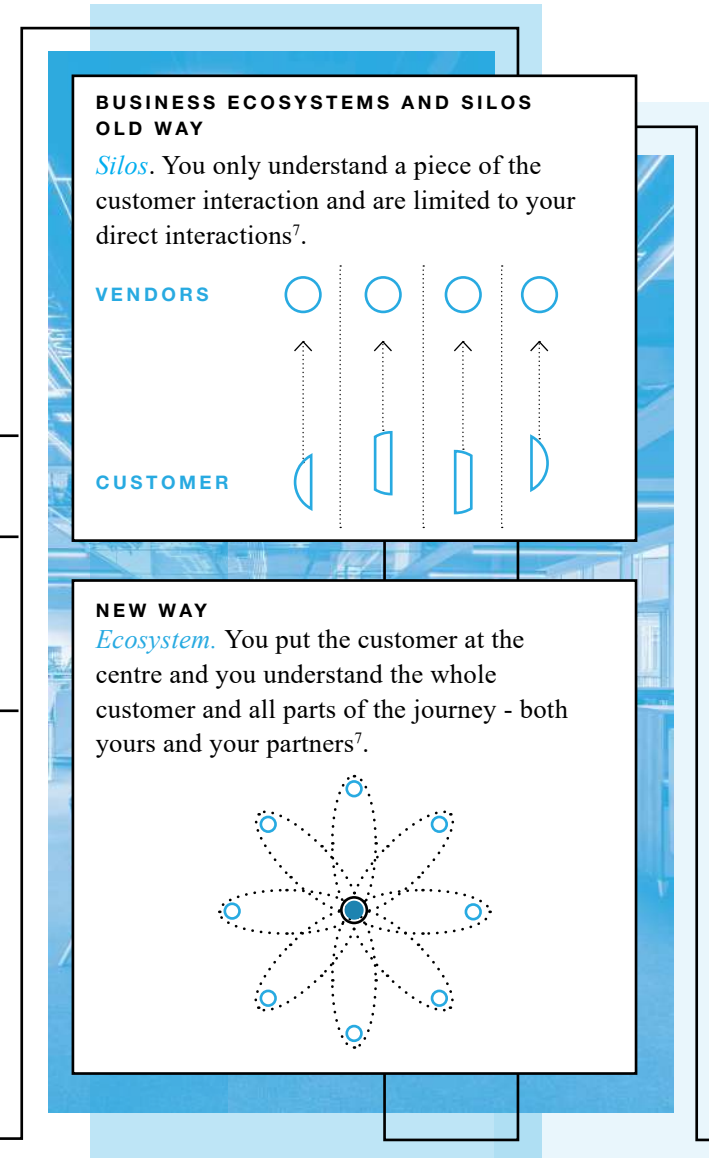
spot these trends can work hand in hand with city planners to define new areas for growth and invest in regeneration projects.
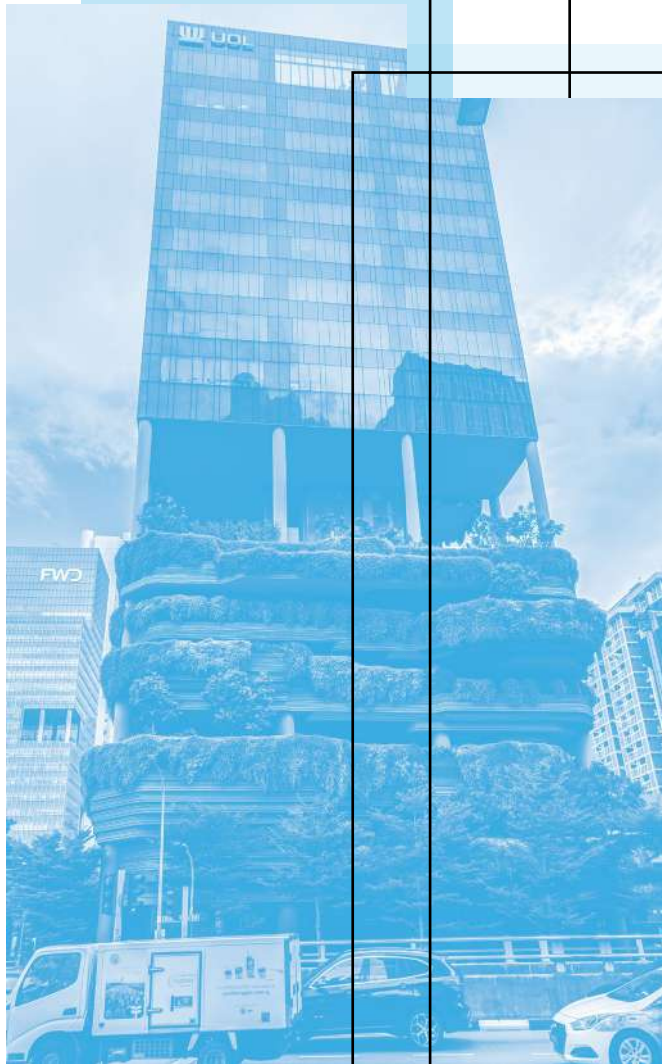
This is not an entirely new trend. Corporate office space tenants were already renting co-working spaces in addition to their fixed office space for multiple benefits:

Reduces ratio of fixed space (thus rental costs) to giving rental control flexibility.

Allows migration of fixed office to somewhere less central for non-client-facing functions but use co-working space in prime areas for client meetings.

Allows the management team to split and work at different locations for risk control during COVID-19 outbreak.

BUSINESS ECOSYSTEMS AND SILOS OLD WAY

Silos. You only understand a piece of the customer interaction and are limited to your direct interactions[7].

VENDORS

CUSTOMER

NEW WAY

Ecosystem. You put the customer at the centre and you understand the whole customer and all parts of the journey - both yours and your partners[7].

A NEW FOCUS ON WELLBEING

Although there are outliers, most office places in the East Asia region conform to the traditional workplace layout – rows of desks and meeting rooms with a primary focus on productivity. However, if work is possible anywhere, this could represent an opportunity to reimagine office design to be more 'human centred'. Furthermore, the pandemic has made people ever more conscious of the health risks of working in close contact with others. What could the implications be for office design?

As the pandemic recedes, we can expect demand for high-quality spaces that support health and wellbeing, both from tenants and developers. There will be opportunities to explore new materials, façade design and MEP solutions for healthy office buildings.

A growing number of employers and building managers are installing air filters in offices, while relocation companies are offering indoor air-quality assessments to top-tier expats, and Starbucks built its enormous Shanghai Reserve Roastery to Leed Platinum standards, including air quality monitoring[8].

Similarly, the 35,000 sq. ft JLL Hong Kong office has been designed with wellness and sustainability at its heart. The office also looks to boost its green credentials with two larges 'green walls', plants throughout the office, low emission furniture, an air purification system with real-time air quality monitoring and active encouragement of recycling and a move away from single use plastics[9].

DE-DENSIFICATION OF THE WORKSTATION PLANNING

At least for a few years after the pandemic, physical distancing will remain a primary concern for many, affecting all kinds of interactions – not least at work. People will likely demand more space at work, and this would mean more private spaces or personal offices for individuals, and more distance between desks.

Rather than desk setups that face each other or are right next to each other, we might now be positioned to our colleague's backs with more space between us. A conference room that normally fits ten people might now only hold chairs for five, and larger virtual and platform-based collaboration tools.

This is mainly an opportunity for top firms, with healthy financial assets who will be able to attract and retain the ever more demanding workforce while bearing increased cost per head ratio. Increased challenges for developers, tenants and designers will be on GFA and GLA better allocation, favouring space that adds value to the office workers, staff and leaders, as well as increasing efficiency.

RISE OF THE POD, END OF THE OPEN-PLAN OFFICE?

Research[10] shows that employees take 62% more sick days when they work in open-plan office compared to those working in cellular offices. With people more conscious than ever of the life-threatening risks of airborne diseases, we may be moving towards more dividers and breakout pods, booth and focus rooms. We may in some cases also anticipate the end of hot desks and the redefinition of shared spaces.

FLEXIBILITY AND CIRCULAR WORKPLACE

As the economy recovers from COVID-19 there will be greater demand for flexible buildings that can be easily adapted for new uses in the event of future market disruptions, driven by circular and resiliency principles. As sector lines blur, new business ecosystems emerge. The premise is that technology makes it ever easier for sector boundaries to disappear and for whole new business ecosystems to emerge. In a knowledge-driven and digital economy, value is increasingly generated through open innovation, start-up ecosystems and advances in information technology. Traditional industries are being disrupted by agile and fast-moving players that are transforming established markets at pace and at scale.

© Satoshi Shigeta
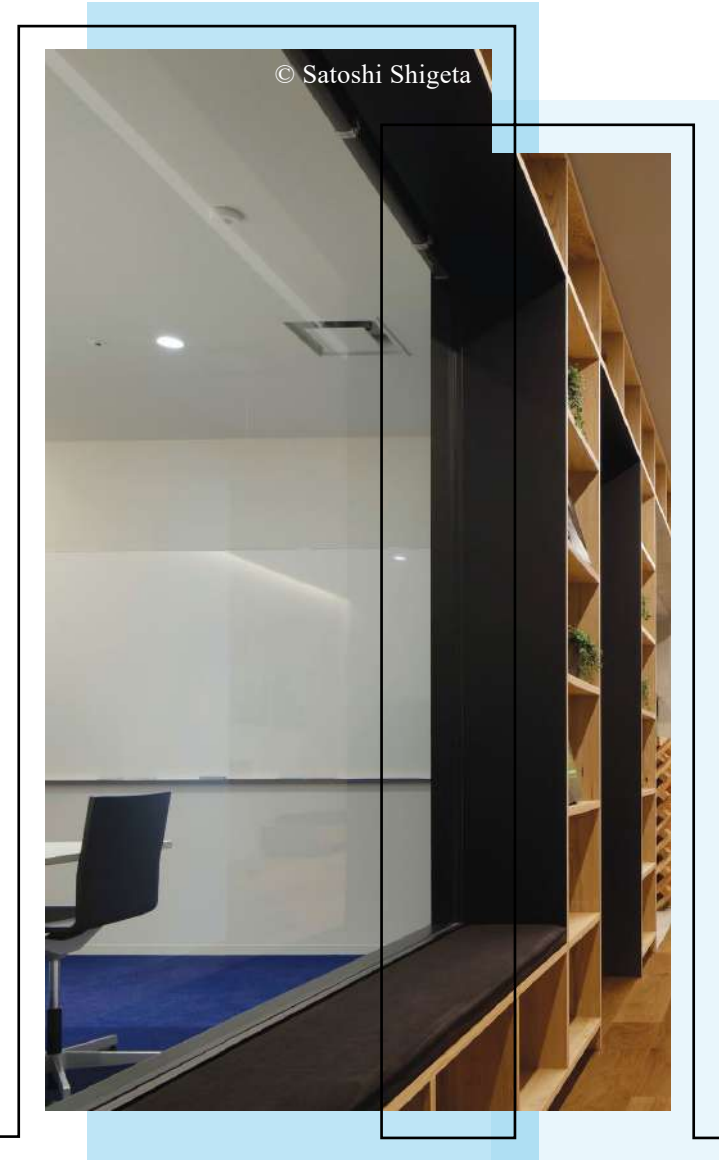
TECHNOLOGY

One of the most exciting trends which may be accelerated by the pandemic is the use of 'proptech' (property technology). This includes apps, the Internet of Things (IoT), sensors and robots to streamline property management - the COVID-19 outbreak brought the benefits of proptech into much sharper focus.

