

GLOBAL RESEARCH REPORT

MAKING PLACE

THE RECALIBRATION OF WORK, LIFE, AND PLACE



IPUT REAL ESTATE
DUBLIN

ARUP

MAKING PLACE

As we see our working lives being transformed by technology, we have reached a point at which we need to reflect on what this means for the future of physical offices and the communities surrounding them.

The digitalisation of how we work – enabling the flexibility to work from anywhere, anytime – has highlighted a built-in complacency as to what constitutes attractive workplaces for employees and their companies.

With the stakes now raised about the role of the office after the period of home-working prompted by Covid-19, it is more important than ever to recalibrate offices to make them appealing and to work harder to be part of sustainable places both socially and economically.

This report examines what we as employees are looking for from our workplaces, and what that teaches us about how we can narrow the gap between the physical make-up of the places in which we live and in which we work. Through this research, we want to start the debate on how offices can maintain their important economic and social functions while at the same time contributing to making our cities more enriching and sustainable places.

COMMISSIONED BY IPUT REAL ESTATE DUBLIN

PROJECT DIRECTOR

Léan Doody

AUTHORS

Camilla Siggaard Andersen

Léan Doody

Alannah McCartney

Zung Nguyen Vu

EDITORS

Nicola Hudson

Tom Bridges

Sophie Camburn

Andrea Carpenter

COEDITORS

Zara Walsh

Anita O'Rourke

Sam Horan

CONTRIBUTORS

Robin Abad Ocubillo,

Director, Shared Spaces Program, City and County of San Francisco, USA

Yolande Barnes,

Professor of Real Estate at The Barlett, University College London, UK

Susan Freeman, Partner, Mishcon de Reya LLP, UK

Fiona Gallagher,

Chief Executive Officer, Wells Fargo Bank International, Ireland

Jan Gehl, Professor, Urban Design Consultant, Denmark

Dan Hill, Director of Strategic Design, Vinnova, Sweden

James Morgensen, VP Workplace, LinkedIn, US

Peter Murray, Curator-in-Chief, New London Architecture, UK

Niall Gaffney, Chief Executive, IPUT Real Estate Dublin, Ireland

Carlo Ratti, Director, MIT Senseable City Lab, US

Jeff Risom, Partner and Chief Innovation Officer, Gehl, Denmark

Malcolm Smith, Arup Fellow, Masterplanning and Urban Design, Arup, UK

Anthony Townsend, Urbanist in Residence Cornell Tech, US

Camilla van Deurs, City Architect, City of Copenhagen, Denmark

Lisette van Doorn, Chief Executive Europe, Urban Land Institute, UK

ILLUSTRATOR

Dermot Flynn

DESIGN & PRODUCTION

Begley Hutton

Design Consultants

CONTENTS

	Foreword	2
	Executive summary	4
Chapter one	INTRODUCTION	8
	Structure of the report	10
Chapter two	<i>the</i> RECALIBRATION	12
	The rise of the white-collar worker	14
	Covid-19: Rethinking work and home	16
	Recalibration: Between work and home	17
Chapter three	<i>the</i> NEW FOUNDATION	18
	Workplaces and the street	20
	Workplaces and the neighbourhood	24
	Workplaces and the city	28
	Summary	31
Chapter four	ESSENTIAL WORKPLACEMAKING	32
	Work is a social experience	34
	Work is a learning experience	38
	Work is a cultural experience	42
	Work is a collaborative experience	46
	Work is a mindful experience	50
	Moving between places	54
	Summary	58
Chapter five	MAKING IT WORK	60
	The role of the employer	62
	The role of the city	64
	The role of the developer and landlord	66
Chapter six	LOOKING FORWARD	68
	A P P E N D I X	
	Contributors	70
	About the employee research	70
	Figure notes	71
	Image credits	72
	Index	73

FOREWORD

The nature and role of the traditional workplace is changing



Niall Gaffney
Chief Executive, IPUT Real Estate Dublin

It has been clear for a number of years that the nature and role of the traditional workplace was changing. Technology was already supporting flexible working, and this was being combined with a growing societal push to offer agile working to employees.

We commissioned this research to help inform our long-term strategy. We have been an office investor in Dublin for over 50 years. As we look forward, and in particular as we have moved into an office redevelopment and regeneration programme over the past five years, we need to assess what the working environment may look like in the coming decades.

We recognised that we could not build the same types of offices that have dominated the urban landscape for the last two decades. This would not suit our role as custodians of our city, nor be successful places for our occupiers and their employees.

Instead, we need to invest in and develop projects that put quality placemaking at the forefront. Successful placemaking underpins an enhanced experience for our occupiers and the local community, and it is this viability that translates into financial resilience for our investors.

With our recent office developments, we have already been mindful of people's changing relationship with their workplaces, and have incorporated better placemaking elements to our projects. Now, with a major development programme ahead of us, including our 600,000 sq ft flagship Wilton Park development, we wanted to make sure that we were developing the next chapter in office space, and places.

Then came Covid-19; a turning point in the nature of office work. The lockdowns, which saw millions of people working from home, have become a pivotal moment for companies and people to rethink their relationship with the workplace. We all leaned into technology to support flexibility, and for many employers and their employees, it prompted a shift in mindset about the need to work full-time in offices.

What the recent lockdown period has shown us is that we now know we can technically work from home all the time but we believe there are clear social, cultural and economic reasons why we shouldn't. We need to embrace technology and new ways of working but this needs to be alongside a renewed relationship with the office.

Things will be lost if we choose to work from home full-time; and we mean over and above our need to be social, collaborative and feel part of our professional tribe.

Not balancing the office/home relationship could derail progress in supporting diverse and inclusive workplaces; a two-tier system where decisions and opportunities are for those who are seen in the office rather than those working from home. We also have a duty to future generations to be present in workplaces to support their career progression, and tacit learning.

Instead, we need to recalibrate offices to make them attractive to today's working mindset. That means offices need to work harder to be part of sustainable places both socially and economically. We need to be able to encourage people back to an office (full or part-time) that is as fulfilling as working from home. We now need a recalibration of the office and its neighbourhood. Digitalisation has blurred those boundaries that provided the clear work-life separation between the office and the home, and the locations for work and life need to respond to that.

This is a movement we call placemaking. If workplace design has traditionally been about creating productive corporate environments, and placemaking has traditionally been about the making of attractive and engaging public spaces, we propose a new typology of space that sits somewhere in the middle. This research identifies different types of spaces that become essential to placemaking based on what we think employees seek from office life.

Placemaking is about making places that are equally productive and enjoyable for all; places that drive economies by bringing people into shared environments that make them feel comfortable, happy, and healthy, so that they may learn, innovate, and grow together.

Successful placemaking requires a pact between developers, city makers and employers. For developers, this is about working hard to create places from which people willingly want to work. In recent years, office buildings have been acting too much as negative spaces, existing to be convenient for their tenants and transient workers, doing little to support local community and create interesting places.

Employers need to look more outward and have a more involved relationship with their local community. By providing employees with a city campus-style office that has all their needs satisfied – including restaurants, gyms and other services – without stepping off the campus, then they have also been contributing to the lack of a surrounding sustainable community.

We need to recalibrate offices to make them attractive to today's working mindset. That means offices need to work harder to be part of sustainable places both socially and economically.

City authorities and planners need to engage with the concept of placemaking, and encourage this through planning to promote a wider mix of uses in office locations from better public realm to cultural and community amenities. By merging functions and creating a greater diversity of spaces, these places can benefit from greater social and economic activity within their boundaries.

As property investors, ensuring that we work with our tenants, city planners and the wider community, to build and own attractive work spaces, is part of a sustainable and responsible investment strategy which protects value for our stakeholders over the long-term.

We believe there is still a bright future for the workplace. We hope that this report can be the start of open and collaborative discussions between the many stakeholders in our cities to make the transition to better office districts, that are also better communities.

EXECUTIVE SUMMARY

A unique opportunity to reassert
the value of workplaces for the future

For the past few decades, if you thought of a workplace you probably thought of a glass and steel office building, jealously guarding the knowledge workers housed within. Now, the workplace is a much more fluid concept, spanning the home, the coffee shop, the office building and places in between.

The pandemic has accelerated existing trends, in particular the digital transformation of our working habits, from needing everyone in one room to doing everything on Zoom. This is impacting the central business districts of our cities, where the dominance of monofunctional office buildings is revealing a deficit in the resilience of those places.

This research seeks to address how the office can adapt to support this new style of working, where people are looking for a range of different settings to work. It also discusses how the office building can adapt to make a greater contribution to the social, economic and environmental resilience of our towns and cities.

The YouGov research commissioned for this report, confirms that the shift to agile working between home and work is likely to be a permanent one. Half of typically office-based employees (50%) that have worked from home at least three days per week during this summer's coronavirus lockdown want to split their work equally between the home and the office in the future, and 28% do not want to return to the office at all. Only 9% of people that have worked from home during Covid would prefer to work in an office most of the time in the future.

However, most people see value in being in the office at least some of the time, with 84% of all typically office-based employees saying that there are social and personal benefits to sharing a physical workplace with colleagues

and managers, and 79% say that there are professional benefits. Many people were concerned about missing out on promotions and opportunities for advancement by being out of sight and mind. In particular, progress in building diverse and inclusive workforces could be set back.

Our study concludes that there is a need for a new design practice, which sits between traditional workplace design and public realm placemaking. We focus this practice on the urban realm, between the office and the home, where the knowledge economy naturally thrives from the serendipitous interactions of diverse people. We call this practice workplacemaking.

Workplacemaking should seek to create places that attract people, that promote interaction and knowledge exchange, and that make a social and economic contribution to the neighbourhood they are in.

This is to counteract the current set-up in which commercial buildings tend to be designed to keep the employees of these places confined. With heavy security systems and introverted building edges, few offices contribute to the surrounding environment from which they thrive. This is due to the fact that employees are not fully aware of what their workplace's surroundings has to offer and are not actively engaged with the local neighbourhood. From our research, when people choose a place to live, the quality of the environment is at the top of their list of considerations, but when employees look for a job, the environment barely weighs in.

Therefore, there is an urgent need for companies and commercial developers to rethink the appeal of the office in the short-term, and a unique opportunity for all to reassert the value of workplaces for the future.





The foundation for workplacemaking is created by five overarching design principles that address how places shape social, economic, and environmental outcomes. Workplacemaking is the making of urban environments that are comfortable for all people, integrated with the street and public realm, symbiotic with the neighbourhood they are in, connected to the wider city and its communities and finally, they should be sustainable at a local level with a consequent benefit globally.

Workplacemaking should address people's need to work anywhere by bringing them together in the right places at the right time. The building blocks of workplacemaking are five types of place which describe how people's new working and living needs can be met by space. These typologies can be created on the ground floors, around or at the edges of buildings, or in open space. They may include commercial, recreational or passive functions. The essential spatial typologies of workplacemaking are:

Watering holes

Places that attract people to linger, meet and socialise: this is based on the experience that employees see work as a social experience.

Street classrooms

Places that bring people together in formal and informal knowledge exchange: this recognises that employees seek opportunities to acquire new knowledge and skills.

Cultural canvases

Places that can be shaped curated, and programmed by people and communities: this recognises that employees seek opportunities to express individuality as well as shared culture that can lead to a better sense of belonging and identity.

Mind labs

Places that invite people to come together around shared issues, ideas and challenges: this recognises that employees seek opportunities to share ideas and challenges with their peers that can lead to greater breadth of problem-solving.

Mind gardens

Places that support people's individual and restorative thinking processes: this recognises that employees seek opportunities to think and contemplate ideas and challenges on their own that can lead to greater depth of problem-solving.

Three main stakeholder groups have the power to implement this vision, and their success is likely to be greater by working together. The role and benefits of each are:

- The city/public authority is the ultimate legislator, regulator, and facilitator of quality urban spaces. Through workplacemaking, the city can bridge the gap between citizen productivity and enjoyment, to create an overall more resilient and liveable urban model. The city benefits from greater social and economic activity within its boundaries.
- The company/employer is the daily enabler, custodian, and manager of workplaces and workplace culture. Through workplacemaking, the company can support a variety of interactions between colleagues and industries that ultimately lead to greater employee satisfaction, wellbeing, and productivity. The company benefits from high-value work.
- The developer/landlord is the initial creator, builder, and maker of places for working and living. Through workplacemaking, the developer can future-proof real estate projects against short-term market fluctuations and ensure the relevance and desirability of assets for longer. The developer benefits from fewer investment risks with greater long-term rewards.

With the acceleration of flexible working, this may be the moment when the monofunctional office dies. But, for the future wellbeing of the knowledge economy, its diverse workforce, and our cities and towns, it should also be the moment when every other facet of the workplace is brought to life.

“In digital space we can cancel out the people that we're not comfortable with. In physical space, there's an inevitability of interacting with people that get us out of our comfort zones.”

**Carlo Ratti, Director,
MIT Senseable City Lab, US**

INTRODUCTION

The social, cultural, and economic importance of placemaking

Imagine this. You are on a bus, with your head resting against the window. Outside on the street, all kinds of people rush by, with different errands on their minds. A few turns later, you alight on a familiar corner.

Here, you recognise a few people who always share your destination. You know them well enough to smile, briefly. As you make your way along the pavement, the air you breathe is fresh and clean, the views urban, interlaced with green. Along the edges of the buildings, various activities catch your attention as you pass. Morning trade, friends talking, a new artwork. You stop to buy a coffee, have a chat. By the time you make it to the front doors of the office, you have already exercised, connected with other human beings, contributed to the local economy, and found inspiration for a current work project. Without knowing it, you have also inspired others.

In this report, we explore the multifaceted social, cultural, and economic importance of placemaking in relation to workplaces. As a canvas for human interaction, public space has always played a key role in shaping societal outcomes, from the scale of the individual to the wider world. Chance encounters, informal exchanges, planned meetings – every interchange is an idea waiting to spark, a worldview being

formed. In fact, from electric currents to Uber, some of the most successful creations of our time were conceived not inside buildings, but between them¹. In addition to catalysing business innovation, the life between buildings also shapes social and political constructs, from making friends of neighbours to building empathy amongst a diverse citizenry.

For knowledge-intensive businesses that rely on the mental capacity of their employees to thrive, the mechanisms of how public space forms people’s minds, opinions, and experiences should be a key concern. And yet, the default representation of the workplace for these types of industries is not by a vibrant, open space filled with new ideas and creativity, but by a glass-and-steel box filled with desks. Sure, there’s a water cooler. And this may be the single greatest thing the office has had to offer. Other benefits are more closely related to the colocation with other offices, which has enabled serendipitous knowledge spill-overs – once again facilitated by the intervening urban realm. The only real idea that has emerged from confining mental production within these hermetically sealed, anonymous, sterile environments, is that work can be neatly compartmentalised into office buildings, into certain hours of the day and week. But of course, that is not how the human mind operates.

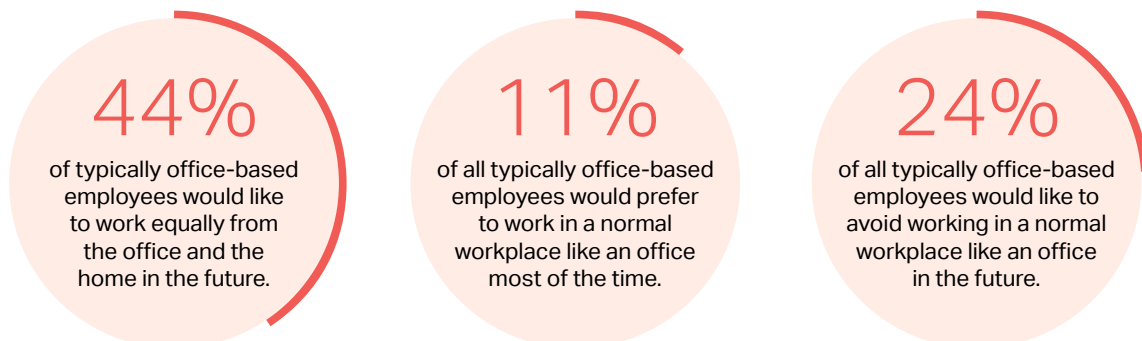
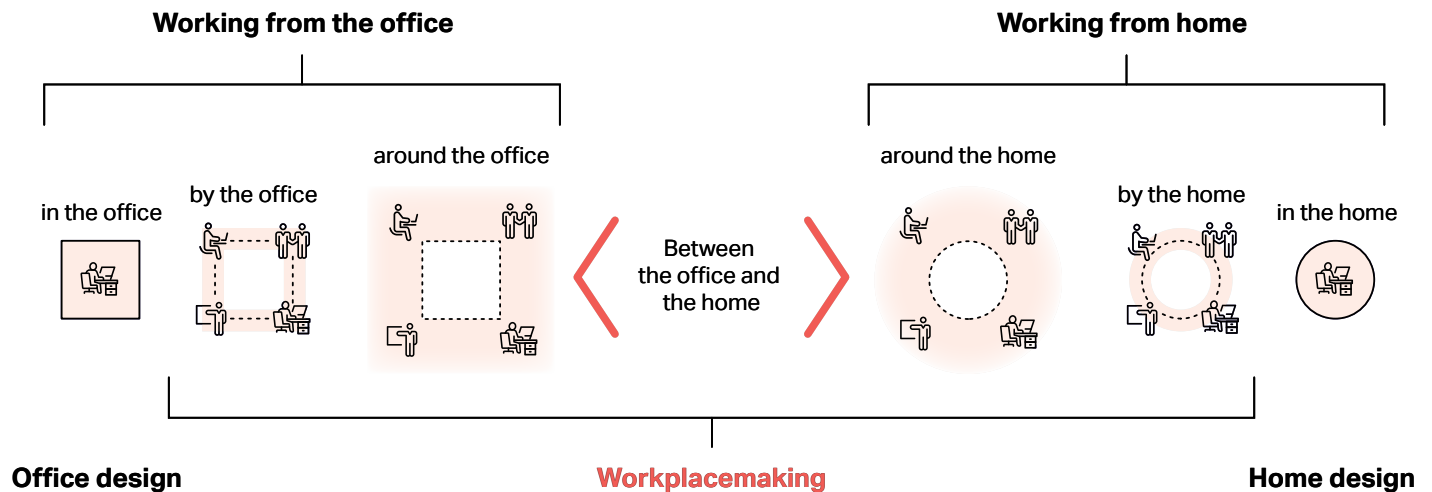


FIGURE 1



Looking ahead, there is a renewed sense of urgency for workplace-makers to engage with placemaking. While flexible working has been on the rise since the advent of digital technology, the 2020 coronavirus lockdown has rapidly accelerated the expectations of employees to be able to work where they want, when they want. Through this experience, 68% of typically office-based employees that we surveyed said that they want to work from home in the future at least some of the time, and 91% said that they would benefit from more flexible working². These preferences will create entirely new patterns of working (and living), which will, in turn, require businesses in the knowledge economy to adapt to thrive. The immediate risk is this: in order to work in a place that feels more comfortable than the office, and at times that feels more convenient than the nine-to-five, people may shift their default work mode to a private desk in the home. In the short term, and from a personal perspective, this may feel better and be equally productive. But what happens in the long-term? What happens to our shared outcomes?

In the future people may technically be able to work from home all the time, but in this report, we present the social, cultural, and economic reasons why they shouldn't, and the tactics to ensure that they won't.

Interaction between people – physical interaction – is the essence of societal success. Yes, digital communication can get us far, but it cannot replicate the tacit knowledge that migrates from one person to another. Offices have never recognised these benefits – at least not in their design in relation to place – yet office-based businesses have always benefitted from the vibrancy of the life between the buildings, as experienced by their employees every day on their way to and from work. Likewise, cities have benefitted from the social and cultural diversity that occurs when people from different neighbourhoods are brought together in a central district.

Now, with most people choosing to work when and where they like, and many choosing to remain within the comforts of their home, any stakeholder with a great reliance on value derived from interaction should be seriously concerned with the subsequent loss of serendipitous exchanges. If ever there was a moment to prioritise placemaking as a key driver of equitable economic growth and societal wellbeing, this is it.

Enter, workplacemaking.

Introducing workplacemaking

This report proposes a new urban design practice that aims to bring together typically corporate and civic territories, to recalibrate the knowledge economy's work culture through the manipulation of space. If office design has traditionally been concerned with the making of productive corporate environments, and placemaking has traditionally been concerned with the making of enjoyable civic environments, workplace placemaking – or simply workplacemaking – is concerned with making places that are equally productive and enjoyable for all; places that drive economies by bringing people into shared environments that make them feel comfortable, happy, and healthy, so that they may learn, innovate, and grow together. Therefore, workplacemaking is specifically focused on the public and semi-public urban fabric between the office and the home, including so-called third destinations (i.e. libraries and café) with general public access.

1.1 Structure of the report



Chapter two The recalibration

This describes the historical development of workplaces in relation to the rise of knowledge-work and the initial creation of desk-based environments in office buildings. The chapter explains why a recalibration of the workplace is necessary to better support people's holistic experiences across work and life, which ultimately drive the knowledge economy and our societal health.



Chapter three The new foundation

Here, we outline the wider interdependencies that exist between the environments where people work and the prosperity of people, places, and planet. By reviewing global best practice in relation to recent shifts in work culture and work habits, the chapter gleans a series of foundational design principles to inform the emerging practice of placemaking.



Chapter four Essential placemaking

This chapter draws on exclusive research insights to outline the essential functions and environments of knowledge-intensive workplaces. These are put into the context of placemaking by considering the wider benefits of employee/citizen interactions, in order to propose a series of spatial typologies that fall into the new, bilateral category of placemaking.



Chapter five Making it work

Finally, we outline a series of practical considerations and actions to unlock the full benefits of placemaking across employees, citizens, companies, cities, and developers. This chapter is aimed at practitioners ready to take the next step.

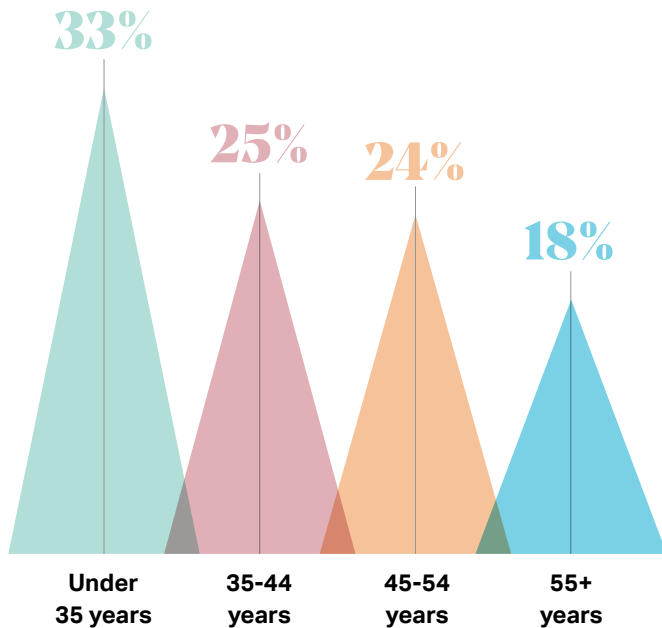
Research demographics

Based on the 1,341 entirely or mainly office-based employees that were surveyed on 18-24 June 2020.

Gender split



Age breakdown



How often did you work from home?

	Before Covid	During Covid	Difference
0 days a week	73%	19%	-74%
1 day a week	19%	3%	-84%
2 days a week	5%	4%	-20%
3-5 days a week	3%	68%	2,167%
+ 5 days a week	0%	5%	-

FIGURE 2

Research and insights

The findings and recommendations of this report are informed by an original survey of 2,050 employees in Great Britain³, conducted by YouGov Plc on behalf of IPUT and Arup. The research was carried out between 18-24 June 2020, three months into lockdown. The figures have been weighted and are representative of British business size. 1,341 respondents were entirely or mainly office-based before lockdown. Unless otherwise stated, this pool forms the basis of the data analysis and of any data points presented throughout the report.

Through June, July, and August 2020, we reached out to more than 20 global experts for qualitative insights and comments.

Through May and June, we also conducted one-on-one interviews with employees working in finance, marketing, and technology across Ireland, the UK and the US. These conversations have informed our interpretation of the quantitative data results from the employee survey.

All the expert quotes that are referenced throughout the report also stem from original research. Through June, July, and August 2020, we reached out to more than 20 global experts for qualitative insights and comments. Conversations with external experts from across the world were conducted through video conferencing. Experts internal to Arup and IPUT were engaged in a series of online workshops. These sources are all listed and duly credited in the appendix on page 70.

Finally, we reference secondary literature and data to add nuance and evidence where appropriate. These sources are all listed in the appendix.

the RECALIBRATION

How work and life drifted apart in space, time, and culture

From the invention of the steam engine to the smartphone, the nature of where we work and how we work has undergone a series of shifts that ultimately led to a clear work-life separation between the office and the home, between places of production and places of enjoyment. For the past 20 years, digitalisation has been once again blurring these boundaries by making us available to work anywhere, but still, the narrative that our work is fundamentally something separate from our lives has largely remained intact.

In our cities, this narrative is made physical by the way office buildings tend to set themselves apart from the street, like glass, steel, and concrete bastions standing guard over desks and laptops. In our choices, the compartmentalisation of work and home is made obvious by

the way people tend to disregard the workplace neighbourhood, while they are quick to prioritise and cherish the local environment around their place of living. In our research, only 1.3% of typically office-based employees rank the workplace neighbourhood as a top three consideration when choosing a job, despite the quality of the local environment being the second-most important priority overall when they are looking for a home⁴. Why is that?