For landlords and operators, proptech allows them to monitor metrics such as occupancy ratio and real-time energy consumption, as well as technical problems like abnormal temperatures or excessive power consumption. Meanwhile, tenants can benefit from insights to rethink their interior layouts, optimise the number of desks as well as the use of meeting rooms and staff areas. Digital technologies make it easier for landlords and operators to monitor metrics, such as occupancy ratio and real-time energy consumption, allowing to either help expand revenue sources or save costs.

Besides proptech, we can also expect a rise in surveillance and building entry technologies too. This could be popular in countries which have used track and tracing to reduce the spread of COVID-19. It may also be backed by unions – reception staff in particular are exposed to potentially hundreds of people every day, so technology which puts more distance between them and visitors will be welcomed.

Expect to see technology entering all private and public spaces in the form of facial recognition, thermal cameras and other sensors at reception desks.

Finally, further technology adaptation and integration will be required to cater for rising demand in spaces that enable remote collaboration, life-like immersive audio and visual high-quality interactions.

We can expect commercial property companies to make significantly more use of these technologies as a differentiator.

GERM-FREE OFFICE

The post-coronavirus office, especially building lobbies, reception desks, and shared common areas, will likely see more frequent cleaning policies as well as features like antimicrobial properties woven into fabrics and materials, state of the art ventilation systems, addition of UV lights for more deeply disinfecting the office at night.

Manufacturers are integrating antimicrobial technology in interior design elements including faucets, window shades, paint, and door hardware — applying coatings that work to keep them cleaner from multiplying bacteria.

We will also see increased demand for integrated smart, contactless access systems in the elevators, lobby gates and office doors.

Further case studies in East Asia

CHINA

At Shanghai Baoland Plaza, a Grade-A office building in the city, IoT connectivity helped reduce manpower to inspect facilities and equipment. The building installed Command Centre, a platform offered by JLL, to obtain real-time data from equipment and facilities through a building's current systems and employ wireless IoT sensors to monitor air quality, temperature, humidity, and energy consumption[11].

Chinese start-up 9am, is using data sensors integrated into office furniture to help provide information for the health and safety of employees. For example, sensors at workstations could be used to alert employees if they have been sitting for too long.[12]

HONG KONG

Global law firm Eversheds Sutherland adopting hotel-like office design.[13]

Eaton Club Hong Kong, an office-cum-leisure space which provides a facility where members can work, network and enjoy the benefits of a private members' lounge, complete with a bar and pantry.[14]

The Great Room in Taikoo is thoughtfully designed to increase casual collisions and heighten productivity. Each site is created by a hospitality designer to achieve the same elevated environment with sleek, sumptuous surrounds and perfect lighting.

JAPAN

At the GSK office in Tokyo, certain concessions were made to Japanese work culture—slightly more emphasis was put on traditional meeting rooms than in equivalent offices in the UK and the United States—but that this is a more community-orientated space than typically found is immediately obvious upon entry. A significant amount of space is given over to small, round tables, allowing for quick and informal discussions, with meeting rooms located in adjacent units.[15]

Slack's Tokyo office is located just opposite the city's Imperial Palace gardens and has been designed by locally based Suppose Design Office to "define a new traditional atmosphere", mixing typical Japanese aesthetics with contemporary work culture. The perimeter of the office, which overlooks the verdant gardens, has been completed with a black-painted drop ceiling and flooring.

Chairs upholstered in dark grey fabric, stone benches and leafy potted plants have been placed at regular intervals.

It's intended to look like an engawa – a wooden or bamboo ledge that runs around the outside edge of traditional Japanese buildings. Shaded by the eaves of the building's roof, the area serves as an indoor-outdoor space where people can sit unaffected by the heat or rain.[16]

THAILAND

Hubba Thailand is a co-working environment situated right in the middle of a large residential community with the intent to create a workspace that would cater to every member of the families living in this area.[17]

SINGAPORE

At the JLL Asia Pacific offices, different types of work settings were designed, enabling employees to move to 'desk for a task' versus 'desk for a day'. Employees use an app to access their lockers, book meeting rooms, and to see where empty desks are. This has led to employees chatting with those not in their department more frequently and preferring to lunch in the office rather than going out.[18]

Conclusion

In this thought-piece we have investigated some of the potential implications of the COVID-19 lockdown on the commercial property sector the East Asia region. East Asia was the first region to be affected by the virus and lockdowns, and is also the first place to begin reopening.
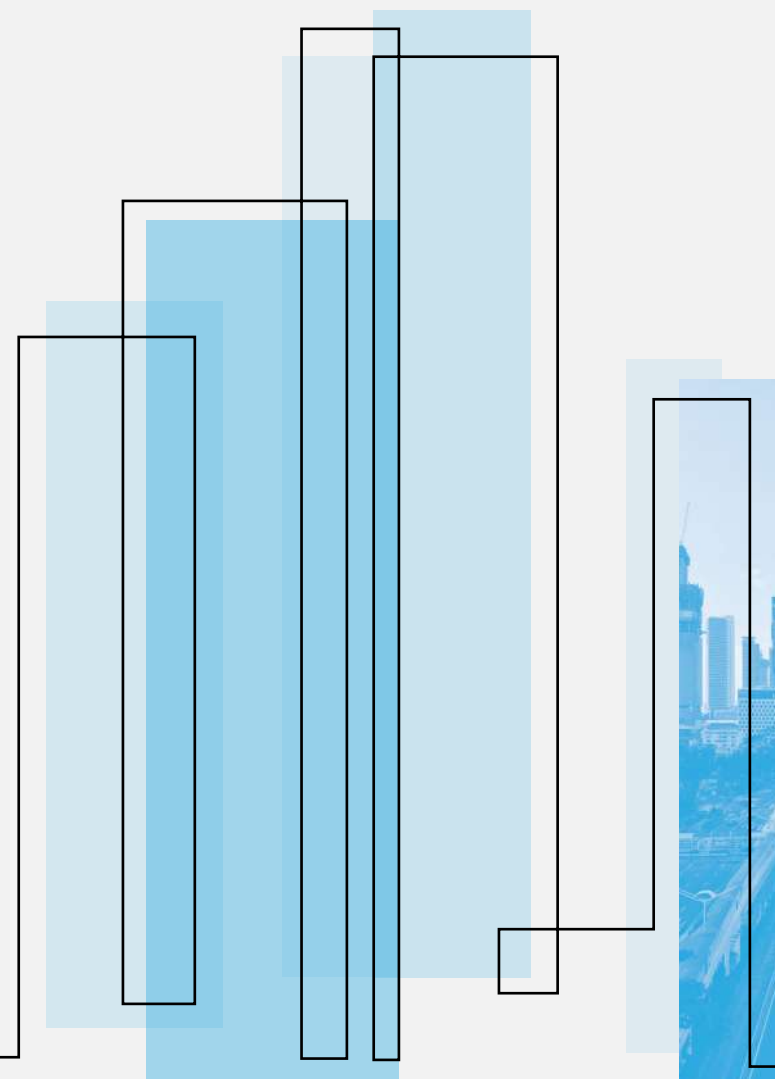
As this thought-piece has shown, the immediate impacts of the lockdown will be on office rental prices and we can expect a drop in revenues during the recession which is likely across the region. However, unlike past recessions and disease outbreaks, the return to the office and fast rebound for the property market this time round is not certain. This is due to a number of interrelated factors:

- In a region that was perhaps most sceptical of remote working, experience has now shown that this model can work for many industries

- Technology now makes remote working possible, unlike in the aftermath of the 2003 SARS outbreak

- Certain trends towards more 'startup' style cultures and decentralised CBDs had already started to emerge, and it is likely that they will accelerate

That said, we do note that remote centralised offices will remain popular in East Asia – many employees prefer working at them or do not have a suitable place to do so at home. Reports that remote working will become the 'norm' are probably overblown.
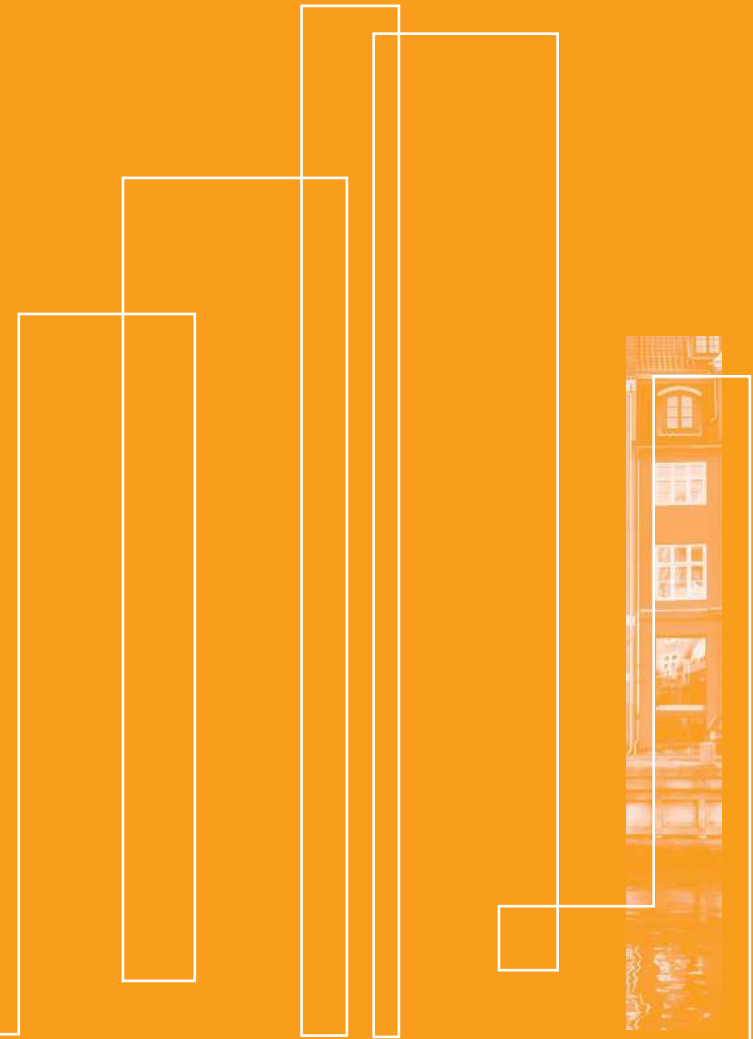
In many ways, the pandemic and lockdown offer the commercial property sector across East Asia an opportunity to pause and reconsider its current approach. Yes, traditional offices are still going to be with us (although they will look different), but there will also be important trends to a greater number of satellite offices, and new WeWork-style spaces away from traditional CBD's. Those who tap into these trends stand to gain.
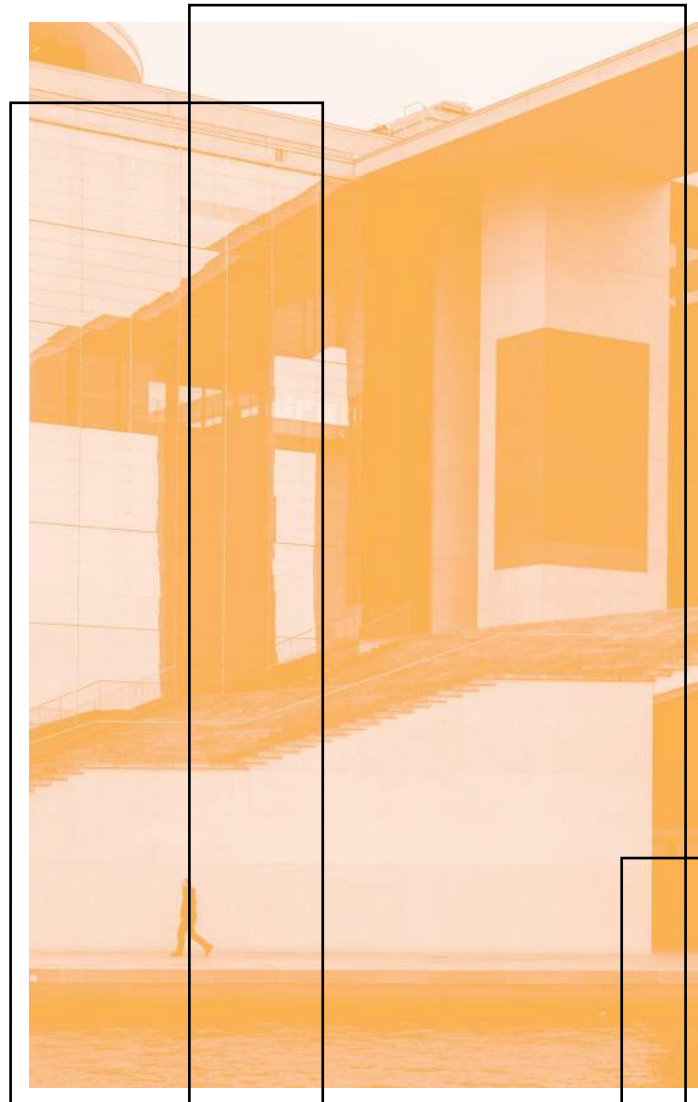
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ARUP

Future of offices:
in a post-pandemic world

COVID-19 has accelerated a range of pre-existing trends in the commercial property sector around health and wellbeing, activity-based working, flexibility and the drive for better space utilisation. Sustainability, smart buildings and the digital workplace are also reshaping the commercial offer. Taken together, these trends and developments will profoundly impact the kinds of workplaces likely to be needed in a post-pandemic world.

In this thought-piece we explore how European workplaces could change in the years following the lockdown and look at developments in how people may work together both remotely and in the same physical location.

The commercial property market is likely to look radically different in a post-pandemic future.

When COVID-19 reached Europe in January 2020, most countries opted to impose lockdowns which either banned all travel to work, or strictly limited it as the virus spread. While lockdowns were imposed at different times, millions of employees were asked to work from home at one point or another during the outbreak.

Remote working was not an entirely new concept in Europe – European Commission data[1] shows that in 2017 around 10% of employees worked from home at least some of the time. But, as with so many other things, the pandemic accelerated this trend. By mid-April, some four in 10 Europeans were working from home full-time.[2]

It seems realistic to assume that remote working will become a more established pattern across the continent as countries emerge from the initial crisis. This is because:

CONCERN ABOUT SOCIAL CONTACT WILL PERSIST
A case in point is the showdown between ecommerce giant Amazon's French distribution centres and local unions with regards to physical distancing in April.

PROOF THAT REMOTE WORKING IS FEASIBLE
Tens of thousands of businesses now have first-hand experience of allowing employees to work remotely and this has largely been a success, thereby reducing concerns about remote working that many employers held.

POTENTIAL COST SAVINGS
With expenses in everything from energy to broadband usage to office rent reduced, many organisations will see remote working as an opportunity to cut some of their biggest financial commitments

These changes do not signal the end of commercial property in Europe. Rather, they introduce a wide variety of new kinds of working which will have important implications for how the sector works and influence the kinds of investment decisions that commercial property firms make.

In this thought piece we establish how the COVID-19 outbreak has affected Europe, then explore some of the potential impacts this may have on the commercial property sector.

The pandemic in Europe
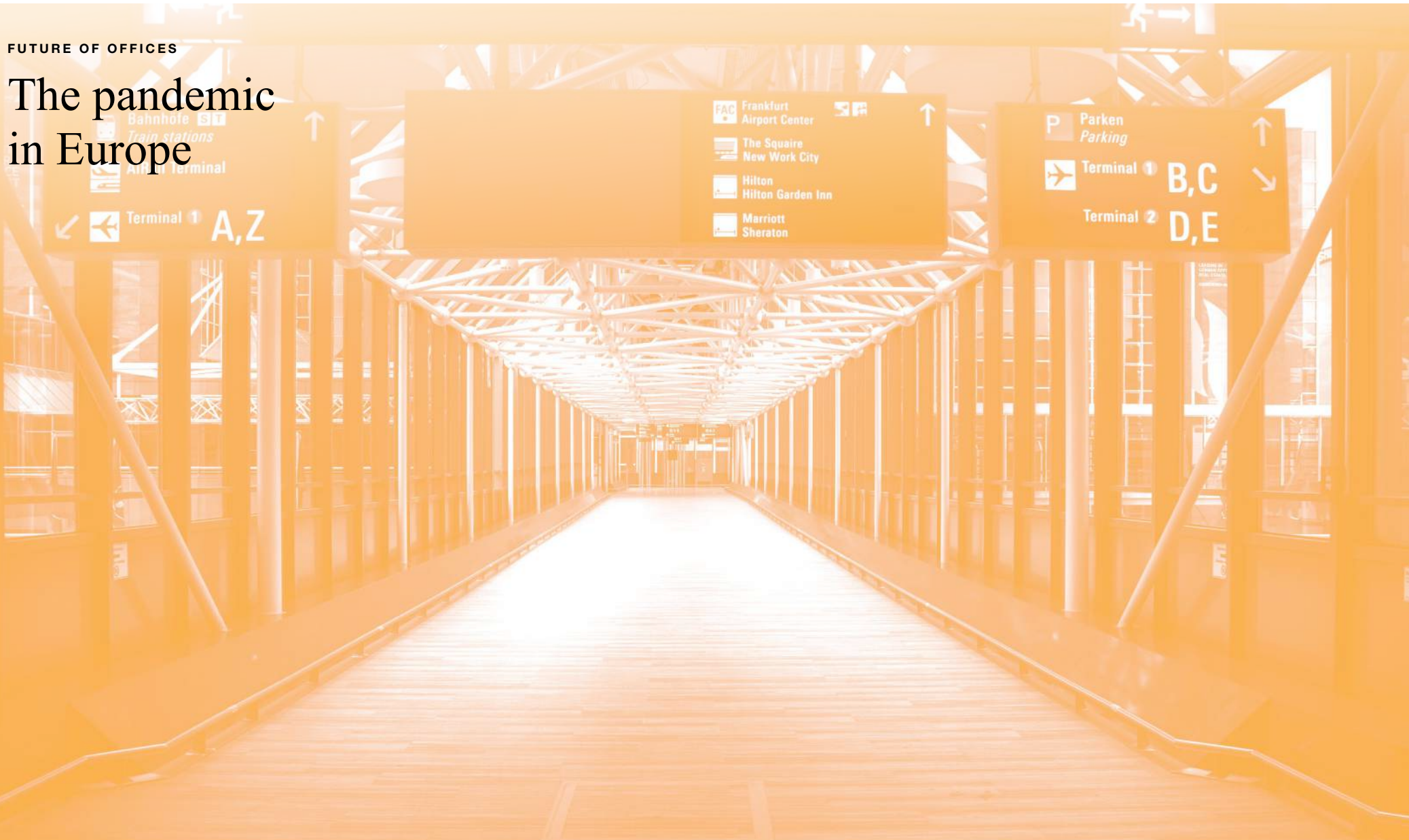
By June 2020 Europe (as a geography including UK) had some experienced some 2 million confirmed cases of COVID-19 and more than 150.000 fatalities. This tragic human loss was compounded by a historic economic hit. As hundreds of thousands of firms were forced to close temporarily, workers were laid off or put on furlough schemes. Many businesses are likely to face a cash flow crunch during the crisis and many, who rent office space, may never return.

The impact on the economy of the Eurozone will be severe – GDP is set to contract by 13% in 2020 (see graphs for more detail). Unemployment has risen dramatically across the region and is most likely to stay higher for the next 3-5 years.

This GDP contraction will have a significant impact on the commercial property sector. To take the 2009-10 economic crisis as a guide, commercial property prices dropped by 8.8% in the EU on average in 2009 – a repeat of that scenario appears very likely[3]. Indeed, this crisis caused by the pandemic is likely to have more profound and longer lasting effects on the sector.