In this chapter, we reflect on the key shifts for the office worker over the last century, including the recent impact of Covid-19, to better understand the foundation for what might or could lie ahead. Together, these changes lead to a moment of recalibration that aim to, once again, bring our environments for working and living closer together.



FIGURE 3

For the past 20 years, digitalisation has been once again blurring these boundaries by making us available to work anywhere.



2.1 The rise of the white-collar worker



Pre-industrialisation

Live at work

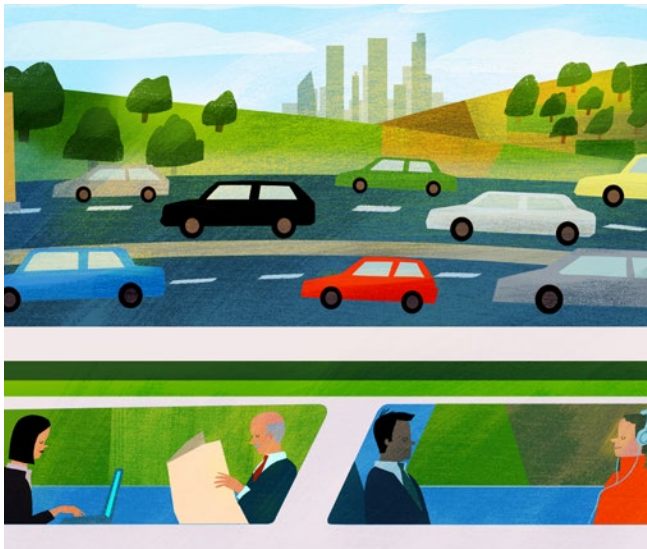
Before the age of industrialisation, when the economy relied chiefly on manual labour, integrated work and home arrangements were much more common than they are today. People would sleep, work, and play on the land that they farmed, or they would build places to live and socialise above places fit for making and selling goods⁵. It was also very common for commercial activities to take place outdoors in the midst of public life, with labour being a key contributor to the vibrancy of central streets and squares. London's 17th and 18th century coffeehouses are closely connected to the birth of the stock exchange, insurance industry, and auctioneering⁶, while in New York, stocks were traded along the kerbside from 1792 well into the 20th century⁷.



Industrialisation

Live next to work

The second industrial revolution brought about mass production, assembly lines, and electrical energy. Scale and efficiency were closely related and, as a result, workplaces grew in size and became more monofunctional. This period marks the first significant split of the place of working from the place of living, with large housing areas clustered around even larger factories. Still, despite this separation, many employers remained closely involved with the living conditions of their workers. In Dublin in the 19th century, the Guinness family built hundreds of homes next to their growing brewery to accommodate their employees⁸, while in Birmingham the Cadbury family built Bournville to enable their workers to work and live in greener, better conditions⁹.



Modernisation
Live away from work

At the beginning of the 20th century, the invention of the car, together with the rapid expansion of road and public transport networks, quickly changed the meaning of proximity and distance. By then, most cities had become polluted and congested from the impact of rapid urbanisation, which catalysed a flight of middle- and upper-class workers to leafier and more spacious suburbs. New technologies also reduced manufacturers’ reliance on manual labour, and factories soon relocated to out-of-town areas with cheaper land and resources.

In the 1930s, the term ‘white-collar worker’ first came into use, in reference to the growing body of workers (mostly men) who wore white shirts to work, instead of the blue overalls commonly worn by manual labourers¹⁰. White-collar work (later known as ‘knowledge work’¹¹) was desk-based, stationary labour relying on mental rather than physical effort. Instead of factories, we constructed expensive, highly specialised office environments for our minds to work at a desk, and other environments for life’s enjoyments.

From this point on, the idea that work and life are separate only continued to grow stronger. By the 1970s and 1980s, the term ‘work-life balance’ entered the English vocabulary and it has stayed ever since¹².



Digitalisation
Work at home

The third industrial revolution formed the next significant phase in our relationship with work. Towards the end of the 20th century, information and communication technologies had entered the world, creating a new dimension of access that further catalysed the global knowledge-based economy. Still, physical proximity between complementary businesses remained important. Through the 1990s and 2000s, knowledge-intensive companies continued to co-locate in urban centres and central business districts, driving the rapid economic growth and broader cultural and social revival of many global cities¹³.

Meanwhile, the physical separation between the office and the home was costing people more and more time on the road. Through the 1990s, a full-time employee in London lost 70 minutes a week of leisure time to commuting¹⁴, a trend which has persisted to present day.

Office-based jobs have remained a normal part of many people’s lives. Meanwhile, with digitalisation, it has also become normal – sometimes unavoidable – for people to work from home before and after they have worked in the office, even if just to check an email or a text. With this recent shift, it would be fair to wonder: where has the work-life separation gone?

2.2 Covid-19: Rethinking work and home

In early 2020, the Covid-19 pandemic swept the globe. In an instant, office spaces in cities all over the world were laid bare and office workers were told to stay at home to reduce the spread of the coronavirus. During this time, many people have been forced to transform their homes to function as work-stations; dining tables were turned into desks, bedrooms into breakout space, kitchens into water coolers.

This experience has created unique first-hand insights into the pros and cons of bringing our work-life and home-life closer together in physical space. The result is a seismic shift in opinions, preferences, and prejudices around both office-based work and the importance of place.

We present here a few findings from typically office-based employees that have worked from home at least three days per week during the coronavirus lockdown¹⁵:

- While working from home, people have rediscovered the joys of staying local. In fact, as many as four in five people (80%) have felt their appreciation of their home and local community increase during the period of disruption caused by the coronavirus. Women (86%) are more likely to agree with this statement than men (74%).
- Women are also more likely to have experienced an improved sense of health and wellbeing while working from home, with 56% agreeing and 39% disagreeing, compared to 46% of the men agreeing and 47% disagreeing. 60% of employees who are over 55 years old have felt their health and wellbeing improve.

“We have all started to learn that you can be productive outside the office and people are asking for more flexibility to work where they want.”

James Morgensen,
VP Workplace, LinkedIn, US

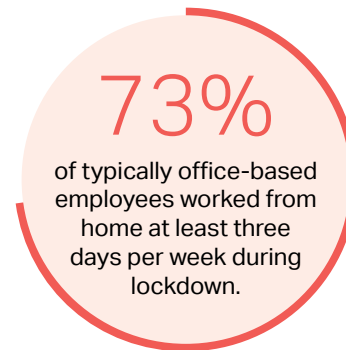


FIGURE 4

- In terms of productivity, the results are mixed. Half of respondents have felt more productive working from home overall, while 42% have felt less productive. Here, there are no gender or age variations, but people living with children are slightly more likely to say that their productivity has been negatively impacted.
- Despite the overall varied experiences across wellbeing and productivity, 63% of typically office-based employees that have worked from home at least three days per week during the coronavirus lockdown, say that they would like to continue to do so in the future, at least some of the time. Only one in 10 (9%) want to work in a typical workplace (like an office) most of the time. Young employees who are under 35 years old are most likely to say that they would prefer to work in a typical workplace most of the time.
- More than half (51%) of people who are under 35 years old also say that they will look for a place to live with better working-from-home conditions the next time they move, and 45% will look for a place with greater access to green space.

Generally, people have discovered that, compared to the current types of workplaces on offer (i.e. the office), the home can be a much more accessible, comfortable, and desirable alternative. We have finally been given the chance to take control of our work environment and it has made many ask: why did we ever come to the office at all?

2.3 Recalibration: Between work and home

The knowledge worker's relationship with the workplace has reached a point of no return; a moment of recalibration between employee obligations and personal responsibilities, between corporate and civic ambitions, between work and life.

At present, this feels like a balance that must be reached by opposition, through the primarily binary choice that people can make between working from the office and working from home. Unfortunately, as this study has also found, both these places come with significant professional and personal trade-offs and amongst employees, neither option is conclusively preferable over the other.

Businesses too, will feel this choice as a compromise. On the one hand, employees working from home may be happier and more productive. On the other hand, employees working from the office can come together more easily to solve problems and connect with the brand. The list of pros and cons is virtually endless, but what it fails to recognise is that, ultimately, both choices are still tied to a desk. It is time to think outside the box.

As employees adopt more flexible working habits, so knowledge-based companies will need to create more flexible workspace models with an even stronger emphasis on the value that is generated by interaction. Developers and landlords will have to collaborate with their tenants through new, innovative partnerships to create an experience of working that is supported by both the office, the home, and every place in between. This study focuses on these in-between environments: the places where great ideas spark from serendipitous human-to-human interactions, and where people can find inspiration and solace from an experience with urban life or with nature.

“It feels like people are locked into the possibilities that are right in front of them: work from home or work from the office. We need a toolkit – more possibilities – to break out of this binary thinking.”

Anthony Townsend,
Urbanist in Residence, Cornell Tech, US

This leads to the new practice of workplacemaking (i.e. workplace-placemaking) that, for the first time, actively and primarily asks commercial developers and companies to engage with space beyond the envelope of the office building. It also leads to a new vision of how work could be better integrated with, instead of separated from, the fabric of life.

This chapter has set out why workplacemaking is fundamentally important. The next chapter delves deeper into the key design principles that should underpin this new practice to form the how, while Chapter 4 will describe the what.

“In order to give people a sense of agency and ownership of their workplace, the office needs to be designed less rigidly, with more gaps and slack in the system.”

Jeff Risom, Partner and Chief Innovation Officer,
Gehl, Denmark



FIGURE 5

the NEW FOUNDATION

Laying the groundwork for a resilient workplacemaking practice

The way we work and our way of life are fiercely integrated. This is true at every level, from a single street to an entire city. For example, if an office building has a lifeless ground floor, it will impact the pedestrian vibrancy of the street. If a commercial district lacks green space, it will impact employee productivity.

If a district is all commercial, it will impact citywide traffic congestion. If too many office buildings emit too much carbon, it contributes significantly to high-levels of air pollution. The foundation for workplacemaking is to actively address these interdependencies to create spaces with overall more desirable, resilient, and prosperous outcomes overall.

To build this foundation, the chapter outlines the broad impact of workplace design across three physical scales: the street, neighbourhood and city while also integrating the implications for the individual person and the planet. These insights are based on research and lessons from the field of civic placemaking, together with new data generated specifically for this study and its unique focus. Across every scale, three design principles are presented in response to the findings. The principles aim to steer the workplacemaking practice to consider its corporate and civic responsibilities equally.

“Digital technology liberates you spatially and intellectually. Intellectually, it takes things that are repeatable and automates them into an efficient process, freeing up the human mind for creative and innovative problem solving.

Spatially, it liberates us from the determinant of physical adjacency as the driver of workplace, allowing us to choose places that suit the task at hand. With these new freedoms, we enter a new age of working.”

Malcolm Smith, Arup Fellow, Masterplanning and Urban Design, Arup, UK



3.1 Workplaces and the street

Buildings shape streets. A street's edges are physically constructed from its adjacent buildings, while a street's life is economically and socially affected by its adjacent functions. Studies show that people tend to walk faster on streets lined by blank and unvaried facades, while they slow down on stretches with more vibrant edges¹⁶. Buildings that are occupied by people at all times of the day and week, with high levels of transparency between indoor and outdoor activities, tend to feel safer and attract greater use, while an introverted building can be a public life deterrent¹⁷. In terms of safety, it has also been found that drivers are less likely to speed on streets lined by buildings with greater architectural detail¹⁸.

People's bodies and minds are shaped by the places they inhabit. Whether it's the home, the office, the local park or café, each of these environments – and every place visited in between – contributes to a person's sense of happiness, wellbeing, and productivity. Some effects are physical, such as how working in a neighbourhood with high levels of air pollution affects people's lungs. Other effects are more abstruse, though no less important. Studies have shown that people think more creatively in spaces with high ceilings¹⁹, for example. And of course, we have all felt the ability of nature to quite literally calm the mind.

Together, these and other factors determine how likely people are to walk and linger, which in turn creates macro and microeconomic outcomes for the street and its occupants. At a macroeconomic level, walking has been proven to

boost people's happiness and life expectancy, as well as their productivity and creativity. At a microeconomic level, pedestrians are more likely to engage in direct financial transactions with local businesses and trade. Studies from London show that pedestrians spend as much as 65% more than drivers²⁰, while in Dublin, a redesigned pedestrian-friendly neighbourhood led to a 300% increase in employment²¹.

In workplace design, there are few examples of office buildings that actively contribute to the liveliness of the street. This is despite the fact that employees benefit as much from street experiences as anyone. Instead, these types of commercial properties tend to be more concerned with how to evade confrontations with public life, such as by making narrow, controllable entrances and putting up 'no loitering' signs. There is a whole branch of design devoted to exclusionary methods, which unfortunately we cannot cover here²².