SECTORS
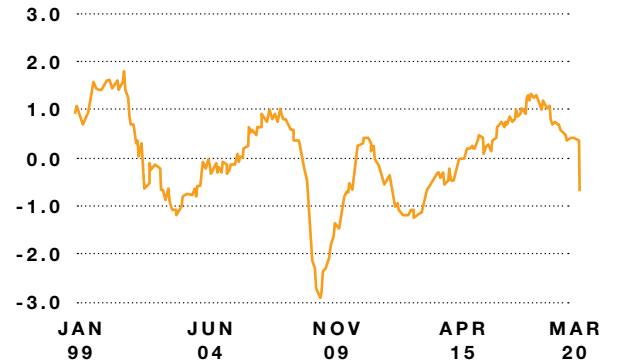Economic sentiment indicator (standardized)

Industry — Services — Retail — Construction
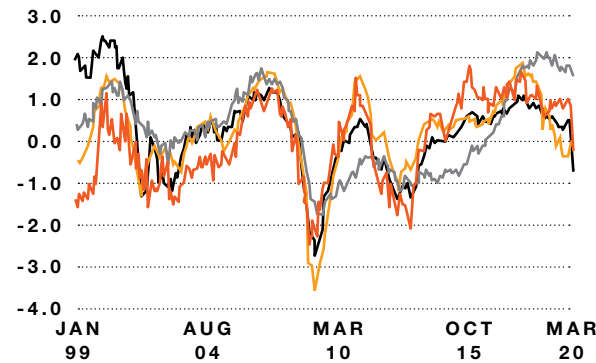
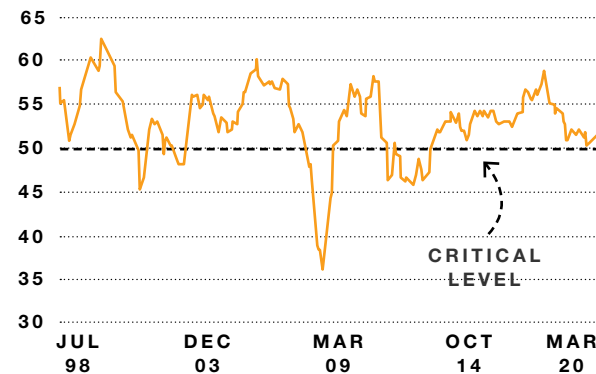The services and retail sectors have been hit hardest so far.

LABOR MARKET
Employment indicator (standardized)

The labor market is worsening quickly.
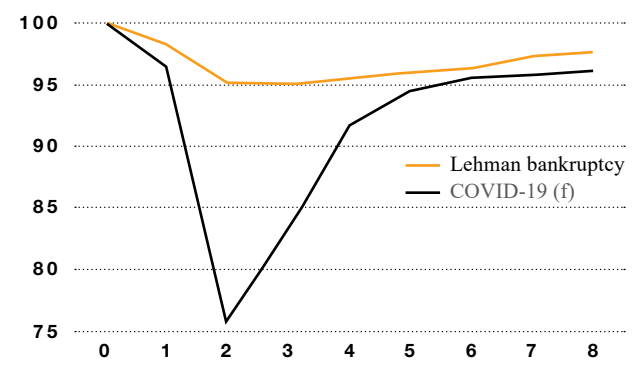
DROP IN COMPOSITE PMI IS UNPRECENDENTED
Composite PMI

CRITICAL LEVEL

RECESSION TO BE MUCH DEEPER THAN IN 2008/9
GPD Level (Pre-crisis = 100)

Lehman bankruptcy
COVID-19 (f)

Sourcce: Eurostat, Markit, UniCredit Research

© Joerg Hempel

IMPACT OF THE PANDEMIC ON OFFICES AS A SECTOR IN COMMERCIAL PROPERTY

It seems highly likely that the pandemic will cause significant disruption to Europe's commercial property sector in the short term. How will this impact office rental companies and related businesses in the years to come?

A major cause of disruption in the sector will be down to inevitable job losses. Higher rates of post-COVID unemployment will result in a decrease in headcount in many organisations – it seems likely that thousands of companies will look to downsize office space (this is with the exception of certain sectors such as public institutions, healthcare operators and pharmaceutical industry). Many businesses that rent office space will face bankruptcy and close, while others will decide that permanently remote working is the right path for them.

What is more, demand for office space might decrease in the post-coronavirus reality due to a general upswing of people working from home. Working from home has now become normalised for many jobs in almost all European countries. Even in conservative sectors like finance, remote working has been working much better than expected. In Germany the government is aiming to include a new 'right to work from home' in its general employment law, meaning that every employee will be entitled to work from home. Similar trends will mean many firms opt for smaller head offices as a large proportion of staff will only come to work a couple of days each week.

That said, some of the losses here may be counteracted by an increase in demand for spacious offices. At least until a vaccine for the virus is found, physical distancing measures will likely compensate for the decrease in headcount at many firms. Companies will be looking to put more distance between individual workers, desk space will increase, and we may even see a return of private individual offices or cubicles in some cases. For these kinds of businesses, lockdown may not lead to a decrease in floorspace requirements at all.

These changes will interact with other trends which were already rising before the pandemic and subsequently accelerate. For instance, while prospects for city centre offices had generally been good in recent years (see table below), they had steadily declined relative to other typologies including logistics facilities, data centres, student housing, serviced apartments and co-working facilities. Meanwhile the outlook for suburban offices had been fair and this could increase post-COVID-19 as countryside and sub-urban living is expected to become more popular in the coming years.

In the next section, we explore what these changes will mean for the purpose of offices.

SECTOR PROSPECTS IN 2020
Table 1 & 2

| OVERALL RANK		INVESTMENT	RANK	DEVELOPMENT	RANK
1	LOGISTICS FACILITIES	4.35	2	4.29	1
2	RETIREMENT/ASSISTED LIVING	4.37	1	4.26	2
3	CO-LIVING	4.31	3	4.23	3
4	PRIVATE RENTED RESIDENTIAL	4.17	7	4.24	5
5	STUDENT HOUSING	4.25	4	4.06	9
6	AFFORDABLE HOUSING	4.13	9	4.17	4
7	HEALTHCARE	4.21	5	4.09	7
8	DATA CENTRES	4.14	8	4.14	6
9	SERVICED APARTMENTS	4.11	11	4.06	8
10	FLEXIBLE/SERVICES OFFICES AND CO-WORKING	4.12	10	4.01	10
11	INDUSTRIAL/WAREHOUSE	4.03	12	3.98	11
12	SELF-STORAGE FACILITIES*	4.19	6	3.81	15
13	HOTELS	4.03	13	3.87	12
14	HOUSEBUILDING FOR SALE	3.92	15	3.87	13
15	SCIENCE PARKS*	4.00	14	3.76	16
16	SOCIAL HOUSING	3.84	17	3.87	14
17	CENTRAL CITY OFFICES	3.92	16	3.69	17
18	LEISURE	3.71	18	3.41	18
19	PARKING	3.56	19	3.39	19
20	BUSINESS PARKS	3.39	20	3.19	21
21	SUBURBAN OFFICES	3.34	21	3.22	20
22	HIGH STREET SHOPS	3.02	22	2.75	22
23	RETAIL PARKS	2.90	23	2.44	24
24	CITY CENTRE SHOPPING CENTRES	2.87	24	2.44	23
25	OUT-OF-TOWN SHOPPING CENTRES	2.47	25	2.18	25

GENERALLY GOOD = ABOVE 3.5   **FAIR = 2.5 - 3.5**   **GENERALLY POOR = UNDER 2.5**

FUTURE OF OFFICES

From a mono-purpose 'get-things-done' place towards a multifunctional, flexible hub for meaningful interaction
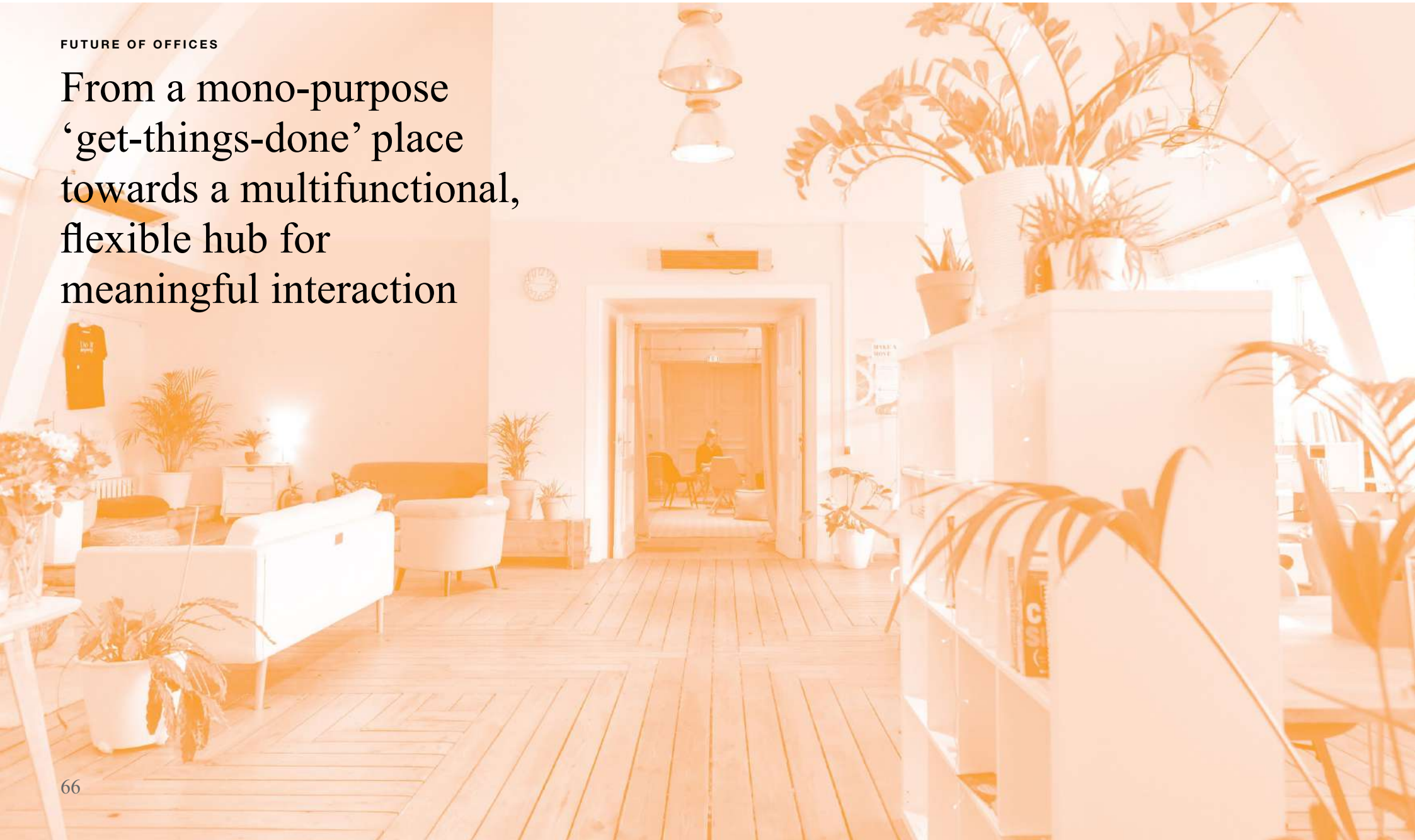
NEW WORK
One place to look is the 'new work' paradigm, as pioneered by start-up culture and companies like Twitter or Google and the related layouts and office designs that have emerged in these organisations.

RETURN TO INDIVIDUALISATION
Another possible direction is the return of the single-person office and 'cubicle 2.0' that comes with extra anti-viral components and materials (although this will most likely be temporary and pass out of fashion once a vaccine or effective medication has been found).

SHOWCASE SPACES
Socialising, including doing sport and eating, and collaborating face-to-face will remain the main reason to come to the office in knowledge driven and creative industries. Offices may increasingly evolve into a hybrid of libraries and cultural hubs for meaningful interaction amongst members of the organisation as well as with its collaborators, partners, visitors and clients.

What is the real purpose of an office? When employees do not need to physically be in a place to do their work, why do these places exist? While different organisations will approach this problem in different ways, examples from around the world offer a tantalizing glimpse at the possible purpose of offices in future.

If the primary purpose of an office is no longer a place for analysts to analyse, marketers to do marketing or salespeople to sell, this does not mean these places will disappear. However, it seems likely that they will have to serve new and different purposes to simply being a well-functioning and nicely designed working environment. It seems likely that offices will change from 'the place to get things done' towards an 'attractor' for employees and collaborators alike in the post-pandemic world.

Rethinking the office in the face of the pandemic (as well as with respect to the bigger challenge of Climate Change) makes sense as each organisation will have to figure out how much of its workforce should come to the office, why they should come and what they would like to do in the office. Answers to these questions will of course vary according to the industry, type of work and the organisations culture.

Where might the office be heading then?

SVEN

SVEN'S WORKPLACE, 2025

I am the head of client services at a specialist management consultancy in Munich. Before the crisis we employed about 200 people, although we made about 10% of the workforce redundant during the lockdown.

When we were finally allowed back to my company's Munich HQ in late 2020 it was very strange. It felt as if everything had changed, yet at the same time the office itself looked just as it did months earlier. However, it soon became clear that things would never return to the way they were before.

I remember feeling quite relaxed about coming back to the office, but many of my colleagues were really stressed. Many people cited Germany's new 'right to work from home' law and about 30 employees kept working from home all the time, while many more began working remotely at least 2-3 days per week. I initially expected this to be difficult but the company handled it well and we found it easy to collaborate using new technology.

Some of the changes at my company were very noticeable. When we first came back, there were Perspex glass screens around individual desks and it was the end of hot-desking. Fortunately that didn't last long – everyone find it annoying and when a vaccine was finally discovered we got rid of the screens fast. Then, about six months after the pandemic ended, the business took the decision to downscale the office since we weren't using all the space.

So how is it working today? I personally still love coming into the office – I work well with the energy of other people in the room. All the same, I still work remotely one or two days per week on average, especially now my wife has given birth to our second child.

Despite fewer people being in the office at any one time, it still feels busy. That's partly because the kind of work people do has changed. There's a much bigger emphasis on meetings and face to face interaction, decision making and the kind of planning and 'bouncing ideas around' that is still unnatural over video call (yep, it still hasn't got better!). When I know I have to do focus work, like writing a report or crunching numbers in a spreadsheet, I try to do that at home.

I find the office design much more appealing too. We're a consultancy so it's important to impress our clients. The new office has a top-quality cafe, a wine and beer bar and we even have a guy doing typical Munich street food every day in the cafeteria (our international clients love that!). There are also more comfortable sofas, big windows and spacious desks. It is definitely inspired by the WeWork style of offices – and much nicer than our boring old offices where we were before.
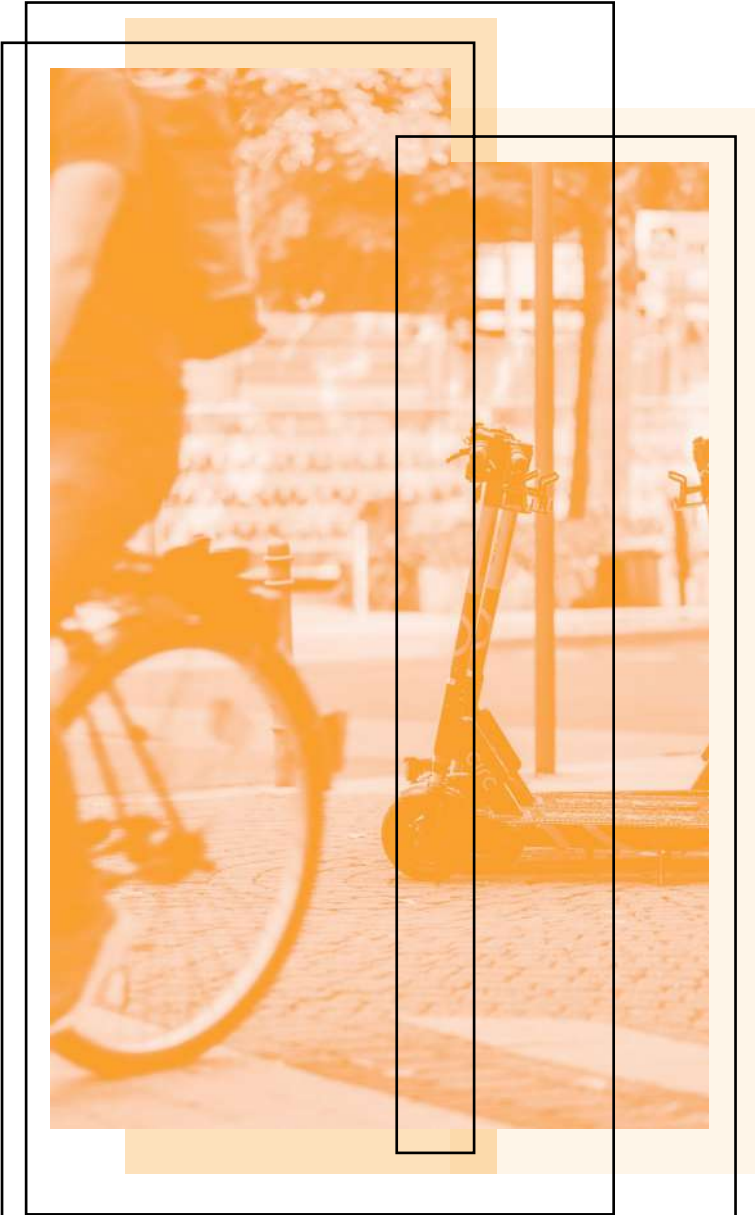
FUTURE OF OFFICES

Work beyond the office

If offices and working styles change, it seems likely that the management of flows of people around cities will change too. This will have important implications for strategic decisions that commercial property companies take.

One likely change that will occur in many European companies will be that employee mobility management will become more important. As the perceived risk of infection is higher in public transportation compared to biking or an (on-demand) shuttle with 'built-in' social-distancing measures, organisations might consider the commute as part of the employer safety and benefits package.

We can imagine a future where corporate e-bike fleets and on-demand work shuttles (like Google's G-Buses in San Francisco but smaller) or partnerships with ride hailing platforms (Uber, ViaVan etc.) which might become a popular way to decrease the risk of infection among staff.

This also means that the workday that started at home continues inside a PBV – a Purpose Built Vehicle – a rolling and well networked mobile platform that can host up to 12 people. The commute thus becomes the time to have meetings (face-to-face as well as remote) and work on the fly.

We are also likely to see an increase in 'work fluidity'. As work becomes increasingly independent from time and specific location - as well as from the physical presence of colleagues - the lines between life and work will continue to blur. It will be increasingly common to do work whenever and wherever employees wish – working from home one day, at a neighbourhood shared workplace the next, at the HQ the day after.

It seems likely that innovative commercial real estate companies will expand into new lines of business too. They may provide consulting on home office design, the development of micro-offices dotted around cities or mobile workspaces that can be set up and taken down in a matter of hours.

Conclusion

In this report, we have investigated some of the potential implications of the COVID-19 lockdown on the commercial property sector, with a special focus on offices. As we have seen, the lockdown is likely to accelerate several trends which were already underway in the commercial property sector, including:

- Rise in remote working

- Growth of shared offices and 'startup'/WeWork inspired environments

- Reimagining the purpose of head quarters

Like many industries, the commercial property sector is expected to be negatively disrupted by the lockdown and its aftermath. In the short term, European office rental firms are likely to suffer and many will lose customers permanently.
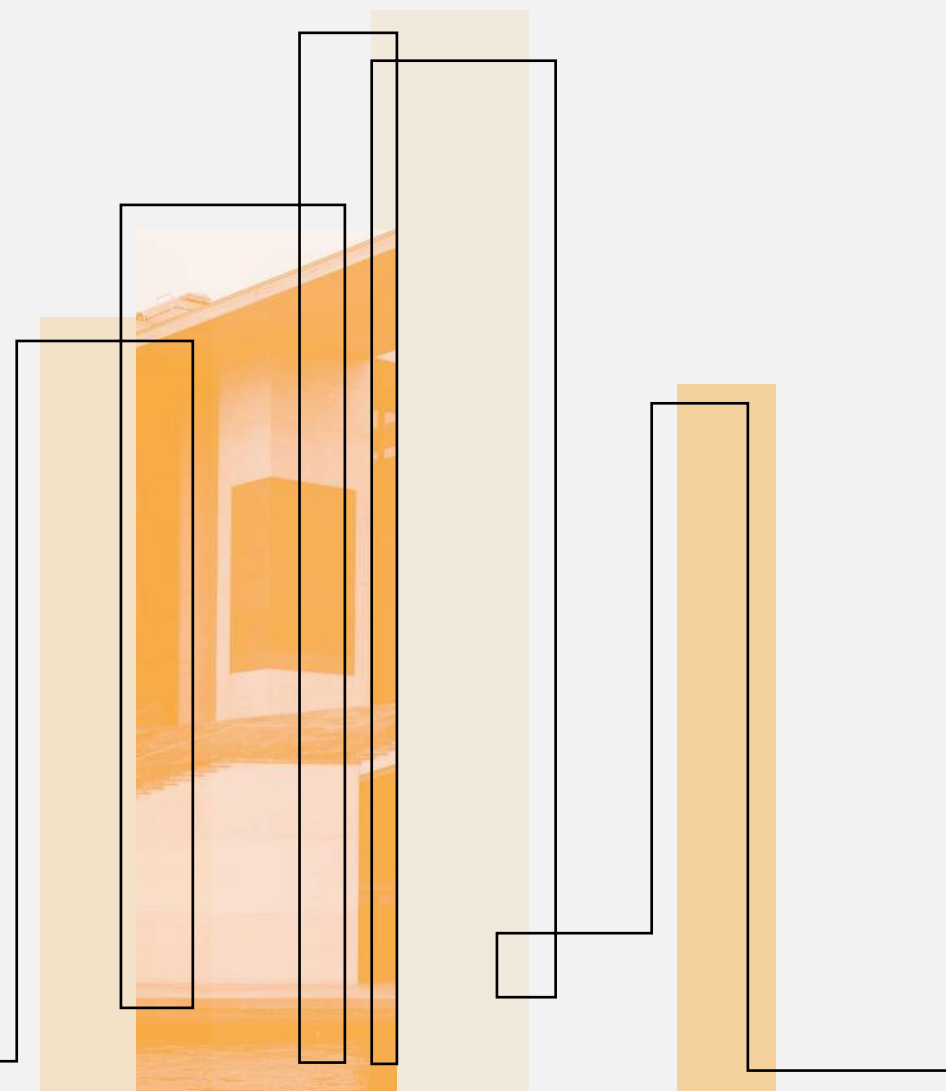
Nevertheless, the lockdown will not put an end to the need for environments dedicated to companies, where culture is developed and work which involves face-to-face interaction continues. Company offices have existed in some form or another in Europe for hundreds of years - which suggests that they have more value to businesses than just a place where people type on keyboards.
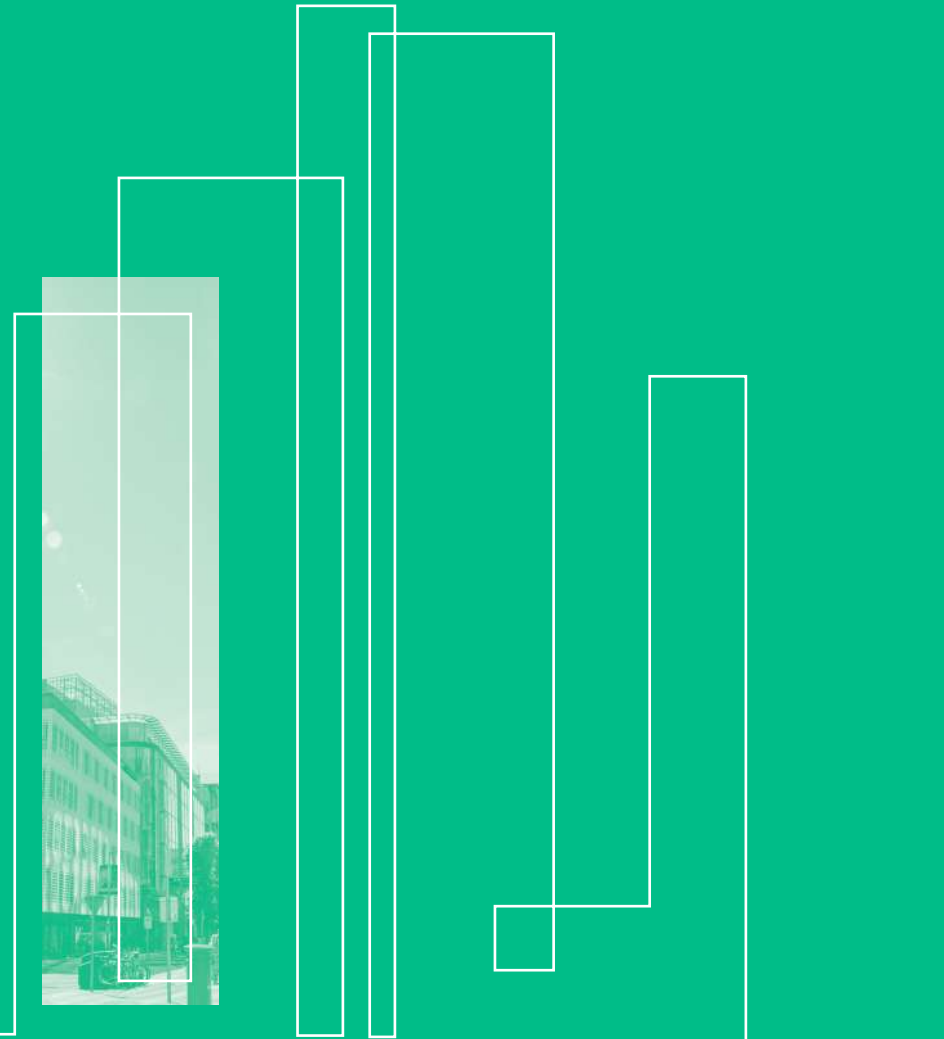
We can expect the kinds of activities that happen in many offices to change, it seems equally likely that the variety of places where work gets done will rise. Commercial property companies that spot opportunities in this period of rapid change can expect to benefit.

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ARUP

Future of offices:
in a post-pandemic world

COVID-19 has accelerated a range of pre-existing trends around health and wellbeing, activity-based working, flexibility and the drive for better utilisation. Sustainability, smart buildings and the digital workplace are also reshaping the commercial offer. Taken together, these trends and developments will profoundly impact the kinds of workplaces likely to be needed in a post-pandemic world.

In this short thought-piece we explore how workplaces could change over the next few years, by looking at how people may work together both remotely and in the same physical location.

The commercial property market is likely to look radically different in a post-pandemic future.

ARUP

The global lock-down has effectively dismantled barriers that previously existed in relation to working from home – namely technology, trust and security.

First, the crisis has necessitated the organisation of working spaces and areas at home for many millions of people. IT systems have been rapidly upgraded, and distributed teams have been up-skilled to work remotely.

Secondly, the concerns of employers and managers regarding trust have started to fall away as they have had no choice but to embrace remote working and flexible working hours. The virus has placed responsibilities on large sections of society to care for members of their families and neighbours. This may have also helped generate more empathy from employers with regards to the responsibilities their staff have as parents or care-givers. The

experience of mass collective home working will likely lead to greater support from employers and managers in future and, for some organisations, a more embedded culture of trust, transparency and flexibility.

Thirdly, security concerns have been allayed as companies test and prove their systems are safe and secure.
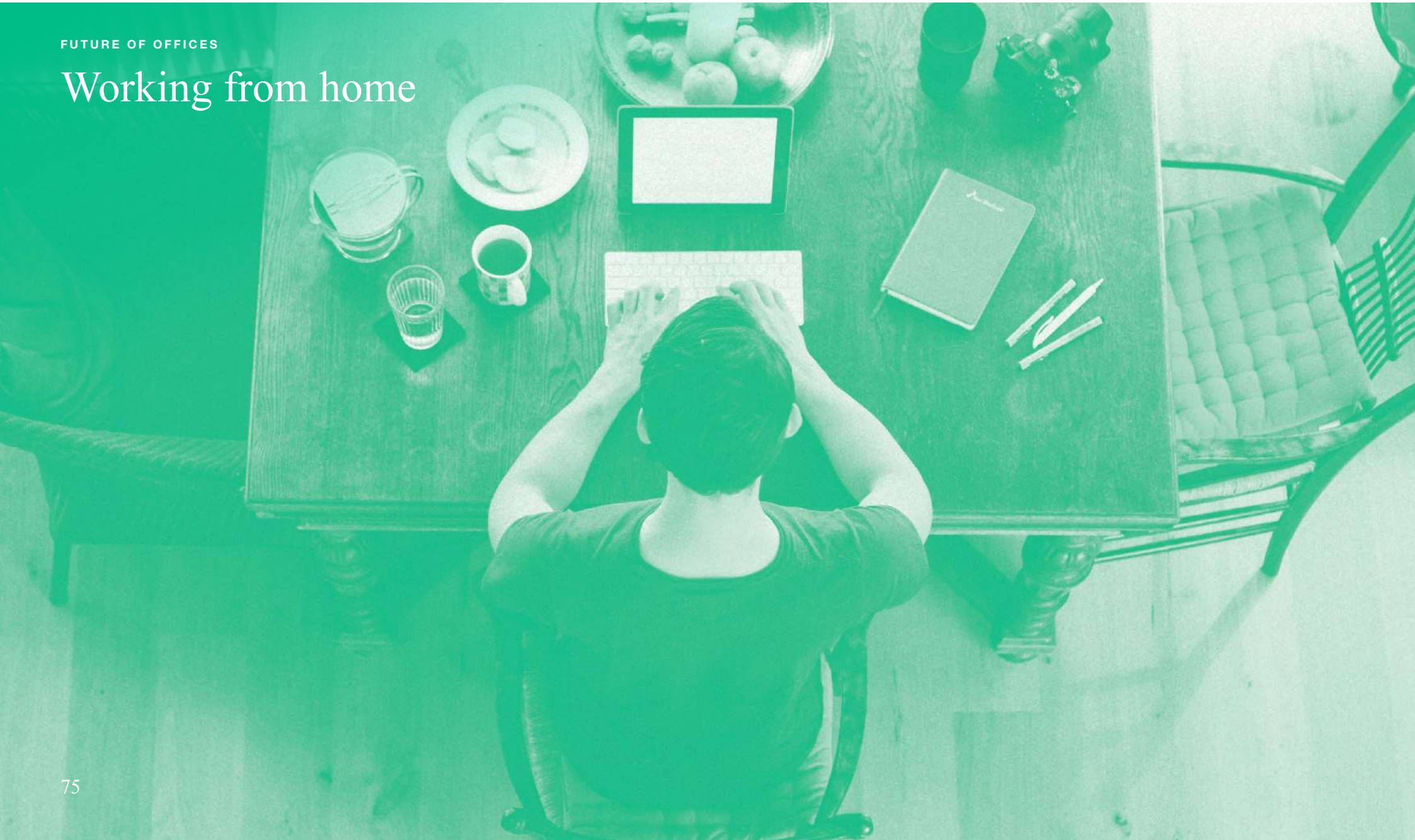
There is a fourth barrier, which is psychological. This is one that many home-workers have had to contend with during lock-down. This relates to the ability for workers to draw a clear distinction between work and life. The human mental and emotional state has been tested as we have had to find spaces within our homes from which to work.
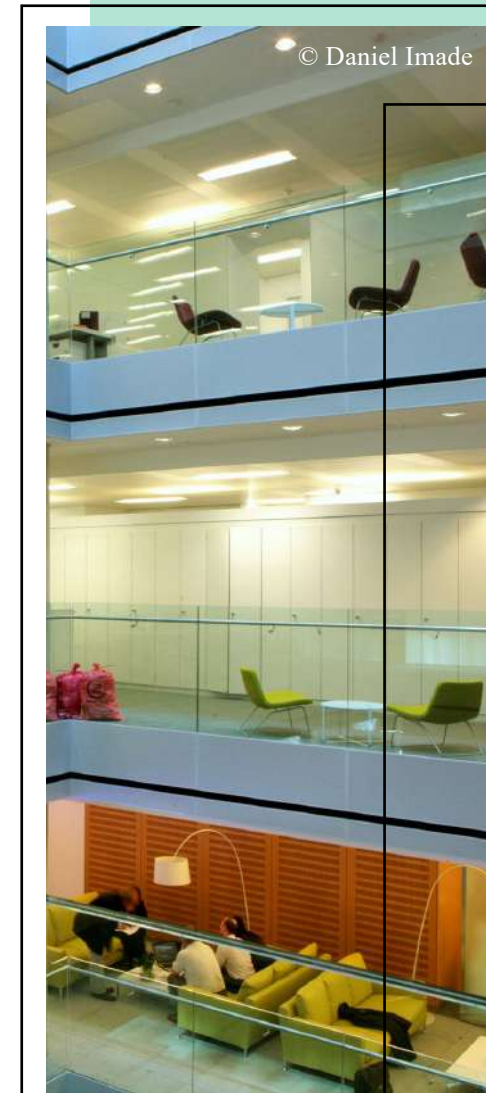
© Daniel Imade

Working from home

Working from home is a very different experience for younger people living in shared accommodation. Some younger workers are sharing with several flatmates, or with family members across multiple generations. Many of those fortunate enough to have a dedicated room to work in at home have multiple other responsibilities to manage. Working from home is a skill that we have all had to learn by dealing with issues of self-motivation, social isolation, loneliness, fear and anxiety –and by knowing how and when to step away and switch off.