The practice of workplacemaking is about inclusion, and about creating commercial building edges that contribute to the health of the street. It is about creating environments that diverse people want to be in; places that are more attractive than staying inside an office or at home. When people have a greater choice over where and how they work, human comfort will be a key factor to influence where they go.

Pleasant street environments are the glue that tie people and buildings together, and where many important work and life experiences are born.



FIGURE 6



FIGURE 7

“The City has a close dialogue with developers wishing to build commercial buildings to ensure that they create active, interesting, and inviting ground floors all the way around the building. Unfortunately, it also often happens that these great ambitions to make active uses materialise as a series of meeting rooms. After five o’clock, how interesting is that going to be? Preferably all functions in the ground floor contribute to activating the public realm.”

Camilla van Deurs, City Architect, City of Copenhagen, Denmark

Kampung Admiralty in Singapore was designed with a “club sandwich” philosophy; different functions are layered on top of each other to create a vertical village. The lower levels contain the People’s Plaza, a “community living room” with shops, eateries, and access to a tropical garden. This is topped by a roofscape of staggered terraces covered in local plants, which functions as a community park.



3.1 Workplaces and the street



Salesforce Park in San Francisco, which sits above a transit centre, is a 5.4 acre botanical garden and arboretum that was developed as a multi-functional space to provide respite, activity, and education for transit users, office workers and local residents alike.

“Commercial developers, private companies, and city officials all have a role and a responsibility to the public realm and to the physicality of the street.”

**Robin Abad Ocuillo, Director,
Shared Spaces Program,
City and County of San Francisco, US**



In Paris, booksellers line up daily along the banks of the Seine with small parasitic structures that activate the wall with commercial and lively activities.



DESIGN PRINCIPLE

Workplacemaking creates integrated and comfortable streets

Workplacemaking creates a new relationship between the office and the street by blurring the edges of the ground floor to create more opportunities for serendipitous exchanges between those within and without.

1. Design for the human body

Consider the height of a person or a child, the length of a stride, the size of a hand, and the properties of sight, smell, touch, and sense of hearing.

2. Design for the human mind

Consider the impact that different shapes, textures, and colours have on people's subconscious and instinctive feelings, experiences, and reactions.

3. Design for permeability

Add entrances, physical throughways, and visual transparency, especially for buildings with large floorplates that occupy entire city blocks.

4. Design for transitions

Consider the edge of the building as a transitory zone with semi-public properties that softens the public/private boundary.

5. Design for variation

Create a new experience for every six meters of horizontal façade, such as by integrating benches, greenery, art, design variations, and openings.

3.2 Workplaces and the neighbourhood

The distribution of buildings and functions shape neighbourhoods. Places with primarily commercial uses, built from glass, steel, and concrete materials, feel and operate very differently from places with primarily residential uses, built from bricks and timber. In both cases, neither the single skyscraper nor the single house could create a sense of neighbourhood on its own, and yet each building is absolutely responsible for the outcome as a whole. Central business districts have emerged from the decision of multiple individual companies to collocate next to each other and close to easy access routes, while suburbs have emerged from the decision of multiple individual people to live with private green space and no immediate neighbours (at least not compared to apartment living).

Yet all companies and individuals benefit from working and living close to a range of amenities, which can complement the functions of either the office or the house. For example, for both commercial and residential developments, being close to green space can significantly increase the desirability of the place and thereby value of the property. In New York, the restoration of Bryant Park is estimated to have added \$5 billion in real estate value. Other beneficial amenities for neighbourhoods are places to eat, shop, and play. A study from Denmark found that smaller companies paid 5% to 20% more in rent on average for every 10 cafés/restaurants added within a 200-metre radius²³, and in Berlin, proximity to playgrounds in residential areas has been found to increase land values by up to 16%²⁴.

Top 5

Top five amenities in the environment outside the place of work for typically office-based employees.

1. Shops, stores, pharmacies
2. Transport connections
3. Green space, parks, gardens
4. Places to socialise
5. Places to work and collaborate

FIGURE 8

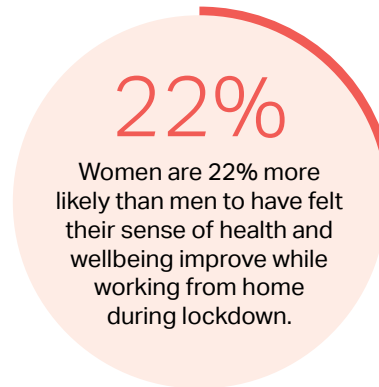


FIGURE 9

“A lively and vibrant environment around the office has distinct benefits. Throughout the day, coming and going and during lunch breaks, people can find inspiration from seeing, hearing and meeting one another. The presence of public spaces next to office buildings help with the fertilisation and interchange of thought between those within and without.”

**Jan Gehl, Professor,
Urban Design Consultant, Denmark**





Workplace design has traditionally been concerned with increasing the productivity of employees, which has led to some wellbeing factors being considered. However, it rarely engages beyond the red line of the plot, despite the obvious connections that can exist between buildings and neighbourhoods. Therefore, the better examples of office/neighbourhood synergies tend to be found where a larger area is developed under a common vision, either from a single source of ownership (King's Cross) or through business coalitions (Bryant Park).

Workplacemaking aims to recognise and actively seek neighbourhood-level collaboration, to create places that work for each individual building and user, as well as for the collective. With a more holistic approach, neighbourhoods can become multifaceted destinations, which are more resilient to survive changing work and life behaviours.

Bryant Park in New York is a popular public park in the heart of Manhattan's commercial district, which attracts more than 12 million visitors per year with its green space, café seating, and cultural activities.

“In an urban context, workplace environments should be open and integrated into the city around. If you provide everything inside, you're taking away from the business outside.”

Dan Hill, Director of Strategic Design, Vinnova, Sweden



Aker Brygge is a former industrial area on Oslo's seafront that today incorporates offices, apartments, and plenty of public space, dining and entertainment options. The neighbourhood is one of Oslo's most popular destinations.

DESIGN PRINCIPLE

Workplacemaking creates collaborative and diverse neighbourhoods

Workplacemaking actively engages with the fabric of its surroundings by collaborating with local private and public stakeholders to shape a neighbourhood that is equally liveable and economically vibrant.

1. Design for time

Invite different activities and users throughout the day, week, and season to keep the neighbourhood vibrant at all times.

2. Design for flexibility

Increase the flexibility of spaces and functions to encompass a greater variety of users and uses.

3. Design for partnerships

Create coalitions with local businesses and communities to collectively deliver and safeguard the qualities of the neighbourhood.

4. Design for proximity

Increase the availability of work amenities in residential neighbourhoods, and the availability of everyday amenities, such as parks and nurseries, around the office.

5. Design for diversity

Consider every type of user and every category of user group, for example, ethnicity, gender, age and abilities.

3.3 Workplaces and the city

At a macro-level, every building and building function contributes to the overall patterns and shape of the city. Downtown skyscrapers that house traditional nine-to-five companies put significant pressures on the city’s public transport systems, while an out-of-town commercial campus puts pressures on its roads. The further people live from their main place of work, the more the city is crisscrossed by transportation corridors that, in the worst of cases, are inefficient for those travelling and unpleasant for those standing by. Additionally, you have people that need to access schools, grocery stores, cinemas, and restaurants. The location of each of these destinations is an important node in a complex network that can make or break the liveability of the city and the quality of life for its inhabitants.

One of the main selling points of cities is their ability to provide access. Access to jobs, friends, experiences and entertainment. Unfortunately, many cities also fail to live up to this promise. Instead, in an effort to create economic activity and keep up with population growth, cities have developed large monofunctional areas for housing, shopping, and working where access is primarily granted via car, while the house prices in more mixed-used and walkable areas have pushed out all but the highest earners. It is estimated that 19 million Americans living in low-income urban areas are more than one mile from the nearest grocery store²⁵, while in Great Britain more than 2.7 million people are more than a 10-minute walk from the nearest park or green space²⁶. These distances again increase people’s reliance on cars, which in turn increases social

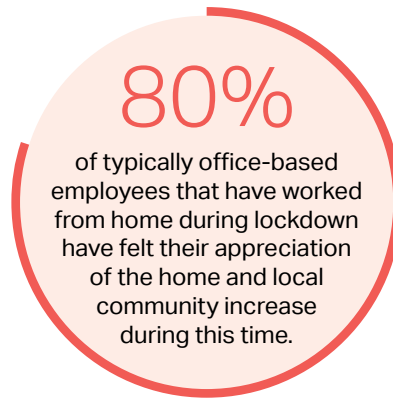


FIGURE 10

inequalities²⁷. To address these issues, Paris launched an urban vision in 2020 to transform itself into “la ville du quart d’heure” – a place where every daily necessity is accessible within a 15-minute walk or bike ride. This 15-minute city vision presents a medium-density, maximum-proximity type of urbanism, where the different functions of life and work are weaved closely together by a people-friendly and green public realm²⁸.


In addition to promising greater accessibility to places and services, the 15-minute city also aims to increase the environmental health of the city, specifically by reducing mobility-related carbon emissions. But still further measures are required to increase our planet’s wellbeing. It is estimated that buildings and their construction together account for 39% of global energy-related carbon dioxide emissions annually²⁹. With rising temperatures and sea levels, no corner of the world is immune to the impact of climate change, and every city and building must play its part to help mitigate the situation. All across the world, cities are responding by actively pursuing carbon-neutrality. New York City has committed to reducing its greenhouse gas emissions by 80% by 2050 and is investing \$20 billion to adapt neighbourhoods to be able to handle climate change implications³⁰. Meanwhile, Copenhagen aims to be the first carbon neutral capital in 2025, and the city is investing heavily in initiatives such as the Østerbro Climate Quarter, as well as in strategic partnerships with green tech industries.

“The key proposition of workplace design is how you can bring people together; which both correlates to how you design the office but also the city around it.”

**Carlo Ratti, Director,
MIT Senseable City Lab, US**

Workplace design tends to respond to urban patterns by how the building integrates either car parking or bicycle facilities, which communicate expectations of employee travel choices. The satellite office or co-working space has also been a response to people's increasing need to access work environments more easily, particularly in neighbourhood centres and next to transport hubs. In addition to the regulatory and reputational reasons to engage with climate change mitigation, the built environment is facing increasingly severe weather conditions. In the future, buildings and public spaces will have to deal with rising sea levels, and severe natural disasters (to name a few).

Workplacemaking connects people's places of living with their places of working by creating greater diversity of choice in both environments. Furthermore, the practice asks companies and developers to consider their buildings in relation to urban transport systems, to contribute to developing well-connected, equitable and sustainable cities.



Paris has launched a project to become "la ville du quart d'heure" which aims to bring most daily amenities within a 15-minute walk or bike ride from anywhere in the city.



New York City has committed to reducing its greenhouse gas emissions by 80% by 2050 and is investing \$20 billion to adapt neighbourhoods to be able to handle climate change implications³⁰.

DESIGN PRINCIPLE

Workplacemaking is connected and sustainable

Workplacemaking embeds knowledge-work activities throughout the urban fabric to help create social, cultural, and economic patterns that increase the equity and liveability of the city.

1. Design for equity

Consider the location of the main office and distributed workplaces in relation to the location of homes, house prices, and transport connections.

2. Design for accessibility

Create safe and accessible walking, cycling, and public transport connections between places of working and places of living.

3. Design for circularity

Use construction methods designed to reduce waste, and to use building materials that can eventually be reused or recycled.

4. Design for biodiversity

Integrate different types of trees and plants that change characteristics throughout the seasons and attract a diverse wildlife.

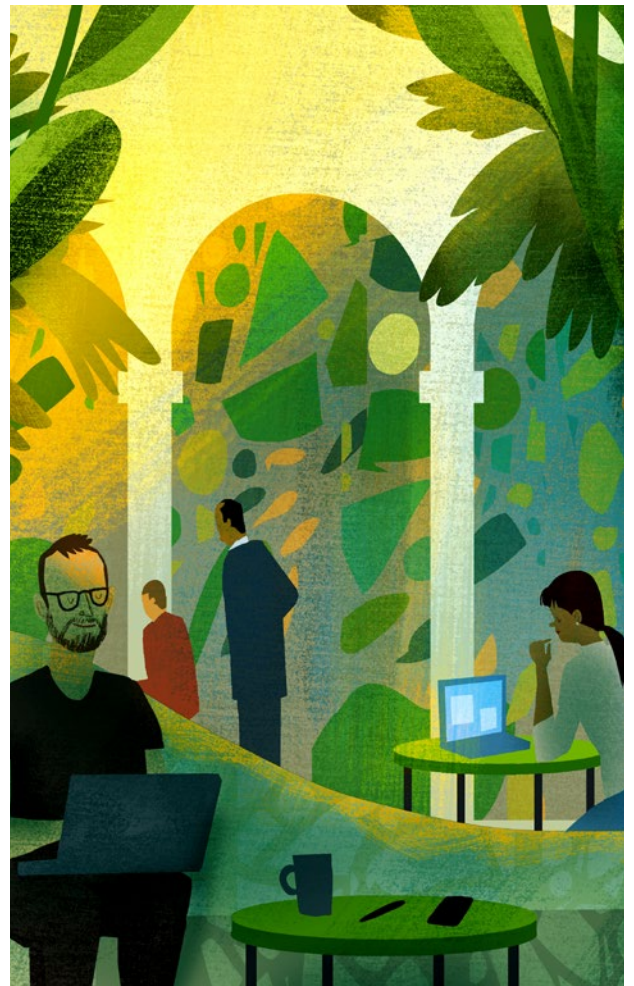
5. Design for climate mitigation

Build environments and design solutions that help to mitigate climate change and tackle severe weather events such as floods and extreme heat.

3.4 Summary

By considering the impact of workplace design across three scales, the chapter has extracted 15 design principles in total that together explain how to approach the practice of workplacemaking to create the greatest outcomes overall. These principles are aimed at commercial developers, companies, and public authorities with a goal to better integrate work-related activities through the fabric of the city.

To build on this foundation, the next chapter dives deeper into the specific activities and experiences that give the workplace its sense of meaning and purpose, to discover exactly what types of spaces are essential.



ESSENTIAL WORKPLACEMAKING

Five spatial typologies to support work-life activities between buildings

Few people visit the park with a purpose to grow their sense of empathy from the observation of strangers, just as few employees seek out the water cooler in the office with a purpose to further their careers. Yet these are very real benefits of having parks to visit and water coolers to cluster around. The knowledge economy was catalysed by spaces where information could be shared easily, such as the London coffeehouses, and in the future, it will thrive in places that continue to attract diverse visitors with different thoughts and ideas on their minds. But, what kind of places?

The pressure is now on companies, commercial developers, and city authorities to understand what other types of environments might draw people together in knowledge-exchange. Unlike the office, the use of these places cannot be dictated. Instead, like the park, the space itself must offer an experience that is appealing to its users.

The previous chapter described the foundation for making places that are well-designed from the scale of the street to the city – the principles for how to approach placemaking. Through further research and data analysis, this chapter examines the specific experiences and activities that employees tend to seek and engage with in the workplace, which bring benefits across work and life. Essentially, what placemaking is all about.

Five principal findings have emerged from this study which form the five spatial typologies that become essential to placemaking. The following sections dive deeper into the importance of each and provide guidelines to unlock multifaceted benefits for employees, companies, citizens, and cities alike. We consider the role of the immediate edges of the office building and the wider scale of the neighbourhood around the office. Towards the end of the chapter, the study also considers people's experiences as they move between places, and the importance of the commute.

“I think the interweaving and interlacing of space, workplaces, and culture is probably what the opportunity is in our future; to reverse some of the strict and rigid segregation of spaces and functions of the past.”

**Robin Abad Ocubillo, Director,
Shared Spaces Program,
City and County of San Francisco, USA**



“The number one reason that people come to the office is for that social interaction with colleagues.”

James Morgensen,
VP Workplace, LinkedIn, US

4.1

Work is a social experience

Findings relating to sociability, support networks, and relationships

Human-to-human interaction is a key element of everyday work and life. When people spend time socialising, they benefit from better health, feeling happier, and living longer³¹, which in turn makes them more productive. When people are able to establish close support networks, they also become more resilient to cope with external stressors, such as an extreme weather event or a global pandemic³². These benefits are unlocked both from direct, intentional meetings and from brief, serendipitous encounters that grow familiarities between strangers over time. Conversely, suffering from social isolation can be as damaging to a person's wellbeing as high blood pressure, obesity, and smoking³³.

People in full-time jobs spend half the waking day at work on average, which makes the office a key environment for establishing social bonds, support networks, and even close friendships. Our research³⁴ found that before Covid-19,

80% of typically office-based employees interacted with other colleagues through work on a daily basis, while 47% engaged in social activities with colleagues at least monthly. When asked about the office's most valued features, employees chose “places to have social encounters with colleagues” above every other aspect listed. Even with typically office-based employees seeking more flexible work arrangements in the future, 84% still agree that there are social and personal benefits to sharing a physical environment with colleagues – at least some of the time.

With these findings, the social aspects of the workplace stand to be a key differentiator for whether employees choose to make the journey to the office or not in a fully flexible work-as-you-like future. No matter where people base their workday, socialising is an important activity with individual as well as societal and economic benefits. Therefore, the making of places that attract people to linger, meet, and socialise should be a key concern for both private and public stakeholders.

No.1

Being able to have spontaneous social encounters with colleagues is the main factor that typically office-based employees appreciate about the workplace.



From offices that support social events to workplaces that are *inherently* social.

FIGURE 11



4.1 Work is a social experience

Watering holes

Places that attract people to linger, meet, and socialise

Workplacemaking is the making of watering holes in the urban fabric where employees and citizens alike can come together to socialise and establish vital interpersonal connections.

Watering holes at the edges of buildings

Passive

Comfortable benches and group seating integrated with the building's ground floor; places should be open and protected from heavy rain, wind, and noise.

Commercial

Publicly accessible coffee shops/cafés on the ground floor of the building; places should have strong visual and physical connections to the street.

Recreational

A front garden/porch area where pedestrians, colleagues, and neighbours can meet to talk, play games, and picnic; places could be bookable as long as they are open to all.



Capital One Bank Café is both a public café and a place for the company to connect with its customers in a less formal and more personable environment.



Nightingale 1 is an apartment building in Melbourne which activates the ground floor with a commercial studio space, seating nooks, a semi-public laneway, and a kerbside social space.

KEY BENEFITS

✓ **The employee** benefits from socialising and building friendships with a community of like-minded people through work.

✓ **The company** benefits from greater productivity and long-term economic outcomes of a healthier and happier workforce.

✓ **The citizen** benefits from encounters with like-minded and diverse people that can increase their social capital and personal wellbeing.

✓ **The city** benefits from the increased resilience of, and growing empathy between, diverse people and communities.

Watering holes in neighbourhoods

Passive

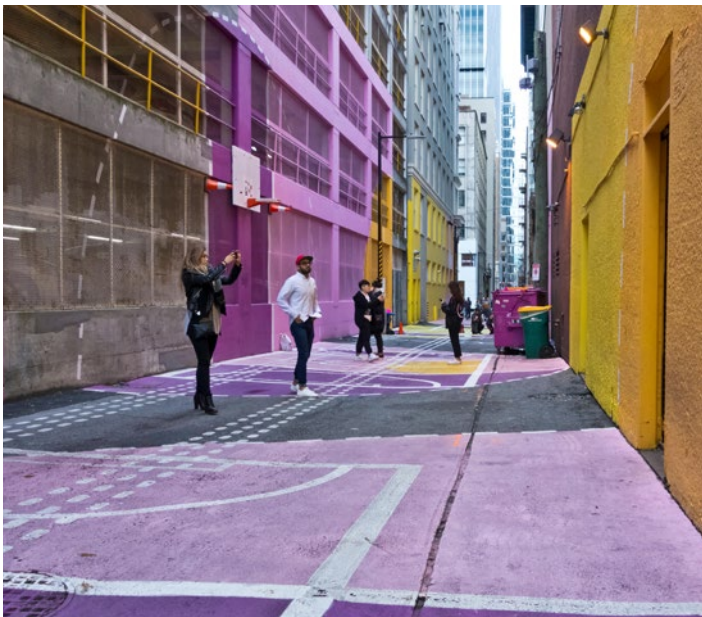
A high-quality public square/park with abundant seating options; places should create micro-environments fit for conversation.

Commercial

A variety of local drinking, dining, and entertainment options within a 15-minute walking radius; places should cater to all types of users throughout the day and week.

Recreational

Leisure facilities in parks, squares, and public buildings, like ballgame pitches, community dining halls, and playgrounds; places should support all age groups.



Alley Oop is an urban space in downtown Vancouver that invites the public to play in a laneway between commercial buildings.



The High Line in New York is a green corridor built on a historic freight rail line along Manhattan's West Side, which has generated an economic uplift for an entire neighbourhood through its public and social use.

“In the enthusiasm of working from home some things are being missed. The way we teach younger people coming up through the business is by giving them the opportunity to learn from senior staff.”

Susan Freeman, Partner, Mishcon de Reya LLP, UK

4.2

Work is a learning experience

Findings relating to progression, learning, and skill-sharing

Encounters between people with different skills and experiences help to catalyse personal, professional, and societal growth. When people share space, they instinctively learn from one another, exchange information, and establish connections that can lead to new, professional opportunities. Studies show that employees who spend more time “rubbing shoulders” with their manager are more likely to progress than their peers, while people who are unable to participate in socialisation at work are routinely professionally disadvantaged³⁵.

Informal learning at work is positively correlated with greater flexibility, employability, adaptability, and resolution of work-related problems³⁶. Around the home, tacit exchanges between neighbours can help build social capital, community coherence³⁷, and better economic outcomes for disadvantaged individuals³⁸. At both the office and at home, people benefit from establishing ties outside their typical areas of influence, which become important conduits for access to new perspectives and information³⁹.

Our research indicated⁴⁰ that more than one third (38%) of the under-35s, and a quarter (24%) of the 35-44-year olds, ranked opportunities for career progression and learning as a top-three consideration when choosing a job. Furthermore, four in five (79%) employees said that they benefit professionally from sharing a physical environment, like an office, with their colleagues and managers⁴¹. Finally, 52% of young employees (under 35s) felt their opportunities for career progression and learning suffer when their main place of work moved from the office to the home during the coronavirus lockdown⁴². Together, these findings emphasise the importance of the workplace as a learning environment to attract and retain skilled employees.

The multifaceted benefits of tacit learning that takes place through chance interactions between diverse colleagues and citizens cannot be planned, digitised, or unlocked from behind a desk. Therefore, public and private stakeholders should be concerned with making places that increase interhuman friction and enable the natural osmosis of knowledge, experiences, and opportunities, between individuals, cultures, and industries.



FIGURE 12



From offices that benefit individual progression to workplaces that *stimulate* collective growth.



4.2 Work is a learning experience

Street classrooms

Places that bring people together in formal and informal knowledge exchange

Workplacemaking is the making of street classrooms where employees and citizens can come together to learn from one another, exchange knowledge, acquire new skills, and grow.

Street classrooms at the edge of the building

Passive

Standing nooks and shopfront windows that invite people to linger in conversation and observation between indoor and outdoor activities; places should have access to fast, free, and reliable Wi-Fi.

Commercial

A commercial event space/ learning suite on a building's ground floor; programmes and facilities could be organised and run in partnership with external organisations.

Recreational

A public exhibition/research display with close visual and physical connections to the street; any person passing by should be able to enjoy a new lesson or insight.



Arup's London office has a permanent exhibition space in the building's corner where engagement is encouraged between the indoor displays and people passing by.



The steps in front of the Metropolitan Museum of Art in New York attract all kinds of citizens to linger at the entrance of this knowledge institution, merging people's experiences of the exhibitions with their experiences of public life.

KEY BENEFITS

- ✓ **The employee** benefits from learning new skills and establishing connections that can lead to a greater sense of personal fulfilment as well as career advancement.
- ✓ **The company** benefits from knowledge retention, knowledge exchange, and employee-led innovation.
- ✓ **The citizen** benefits from serendipitous moments of knowledge-exchange with other citizens that can lead to personal growth.
- ✓ **The city** benefits from the cross-fertilisation of knowledge and skills between diverse industries and individuals.

Street classrooms in the neighbourhood of the office

Passive

Streets that encourage people to walk, linger, and mingle, and local plazas and corners where people can stop to voice their opinions and share their ideas.

Commercial

A variety of event spaces/ learning suites with strong connections to the street and different offers that create area-wide synergies.

Recreational

Public libraries that are well-maintained and well-run with programmes and activities that relate to contemporary topics.



Eilis O'Connell RHA, Six Works was an augmented reality exhibition by IPUT and the Royal Hibernian Academy. Situated throughout Wilton Park, Dublin, the interactive experience allowed visitors to see the sculptures on their smart devices.



The Library at the Dock in Melbourne is a civic destination where people go to learn new skills both from the traditional book collection and from playing with 3D printers, industrial sewing machines, and audio recording equipment.

“Personal contact is key to establishing corporate culture – so the place is important. People need to come together to feel connected.”