For a knowledge economy where the creation of value is no longer fixed to a physical space, we will witness a continued diversification of working styles and patterns. New attitudes and behaviours regarding remote working are becoming normalised. Unproductive commuter trips have been temporarily stripped away from our lives, and a new appreciation has been gained for the physical and mental health benefits of a better and more integrated work-life balance. Clear skies, quiet roads and visible wildlife have been positive side-effects of the situation created by the pandemic, and there

has been widespread recognition that fewer trips have led to improved local air quality. The widespread reduction in local, regional and international travel has also helped the fight against climate change.

Younger workers, millennials and now Gen Z (entering employment since 2018), will be especially impacted by the pandemic. Some have had to move back in with their parents. Others will have struggled with restricted access to outdoor amenities. It is not implausible that they will reconsider where and how they want to live and work post-COVID. Many will look for more affordable housing in rural or semi-rural areas where there is greater access to amenities and the countryside. Workers with young children may also look for more space, knowing that they are likely to be able to work more from home in future. A better work life balance will compensate for a less frequent, longer commute.

For all demographic cohorts, living further from cities reduces the risk of catching highly contagious viruses in future and could improve quality of life in any future lockdown.

As the rate of infection begins to subside, organizations across all sectors are planning for a post-COVID future. Whilst many organisations have long suggested that flexible working wouldn't work for their industry, an 850% increase in homeworking in the space of a month during this crisis has raised questions. Understanding how people have found the experience of working from home may unlock new implications for future workplace decision makers. Arup has developed a diagnostic survey that has uncovered positive attitudes to home working and overall impact on perceived productivity, along with difficulty in switching off. Loneliness can also be an issue. Early findings from the survey suggest a 20% decrease in the number of days staff will spend in the office post-pandemic with significant implications for the scale and purpose of our future workplaces.

Survey results suggest that on average, employees hope to work a day less each week in the office following coronavirus, representing a reduction of 20% in demand.

BEFORE CORONAVIRUS, ON AVERAGE HOW MANY DAYS A WEEK DID YOU WORK FROM HOME?

PERCENTAGE

60%

40%

20%

0%

0.65 DAYS

0 DAYS   **1 DAYS**   **2 DAYS**   **3 DAYS**
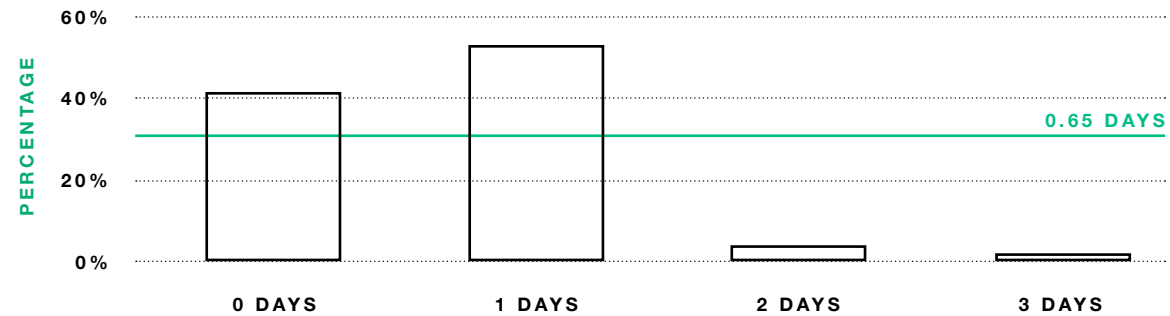
AFTER CORONAVIRUS, ON AVERAGE HOW MANY DAYS DO YOU THINK YOU WILL WANT TO WFH, ASSUMING YOUR COMPANY ADOPTS A FLEXIBLE WORKING APPROACH?

PERCENTAGE

50%

0%

1.71 DAYS

0 DAYS   **1 DAYS**   **2 DAYS**   **3 DAYS**   **4 DAYS**
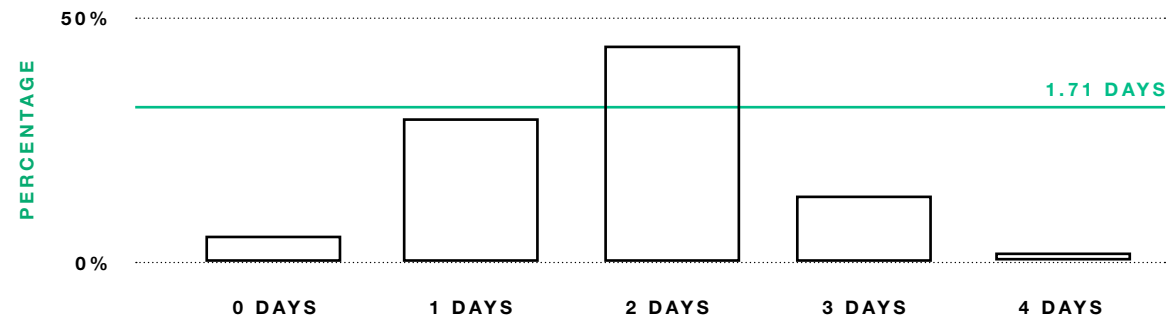
The large-scale adoption of working from home also represents a major opportunity to support a more diverse workforce with needs which differ from the traditional "9 to 5" office-based routine. This would help employers to further the equality, diversity and inclusion agenda in their organisation.

As a result of all these factors playing out in parallel, we may well see a drop in demand for commercial office space as connectivity speeds improve (5G) and more options become available for those who want to work without having to commute to a central urban location. These options will no longer be binary (i.e. working from home or from an office) as more localised co-working hubs, and third spaces are utilised. The future balance of work will be shifted across the Home-Remote-Work spectrum.

What will happen to large offices in central urban locations once we reach a post-COVID recovery phase?

Physical, location, connectivity

During the pandemic, many of us have come to appreciate what we value most about conventional offices and workplaces - the buzz and excitement of a busy office environment, the social interaction, the perks, the scheduled events, the chance encounters and mixed-use location. Many businesses will continue to want to attract a mix of people co-located in one location to build new alliances, cross-fertilise ideas and drive innovation. They will have to work harder in future to ensure offices add value.

Looking ahead, large offices are likely to be distilled into centralised hubs for face-to-face collaborative work, complemented by traditional work tasks being carried out remotely. These offices and HQs will become even more fluid as entities in future, capable of expanding and contracting on demand.

Whilst smaller regional offices might not be cost effective or sustainable as a solution, co-working spaces and shared low-cost operations could provide options for staff located away from city centres who have a working environment need that can't be met in their home (e.g. a need for quiet, space, physical comfort, privacy, technical support).

Smaller offices located near transport interchanges and corridors sit within this more diversified arrangement, allowing a larger proportion of the workforce to live outside of expensive city locations and reduce work-related travel (and associated costs).

Employers will assess and prioritise the need to travel with a new level of scrutiny, using a broader range of considerations including cost, carbon footprint, safety and physical and mental wellbeing. A much larger number of business meetings, engagements and transactions will be done virtually in future.

To reinstate the workplace as a destination and maintain its relevance in a post-COVID19 world, employers and developers will need to further experiment with alternative modes of working. Agile, scrum working, and e-collaboration between those physically located in the same building and those working remotely, in other geographies and time zones will become commonplace. Hybrid physical-virtual meetings and workshops will become standard, and meeting rooms and collaborative spaces will need to accommodate those joining remotely. Further ahead we will likely see the use of mixed reality in offices, combining the real with representational avatars and holograms.
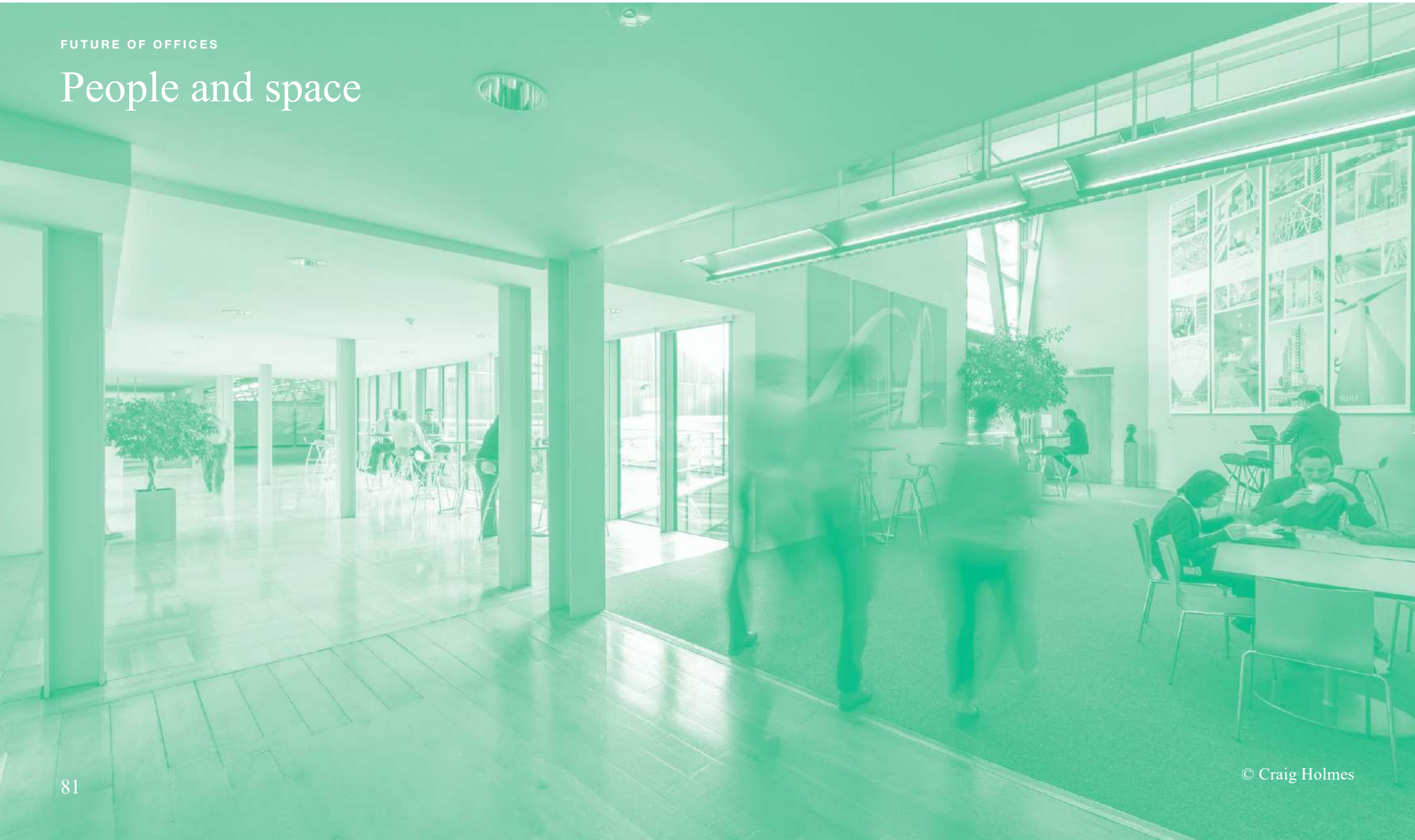
"

Having thousands of bank workers in big, expensive city offices may be - a thing of the past."