Lisette van Doorn, Chief Executive Europe,
Urban Land Institute, UK

4.3

Work is a cultural experience

Findings relating to belonging, identity, and brand

As a social species, humans have a strong natural desire to establish a sense of belonging to familiar places and with likeminded people⁴³. This primal need extends across work and life, and it is at the core of any company culture, as well as in the heart of most community groups⁴⁴. Places that invite people to take ownership of the physical environment often see greater use and care than places that are designed to remain anonymous⁴⁵, which over time helps to establish a sense of culture and identity. For companies, culture can help with employee engagement, satisfaction, retention and attraction, as well as with the establishment of a corporate brand and business direction. In communities, cultural activities bring benefits such as improved educational outcomes, increased mental and physical wellness, and job creation⁴⁶.

Our employee research⁴⁷ found that more than a third (34%) of typically office-based employees consider company culture and values as one of the primary factors when choosing a job. This consideration is even higher amongst younger employees (under 35s) and amongst people based in London. However, the results also suggest that the link between company culture and place is scarcely appreciated at the moment; fewer than one in 10 employees (7%) rate the quality of the physical environment in the workplace among their top three considerations when choosing a job, and even fewer (1%) rate the neighbourhood around the office. This is despite the fact that 67% also said that communities benefit culturally and socially from the presence of companies and offices in the local neighbourhood.

In a future with more people working from home, and a greater blurring of the boundaries between work and life, companies and cities will be forced to rethink the roles of places that have traditionally fostered corporate cultures and civic cultures respectively.



FIGURE 13



From offices that build
a company culture
to workplaces that
have a cultural impact.



4.3 Work is a cultural experience

Cultural canvases

Places that can be shaped, curated, and programmed by people and communities

Workplacemaking is the making of cultural canvases where employees and citizens can shape spaces and activities in their own image, to feel part of the identity and culture of place.

Cultural canvases at the edge of the building

Passive

Movable and customisable furniture and building elements that can be shaped and rearranged by users in real-time; places should invite occupants to curate their own environments.

Commercial

Cultural activities and art installations that communicate a company's brand and identity integrated with the building's ground floor.

Recreational

Spaces that can be used for community meetings, social events, and cultural activities integrated with the building's ground floor.



The lobby of 110 High Street Boston has been transformed into an Immersive digital experience. The interactive mural reacts to users' movements, and the experiences change during the day from an aquarium to different landscapes. At night, the installation also features silhouettes of people walking by the building.



IPUT's high profile Tropical Fruit Warehouse, currently under construction in Dublin city centre, is being used as a canvas to showcase work by emerging Irish artists. Pictured above is *Abiding Traces* by Leah Hewson who is also part of the IPUT Artist in Residence initiative.

KEY BENEFITS

- ✓ **The employee** benefits from feeling a sense of ownership around work that leads to fulfilment.
- ✓ **The company** benefits from employee loyalty, engagement, and satisfaction.
- ✓ **The citizen** benefits from diverse cultural experiences that add character to corporate functions.
- ✓ **The city** benefits from employees adding to the city's cultural image and identity beyond their local community.

Cultural canvases in the neighbourhood

Passive

Urban furniture and design elements in plazas, parks, and squares that can be shaped and rearranged by users in real-time; places should have a shared sense of ownership.

Commercial

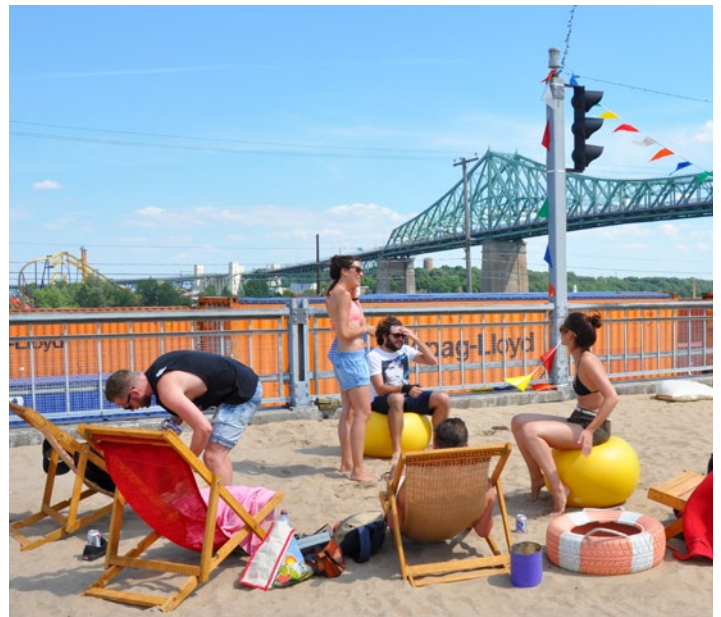
Parklets, pop-up spaces, and temporary events linked to a specific brand experience and/or customer/client outreach.

Recreational

Community gardens, public art installations, and social meeting spaces that are run and curated by the daily users, whether residents, employees, or both.



The Living Innovation Zones in San Francisco is a programme that invites cultural institutions, community organisations, and innovative businesses to create installations on Market Street to help catalyse the street's cultural revival.



Village au Pied-du-Courant in Montreal is a popular urban beach and cultural destination that is redesigned and rebuilt every year by a coalition of artists and creative businesses.

“At the moment, we believe that working from home is just as productive, but a lack of casual knowledge exchange could lead to an innovation deficit in the long run.”

Anthony Townsend, Urbanist in Residence, Cornell Tech, US

4.4

Work is a collaborative experience

Findings relating to collective productivity, efficiency, and creativity

Collaboration is a key element of work and life, whether colleagues are cooperating to raise the bar at work, or couples are working together to raise a child at home. In fact, people’s ability to collaborate to obtain otherwise inaccessible goals has been named as one of the main causes of our species’ success to date⁴⁸. Looking ahead, companies and society face increasingly complex challenges that continue to require lateral thinking, collaborative problem-solving, and dynamic responses. Harvard Business Review has named this the Era of Collaboration, listing corporate benefits such as a more engaged work-force, greater productivity, and a better customer experience for those organisations that promote internal and external cooperation⁴⁹. At a societal scale, collaboration between people and industries continues to be one of the main drivers of economic welfare and innovation⁵⁰.

Cities originally emerged from clusters of people needing to collaborate to thrive, and even today, our research⁵¹ found London to be an overall more collaborative work environment than the rest of Great Britain. Fourth fifths, or 80%, of typically office-based employees working in London reported that their work involves collaboration, compared to 67% of office-based employees working across the rest of the country, with 94% of employees working in large businesses (250+ people) in London interacting with colleagues at least once a day⁵². Within the office, spaces that enable people to gather spontaneously around informal group work is one of the most important attributes that employees everywhere highlight, well before spaces that support planned meetings. Around 15% even rank open places to collaborate with colleagues as one of the top-three amenities to be supplied by the neighbourhood beyond the office.

As employees adopt more flexible working practices, both companies and society face a significant challenge to ensure that people continue to work well together to tackle complex problems holistically and creatively. Therefore, places that facilitate effective collaborative activities between employees and citizens are more valuable than ever.



FIGURE 14



From offices that support group meetings to workplaces that *catalyse* crowd innovation.



4.4 Work is a collaborative experience

Mind labs

Places that invite people to come together around shared issues, ideas, and challenges

Workplacemaking is the making of mind labs that draw employees and citizens together in public space to share, develop, and incubate ideas that lead to new discoveries and innovation.

Mind labs at the edge of the building

Passive

Settings with group tables, writing surfaces, Wi-Fi, and electricity located along the edge of the building; places should have high levels of indoor/outdoor connectivity.

Commercial

Maker labs with specialist equipment and tools that can be rented and shared amongst different stakeholders; places should be visually connected with the street.

Recreational

Shared spaces for community innovation and debates located at the building's ground floor; places should have public Wi-Fi.



Arup's Melbourne office includes a Sky Park with public access where employees and citizens alike can take outdoor meetings in any of the space's diverse seating areas.



International House, Brixton, is London's largest affordable workspace. Managed by 3Space, its 12-storeys house a diverse mix of entrepreneurs, makers and community groups. 3Space's BuyGiveWork initiative means that when space is rented, an equal amount is offered for free to community groups.

KEY BENEFITS

- ✓ **The employee** benefits from faster, more creative problem-solving abilities.
- ✓ **The company** benefits from increased productivity and faster-paced innovation.
- ✓ **The citizen** benefits from opportunities to engage in inter-company and cross-industry cooperation.
- ✓ **The city** benefits from companies, citizens, and employees contributing to solving societal challenges.

Mind labs in the neighbourhood of the office

Passive

Urban squares, spaces, and street furniture that invite groups to gather to exchange ideas and solve common challenges; spaces should have access to free Wi-Fi.

Commercial

Facilities that support co-working, collaboration, and innovation, such as traditional co-working spaces or more specialist laboratories and workshops; places should complement local businesses and residents.

Recreational

Cultural institutions like museums and libraries with open and shared research facilities and programmes that invite public/private partnerships and collaboration.



IPUT invested in re-opening **Wilton Park, Dublin**, to enhance its amenities and reactivate this public space. With the addition of deckchairs, a local barista and regular events, the park is a place for the local community to gather and keep connected.



Copenhagen has created a Street Lab as a laboratory in the city centre where new solutions can be tested under real urban conditions.

“There are many opportunities for people to come together and socialise in the city, but it can be a challenge to find places for focus and privacy in the public realm.”

Robin Abad Ocubillo, Director, Shared Spaces Program, City and County of San Francisco, US

4.5

Work is a mindful experience

Findings relating to individual productivity, efficiency, and creativity

Quiet and undistracted time and space is as important to human wellbeing as stimulation and interaction. Calm environments support people’s holistic thinking across focused and diffused modes, which enable them to process experiences and ideas from across work and life. For example, when people spend time in nature, their abilities to process complex information, cope with stress, and maintain concentration improves⁵³, while time spent in busy, urban environments can have the adverse effects. A 2005 study by London’s Institute of Psychiatry found that persistent distractions such as from social media and digital devices could cause a 10-point fall in IQ⁵⁴ overall, while even a trivial interruption in the workplace impairs an employee’s concentration by 23 minutes on average⁵⁵.

Our employee research⁵⁶ revealed the importance of quiet places for focused, individual work as the second-most popular office quality overall (with 36% choosing this within their top-three), right after spaces to socialise.

Around 65% also said that their work requires them to be focused and discerning at least some of the time with 29% saying that the character of their work does not require any form of collaboration. The greater people’s earnings, the more likely they are to say that their work requires focus; people who earn more than £70,000 per year are 47% more likely to say that their work requires them to focus than people who earn less than £25,000 per year⁵⁷. In London, employees are 26% more likely to appreciate quiet spaces in the office than in other parts of the country, and 13% more likely to say that their work requires time for individual focus⁵⁸. The study has found no clear correlation between the character of people’s work and their experiences of working from home during the 2020 coronavirus lockdown, which may simply reflect the fact that people’s work needs are generally too complex and multifaceted to be met fully by any single environment.

As the intensity and frequency of communication continues to rise, it becomes increasingly important that people can find the space to disconnect, recharge, and focus, even for small parts of the day. The places that support focused and diffused thinking may not be exactly the same, but both are important to safeguard people’s health, wellbeing, and productivity, which in turn benefits companies as well as society at large.



FIGURE 15



From offices that dictate quiet zones to workplaces with *space to think*.



4.5 Work is a mindful experience

Mind gardens

Places that support people's individual and restorative thinking processes

Workplacemaking is the making of mind gardens where people can think and contemplate on their own to process new ideas and inspirations that have come from experiences of interacting with people and place.

Mind gardens at the edge of the office building

Passive

A comfortable bench/seat integrated in nooks and recesses along the façade of the building; views should be peaceful, and noise limited.

Commercial

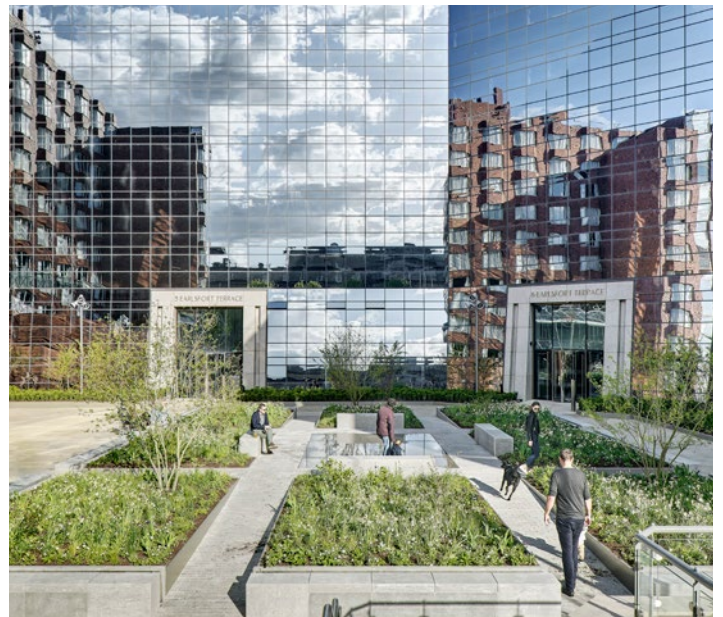
A quiet café or co-working space with a Wi-Fi free zone and individual workstations; places should be located to invite passing pedestrians to enter while maintaining a sense of enclosure and privacy.

Recreational

Public art pieces and play/exercise equipment that encourage reflection and mindfulness; encourage different modes of thinking.



The commercial building at **555 Market Street**, San Francisco, is located in the city's busy central business district, yet surrounded not by concrete but by a lush, biodiverse urban garden that frames the arrival and departure experience.



IPUT commissioned award-winning landscape architect Robert Townshend to create an urban park as part of its **Earlsfort Terrace** redevelopment in Dublin's central business district.

KEY BENEFITS

- ✓ **The employee** benefits from being able to concentrate, contemplate, and re-energize.
- ✓ **The company** benefits from employees completing their individual tasks faster and better.
- ✓ **The citizen** benefits from moments of respite in otherwise busy environments.
- ✓ **The city** benefits from diversity of space which supports a diversity of residents.

Mind gardens in the neighbourhood

Passive

A green/blue space protected from noise and air pollution and with sheltered seating options; calm streets and routes for walking lined by trees and plants.

Commercial

Co-working facilities with separate and quiet workstations and restorative spaces; places should complement local businesses and residents.

Recreational

Peaceful green/blue areas where people can engage with mindfulness activities such as running, yoga, or gardening; also, public indoor destinations with quiet working space and Wi-Fi free zones such as libraries.



Paley Park in New York is a small, quiet pocket park in the city's bustling midtown which uses a water feature to create white noise to drown out the city's clamour.



The British Library in London provides free and quiet study spaces next to the busy St. Pancras International train station.

“The location of the office will always be important and the experience of how people get there. Future workplace design should be approached from an experience point of view.”

James Morgensen, VP Workplace, LinkedIn, US

4.6

Moving between places

Findings relating to mobility, connectivity, and commute

The commute between the office and the home is the final important factor to consider in the shaping of future workplaces and workplace experiences. People who are required to drive to work on busy roads have been found to suffer worse stress than fighter pilots or riot police facing mobs of angry protesters⁵⁹. Furthermore, it can take up to an hour for people to recover the ability to concentrate after a long urban commute by car. Conversely, walking and cycling have been associated with greater levels of health, happiness, productivity, and even self-esteem⁶⁰. Public transport generally enables commutes over longer distances at a lower economic and environmental cost than driving, though often the price for these benefits is paid through a lack of convenience and comfort.

During the Covid-19 lockdown in 2020, many employees working from home reported missing the commute as a way to establish a sense of work-life balance and separation. For others, the commute is primarily seen as unproductive time spent travelling between the office and the home⁶¹. Our quantitative employee research⁶² found that the longer people used to commute before the coronavirus lockdown,

the more likely they were to say that their work experience improved during their time of working from home⁶³: 56% of employees who used to commute for more than 60 minutes per day agreed that their work experience improved when they started working from home at least three days per week, compared to just 46% of people who used to commute for less than 30 minutes before the coronavirus lockdown.

The main considerations for people’s choice of commute is the time, cost, and convenience of their experience⁶⁴. However, these factors also depend on the frequency of travel. Studies suggest that people will be inclined to accept a longer commute fewer days per week, in order to benefit from better and cheaper living conditions further away from the city centre. Instead of seeking to save time on the road, 38% of typically office-based workers have said that they will look for a home that also accommodates working the next time they move, and 35% will look for a place with greater access to green space.

In the future, companies, commercial developers, and city authorities will have to take these multifaceted mobility considerations into account to better understand the options people have, and the choices they make, between work and life. Workplacemaking creates new spatial environments for knowledge-work activities but connectivity is the lifeline that supplies the key ingredient: people.

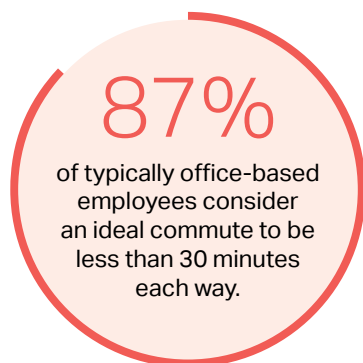


FIGURE 16



From offices as isolated destinations to workplaces that offer *connected experiences*.



4.6 Moving between places

Connective tissue

Connections between places that encourage people to walk, cycle, and use public transport

Workplacemaking is the making of connective tissue between places that invite people to socialise, learn, belong, collaborate and think in the urban realm between the office and the home.

Connective tissue in the neighbourhood of the office

Passive

Wide and well-lit pavements lined by trees and plants; bike lanes; bike parking, bike charging, and shower facilities integrated on the ground floor of buildings; covered and protected public transport stops with seating; building entrances that favour people arriving by foot and bike; public drinking fountains.

Commercial

Bicycle repair shops and cafés offering refreshments; some places should be open after dark to increase the sense of safety for evening travellers.

Recreational

Promenades for leisure walks and exercise; streets that integrate play and games; benches and places to rest.



The Verde Building is one of the first buildings in London to be awarded the platinum rating by Cycling Score; a rating system to incentivise landlords to create better cycling facilities.



Renewal of granite paving on Molesworth Street, Dublin, by IPUT, to incorporate new tree planting, street widening and public bike parking.

KEY BENEFITS

✓ **The employee** benefits from being able to recharge and exercise on the way to and from work.

✓ **The company** benefits from reductions in commute-related carbon emissions and a healthier workforce.

✓ **The citizen** benefits from breathing cleaner air and increased accessibility for all.

✓ **The city** benefits from healthier populations, fewer traffic incidents, cleaner air, and cheaper infrastructure.

Connective tissue between neighbourhoods

Passive

Wide and well-lit pavements lined by trees and plants; bike lanes that connect seamlessly across neighbourhoods; frequent, fast, and reliable public transport connections.

Commercial

Bike sharing and micro-mobility schemes; companies can partner with mobility providers to create favourable terms for their workforce.

Recreational

Green routes, blue routes, and running tracks.



Superkilen is an active travel route that connects the backside of two neighbourhoods in Copenhagen. During peak hours, the route is a commuter corridor and on the weekends, people go there to hang out and play in the fun space. Designed by BIG.



Cykelslangen in Copenhagen connects two city neighbourhoods across the harbour to enable more people to cycle to and from work.

4.7 Summary

By considering workplace experiences and activities holistically, the chapter has distilled five essential spatial typologies for placemaking – and their connective tissue. Each typology can be delivered by creating places at the edges of buildings or in open space, and by implementing functions with either passive, commercial, or recreational characteristics. Well-designed places might be able to support multiple activities at different times of the day and week, through the creative and context-specific merging of typologies.

Some spatial typologies are better suited for commercial districts, while others could also be implemented in the neighbourhoods where people live. What is important is the ability of these places to draw people away from their desks and together in knowledge-exchange. Therefore, companies, commercial developers, and city authorities have an interest in working together to distribute these environments between the places where people work and live.

The previous chapters have described the broad why, how, and what of placemaking.

The next chapter is specifically aimed at future leaders of placemaking. This first section looks at structural barriers and enablers while the second sections outlines a series of next steps from the perspective of three key stakeholders: city authorities, companies, and commercial developers.

“Companies have to be more aware of the unique character of local communities and respond to it. And they need tools to do that in a high-quality, sensitive way.”

Jeff Risom, Partner and Chief Innovation Officer, Gehl, Denmark

THE EMPLOYEE



THE COMPANY



THE CITIZEN



THE CITY



Watering holes

Places that attract people to linger, meet, and socialise

Socialising and building friendships with a community of like-minded people through work.

Greater productivity and long-term economic outcomes of a healthier and happier workforce.

Encounters with like-minded and diverse people that can increase their social capital and personal wellbeing.

Increased resilience of, and growing empathy between, diverse people and communities.

Street classrooms

Places that bring people together in formal and informal knowledge exchange

Learning new skills and establishing connections that can lead to a greater sense of personal fulfilment as well as career advancement.

Knowledge retention, knowledge exchange, and employee-led innovation.

Serendipitous moments of knowledge-exchange with other citizens that can lead to personal growth.

Cross-fertilisation of knowledge and skills between diverse industries and individuals.

Cultural canvases

Places that can be shaped, curated, and programmed by people and communities

Feeling a sense of ownership around work that leads to a greater sense of personal and collective fulfilment.

Employee loyalty, engagement, and satisfaction.

Diverse cultural experiences that add character to corporate functions.

Employees adding to the city's cultural image and identity beyond their local community.

Mind labs

Places that invite people to come together around shared issues, ideas, and challenges

Faster, more creative problem-solving abilities in collaboration with like-minded and diverse people.

Increased productivity and faster-paced innovation.

Opportunities to engage in inter-company and cross-industry cooperation.

Companies, citizens, and employees contributing to solving societal challenges.

Mind gardens

Places that support people's individual and restorative thinking processes

Being able to concentrate, contemplate, and re-energise.

Employees completing their individual tasks faster and better.

Moments of respite in otherwise busy environments.

Diversity of space which supports a diversity of residents.

Connective tissue

Connections between places that encourage people to walk, cycle, and use public transport

MAKING IT WORK

Detailed considerations for future
leaders of workplacemaking



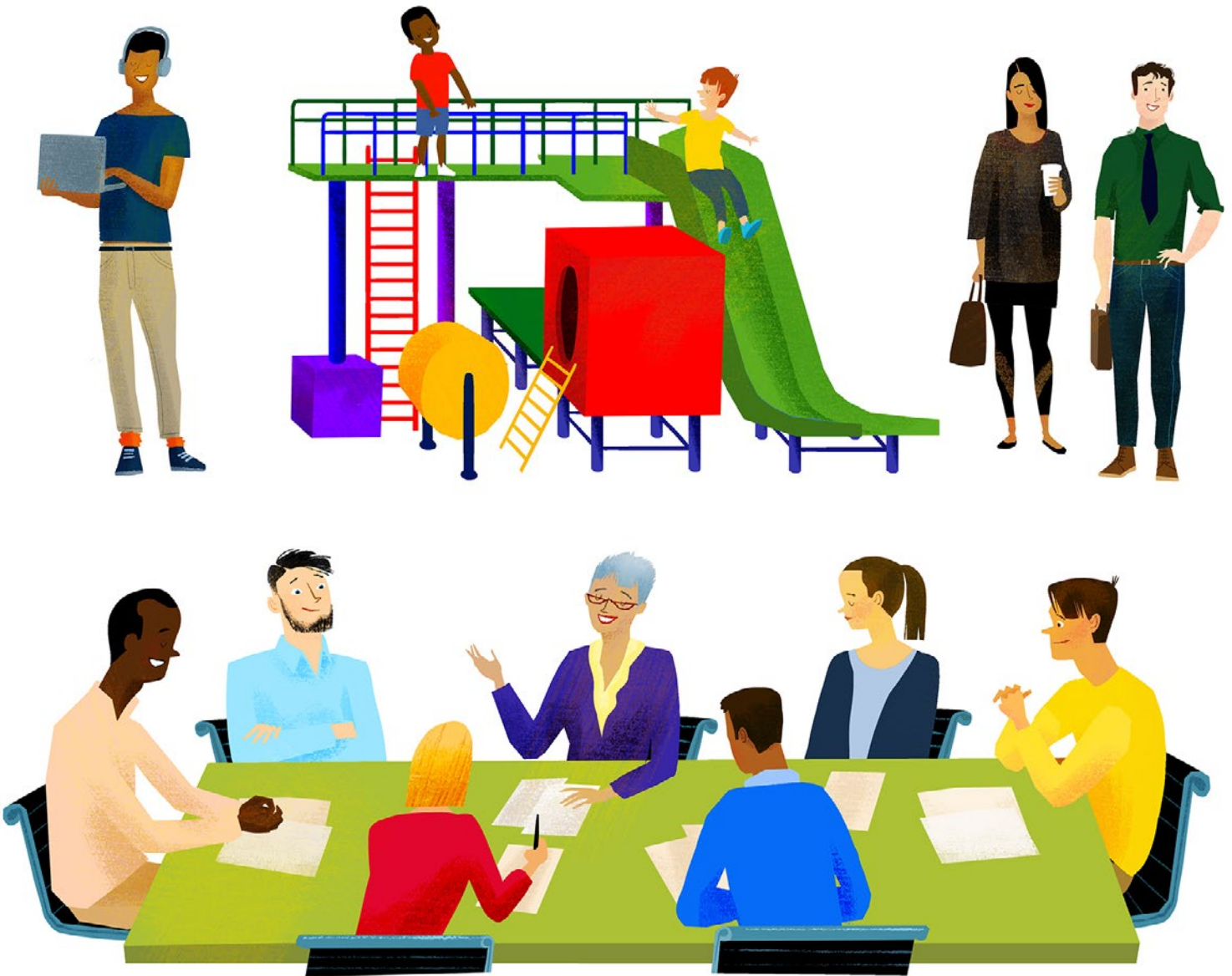
This chapter presents the practice of placemaking in greater technical and practical detail, to help the future leaders of placemaking address common enablers, barriers, and next steps.