Jes Stanley
Group Chief Executive, Barclays

People and space

© Craig Holmes

The pandemic has forced organisations to dramatically accelerate what has been an aspiration of many Corporate Real Estate Services teams for years – the move to high density collaboration. Looking ahead, the need to reduce operational costs will super-charge this agenda.

Occupancy density (typically around 8 m2 per person in the UK) may reduce for some time even after COVID-19. We could even see a reversal in the trend to share desks, with more desks being allocated to assigned individuals until health concerns around sharing are resolved. However, it is more likely that ways will be found to manage shared desks so that employers can accommodate a workforce that has more choice as to when they work and from where.

There won't be as much need for space to support focussed individual tasks, as a lot of this can be done from home. Open, adaptable workplaces that encourage agile work styles and collaboration will be needed more than ever, as interior spaces are matched to the activities that need to be supported.

The mix of activities are likely to change over time. Consequently, the curation and management of facilities needs to be proactive and constant. A range of reconfigurable

work environments will include quiet areas, creative spaces, formal meeting rooms and collaboration zones.

The big tech firms have understood this for many years and are known for having invested heavily in creating university-like campuses. They have done this to attract talented people, and to keep them in an adaptable environment that supports, facilitates and inspires interaction, collaboration and innovation.

It goes without saying that office spaces will need to be inclusive, with health and wellbeing an over-riding priority. Natural light, fresh air, plants, plus access to a good food and beverage are all a baseline requirement. Openable windows in offices could be more commonplace, with cleaner air in cities owing to more remote working, less traffic and more electric vehicles.

A further differentiator for offices, is the serendipitous conversation that they can facilitate – in corridors, cafés, exhibition spaces and atria. Inspiration is something that offices offer – the ability to learn from others and showcase the new. We also crave connection to something bigger, to align with organisational values and "brand" – offices can do this in a way that remote work cannot.

SARAH

SARAH'S WORKPLACE, 2025

I remember coming back to the office 5 years ago after the lockdown. Everything felt different. At first we were nervous to come into the office at all. Many didn't for months. But work handled it really well, upping the cleaning regimes, helping us with physical distancing and being flexible about who wanted to come in and who didn't. In fact, I can't remember a meeting since COVID which didn't have someone joining virtually. Over time, more and more of our office has turned over to hybrid collaboration space.

Some people never came back to the office for the full five days a week. I'm one of them. I look forward to my two trips into the city each week - to catch up with colleagues, hold meetings, go to lunchtime talks and to see people… that was what I missed most during all those months at home.

I've learned not to pack my days in with meetings so that there is time for those serendipitous encounters which add so much to my enjoyment of work. Another reason for going in is to get a taste of city life and the buzz around our office.

Because of the downturn the company had to make some tough cuts. Reducing our office space was one of them. We weren't sure how well it would work but now there are far fewer desks and more meeting places. It works well. And there are really great apps to help us find the spaces we need, to find out what's going on…and report on our reduced impact on the environment too.

My family and my personal health have really benefited from more flexible working…and this better balance has improved my work and productivity too.

Infrastructure, facilties and technology

Digital and smart technologies are already making it easier for landlords and operators to monitor metrics such as occupancy ratios and real-time energy consumption, cost savings and improved utilisation. Facilities managers can use technology to measure and adapt interior spaces more quickly to meet demand and provide an optimised user experience. And for the worker, new apps can direct workers to free stations from which to work.

In the wake of COVID-19 we will see yet more innovation in the "proptech" space: from antimicrobial properties woven into fabrics and materials, to the use of UV lights for deeper disinfection of office environments and high-touch surfaces.

Looking ahead, it is unclear for how long concerns about contagion and hygiene in offices will last once the pandemic is behind us. It may well be that residual concerns will fall away quite quickly once an effective vaccine is made widely available (note the assumption that this comes to pass). System maintenance and cleaning regimes will likely be bolstered for some time, with more frequent and intense cleaning routines to sanitise workstations between use of hot desks.

This will require more stringent facilities management operations.

It is also likely that people will walk and cycle more in order to avoid using public transport. More cycling trips which will require provision of additional space. But we need to be mindful that different priorities could be in conflict in this future. For instance, many of the measures that may help to prevent further infection could increase carbon emissions (e.g. extended systems maintenance and cleaning regimes). This could run counter to the net zero ambitions that organisations are adopting in increasing numbers. Consequently, owners and operators will be incentivsed to find sustainable solutions that don't carry a heavy carbon price – let alone a heavy price in terms of capital outlay.

In the longer-term increased flexibility and modularity will be required to support scalable emergency responses in future, ideally based on circular economy principles in order to minimise waste.

Conclusion

It sometimes takes a shock to reboot an outmoded offer. The new offer will be driven by generational and cultural differences and expectations, transactional life-cycles and property leases, regulatory measures and opportunities afforded by new technology. Workplaces will still need to offer the full range of spaces as working remotely (either from home or third spaces) won't work for everyone all the time. But the demand for commercial property and the commercial offer will likely look very different in a post-recovery future.

As the post-COVID economy recovers, employees may accept what employers offer given the widely predicted economic downturn. However, businesses do need to look past the immediate future. Many employees will have experienced a very different mode of working and will likely want to leverage and espouse the aspects that work well. Far-sighted businesses will prepare to support staff in providing new ways of working that also bring down costs and increase business resilience.

Perhaps it's time, in the wake of the COVID-19 pandemic, to recalibrate our understanding of the workplace? A new vision of the workplace could be one in which we spend less time commuting and instead create more spaces in our offices for creative collaboration, in place of serried ranks of desks designed for independent activity. After all, we all now know that this type of work can be done elsewhere.

It is clear that the brand values and culture of all organisations are being tested by the pandemic. A key to success will be to have a strong set of workplace principles in place that extends to the home and other remote work locations. A new balance is possible.

i BCO Thoughts on Office Design and Operation after COVID-19, briefing note, April 2020

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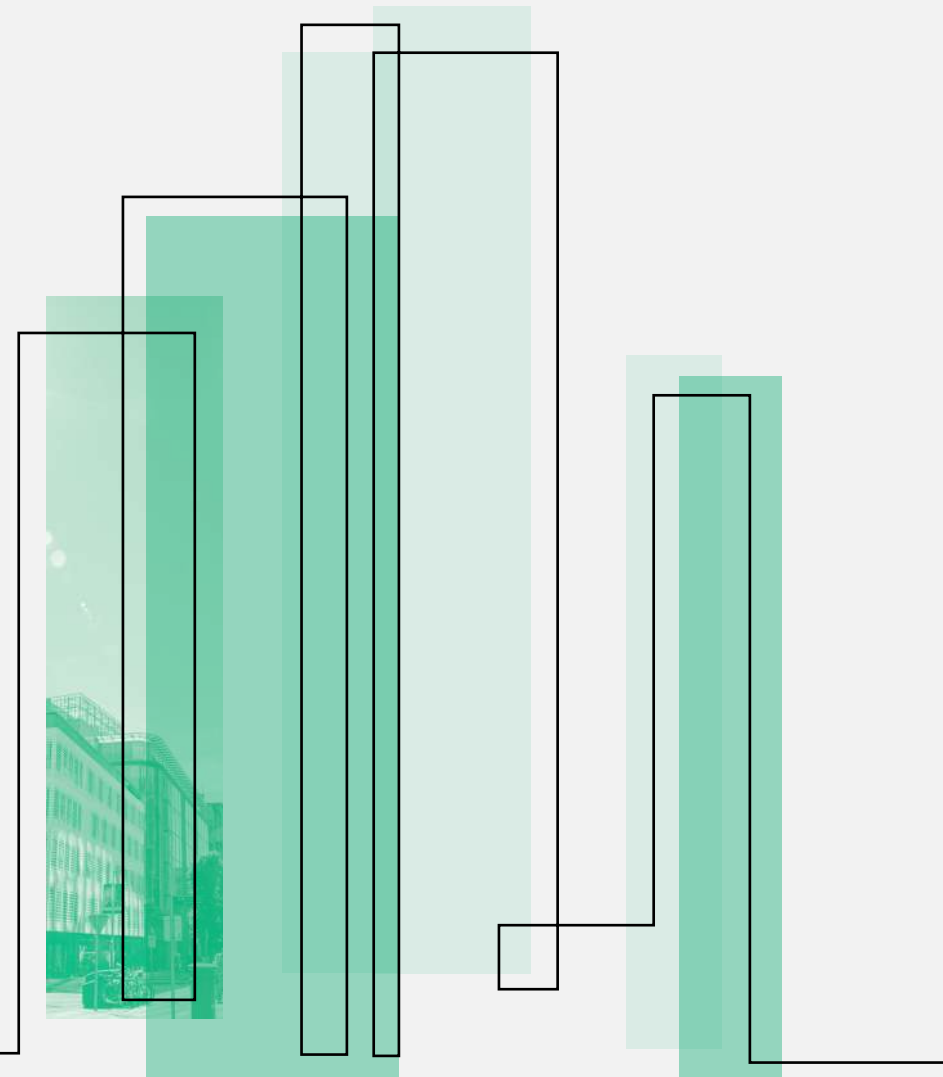
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As we start to look at long-term
recovery, explore Arup's latest
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