We set out some barriers and enablers, as well as practical next steps, from the perspective of city authorities, companies, and commercial developers. These actors are all crucially interdependent to achieve common goals such as the wellbeing of people and planet, economic and cultural productivity, and urban/suburban liveability.

The section makes suggestions for how each stakeholder could begin to address the barriers and enablers to start implementing placemaking for a more productive and resilient workplace future.

“Unless you intentionally invest and think about the office and its amenities, there is a big risk that people who don’t have all the facilities will miss out. It requires a lot of intentional thinking to make workplaces, and you need to be constantly aware of the unintentional consequences and continue to adjust flexibly.”

Lisette van Doorn,
Chief Executive Europe,
Urban Land Institute, UK



The role of the employer

The employer is the daily enabler, custodian, and manager of workplaces and workplace culture. The company should engage with workplacemaking to support a variety of interactions between colleagues that ultimately lead to greater employee satisfaction, wellbeing, and productivity. By merging these activities with public space and public life, the company further benefits from crossfertilisation with other industries and stakeholders.

The seamless integration of digital technology into our spaces and culture is a key enabler from an employer's perspective to managing more complex work-life arrangements.

Technology can help distribute, plan, and programme spaces and activities to ensure that people are in the right places at the right time. Issues with teams misaligning and thereby losing out on face-to-face interaction is a common concern of flexible working, which can be addressed by implementing a digital management layer. For flexible working to be seamless, people will also have to become a lot better at interacting across physical and digital environments.



“Whilst the future is likely to be a hybrid between working at home and the office, the firms that bring their people and collaborators together in well-designed, well-located offices in cities will outcompete those that work from home. They will be more creative, innovative, entrepreneurial, better at learning and development, with higher levels of employee wellbeing and satisfaction.”

**Tom Bridges, Director Cities Advisory,
Arup Leeds, UK**

A series of significant cultural shifts by the employer are also required across every level of command to unlock the full benefits of a more flexible work-life environment.

Though many companies are overtly supporting their employees' work-from-home arrangements, there is still evidence to suggest that people who do not show up at their desks all day, every day, could be unfairly disadvantaged⁶⁵. This issue will ultimately dampen flexible working gains at the cost of employee wellbeing. It is important for companies to address implicit bias against employees that choose to work from home to increase the equality and availability of flexible working.

Culture impacts people's perceptions of what is considered acceptable at work, and these rules are typically different between in-person and online interactions. In order for the office to become more 'liveable', behaviours that support people to work and live holistically must be encouraged to align what is technically possible with what is culturally permissible. This transformation will affect every aspect of our conduct, from how people introduce themselves in meetings to the clothes they wear.

Practical steps for employers

1. Adopt a user-experience focus by engaging consistently and regularly with employees and other office users, and by measuring business success in metrics that capture the wellbeing of people alongside finances; invite employees and neighbourhood residents to engage in work-placemaking.
2. Create new company policies, tools, and partnerships that support flexible working practices; provide equal rights and opportunities for all employees whether participating from the office or from home.
3. Recast the purpose of the office building's ground floor to integrate more public functions and greater physical connections with the street and public life; security concerns can be addressed through smarter spatial planning and digital tools; short-term subleases can help attract more diverse and interesting uses.
4. Develop new operating models that enable spaces and services to be used and shared more flexibly; apply flexibility as a design principle across office furniture, layouts, seating plans, and building systems, especially at the street level where the building interacts with the public realm.
5. Co-create experiences in the neighbourhood around the office together with employees, residents, and local artists, such as parklets, street parties, and art installations. This strategy is especially relevant in commercial districts where spaces can be anonymous and disengaging.

Inspiration

- **Company-led placemaking:** Arup Fitzpark, London⁶⁶
- **Business coalitions:** Bryant Park Corporation (BPC)⁶⁷
- **Public partnerships:** Ford + Techshop⁶⁸
- **Company policies:** Basecamp "Remote: office not required"⁶⁹

“Whether people work from home or in the office, the real challenges arise when teams have to collaborate across mixed environments.”

Jeff Risom, Partner and Chief Innovation Officer, Gehl, Denmark

The role of the city

The city is the ultimate legislator, regulator, and facilitator of quality placemaking. The city should engage with placemaking to bring the productivity and enjoyment of citizens closer together, to create an overall more resilient and liveable urban model. By merging functions and creating a greater diversity of spaces, the city benefits from greater social and economic activity within planetary boundaries.

Holistic economic systems and advantageous financial models are key for placemaking to thrive as both a practice and a philosophy.

Placemaking is not without direct financial returns, but the real impact and value is typically captured at a societal level and shared amongst a variety of stakeholders. A single park will create an uptick in value for all surrounding properties, but the park itself does not generate a direct financial return. It can, however, reduce public healthcare spending. Conditions of landownership therefore become a key enabler or barrier to prioritising investments in place. The establishment of Business Improvement Districts is one way to distribute the costs and benefits of placemaking initiatives amongst its commercial beneficiaries. Another way is through local planning regulations, led by a public authority.



The economic layer also impacts how companies view the benefits of engaging with placemaking initiatives. There is sufficient evidence to prove that happy and healthy people make more productive employees, make healthy firms⁷⁰, but the link to placemaking has yet to be established. Lessons from public and community-led investments in place may serve as sufficient proof of concept until more direct examples can be established.

Public policy, financial incentives, and planning regulations are also closely tied to the behaviour of developers and businesses.

Zoning and planning laws vary considerably from country to country, and their shape and form have a direct impact on development patterns and land use. Generally speaking, regulatory frameworks tend to favour traditional approaches and established methods, which are easy to follow and approve. There will be a need to develop more flexible and agile systems to support workplace makers, potentially facilitated by new digital services.

Various development incentives could be restructured to capture the total value of placemaking to society. By incentivising private developers and companies to engage with public and semi-public placemaking, public authorities could benefit from a variety of outcomes, from reduced healthcare spending and savings on climate change mitigation to increased community resilience and business innovation.

“We try to create conversations between the City and our businesses to see how we can implement solutions that are mutually beneficial. For example, we work with Novo Nordisk and their programme Cities Changing Diabetes by understanding how cycling infrastructure and sustainable mobility influence public health.”

**Camilla van Deurs, City Architect,
City of Copenhagen, Denmark**

Practical steps for cities

1. Incentivise private developers to establish placemaking practices by providing financial and regulatory benefits that pay out over the long term; consider secondary benefits and investments into mutually beneficial initiatives rather than paying out direct cash benefits.
2. Provide placemaking design guidelines specifically for commercial real estate developers that are easy to access, understand, and fulfil; ensure that city officials have the knowledge and skills to evaluate planning applications in accordance with the guidelines.
3. Create more flexible planning permit processes that make it easy for commercial property developers and companies to integrate mixed uses, meanwhile uses, and short-term placemaking initiatives; these initiatives should still be controlled to ensure quality and public access.
4. Develop new value models that capture and quantify the long-term economic, environmental, and societal benefits of quality placemaking to build the case for the city's own investments in these spaces; capture long-term benefits.
5. Establish policies that protect people's rights whether working from home or coming to the office; these should fundamentally increase the opportunities of all people to access jobs in the knowledge economy.
6. Evaluate the current provision of workplaces across the city in accordance with the placemaking framework set out in this report; establish planning guidelines to close gaps and distribute opportunities and amenities for working more evenly across the city and suburbs.
7. Use local area plans and neighbourhood plans to actively guide individual developments towards considering and contributing to the wider whole; every new building should fit under a wider urban vision that safeguards the city's collective future.

“Developers recognise that there is land value and marketability to creating buildings that interface with the public realm. For public authorities there is a potential to refine land use controls to create better street experiences.”

Robin Abad Ocubillo, Director, Shared Spaces Program, City and County of San Francisco, US

“Coming out of lockdown, we could see some new kinds of communities that put pieces of the work environment and the city back together in new ways that are fun and surprising.”

**Anthony Townsend, Urbanist in Residence
Cornell Tech, US**

Inspiration

- **Financial incentives:** Tottenham High Street Social Value Lease⁷¹
- **Building guidelines:** Copenhagen Edgezone Guidelines⁷²
- **Inviting experimentation:** San Francisco GroundPlay⁷³
- **Public space strategies:** UN Habitat's City-wide Public Space Strategies⁷⁴

The role of the developer and landlord

The developer is the initial creator, builder, and maker of places for working and living. The developer should engage with placemaking as a way to future-proof real estate projects against short-term market fluctuations. By making places around the needs of companies, employees, citizens, and cities, developers can ensure that their assets remain relevant and desirable for years to come.

“In the future, in order to deal with the challenges and expectations of offices, landlords will have to work closer with their tenants to run buildings collaboratively.”

**Susan Freeman, Partner,
Mishcon de Reya LLP, UK**



The ways places are owned, operated, and managed can make or break their success regardless of how they have been designed and built.

The work-life recalibration is blurring a lot of boundaries, including between who owns, uses, and manages space. An office building with a well-defined envelope and a single point of entry is technically a lot easier to control than a building with many openings and public access. Concerns over security issues and unsocial behaviour⁷⁵ are typical reasons why companies have generally preferred to minimise their physical interface with the public. However, for their own employees to benefit from a more holistic workplace experience, these operational challenges have to be dealt with quite differently in the future.

“I don’t think anyone quite knows how our habits are going to change. If I was a developer, I would make sure that my buildings were flexible enough and could be adapted to new uses.”

**Peter Murray, Curator-in-Chief,
New London Architecture, UK**

The operation of space has a considerable impact on the experience of people. Places which are continuously programmed and looked after can seem welcoming and exciting, or they can feel controlled and restrictive. A lack of management can either result in places becoming dilapidated and undesirable or in places that solicit the care and attention of local users.

The built environment directly shapes the behaviour and emotions of people. The design of existing buildings and places is what has shaped much of our current reality, with introverted office blocks dominating as centres of knowledge work. These places are often static in nature and difficult to remove or retrofit. There is the possibility that the existence of such expensive assets, which are deeply connected to the systems that drive economic progress, will create a reluctance amongst owners to embrace more flexibility and risk losing profit.

While there is ample space to retrofit the suburbs to become more workable, it may be more challenging to make commercial city centres more liveable. Large, monofunctional, fixed structures will have to be manipulated, redesigned, and repurposed to better meet future demand.

Practical steps for developers and landlords

1. Build places that positively impact people's sense of comfort and wellbeing by following human-centred and context-specific design principles; variation can be achieved by subdividing large plots and working with multiple designers, architects, and artists; engage with end-users to write the initial design brief.
2. In a future marred by uncertainty and shifting economic landscapes, long-term sustainable investment models are more important than ever; develop models that invest in place and people rather in space and things to increase the chances of reaping long-term rewards; quantify the value of place in human-centred metrics.
3. Partner with local authorities and end-users to distribute risks and benefits more equally; use development trusts and formal public/private partnership models to shape holistic projects with positive economic, social, and environmental outcomes.
4. Design and build with flexibility and long-term use in mind; ground floor building elements such as openings, seating, awnings, textures, colours, and nature should be able to accommodate different uses throughout the day, year, and decades.
5. Use tactical urbanism – low costs temporary changes – and meanwhile use tactics to engage with communities and test the impact of different functions and uses early on; embed placemaking principles from the early stages of development to begin building communities before a single brick is laid.

“Private sector developers and investors are realising that they have a role to play. They are fine to take that role because they realise that if you invest in the green space, etc. the area is safe and interesting to go to and the space is active, it contributes to the value of your property and the longevity of the investment.”

Lisette van Doorn, Chief Executive Europe, Urban Land Institute, UK

6. Blur the edges around the building's perimeter by adding entrances, physical throughways, and visual transparency. This is especially important for buildings with large floor plates that occupy entire city blocks.
7. Design beyond the red line of the building plot; engage deeply with the place and people around the new development to create spatial, cultural, and economic integration; be a good neighbour.

Inspiration

- **Meanwhile use:** The YARD at Mission Rock, San Francisco⁷⁶
- **Cooperative development:** Spreefeld, Germany cooperative housing project (and German Baugruppe initiatives in general)⁷⁷
- **Public/private partnerships:** U+I Regeneration Rethought⁷⁸
- **Design partnerships:** Sluseholmen, Copenhagen⁷⁹

LOOKING FORWARD

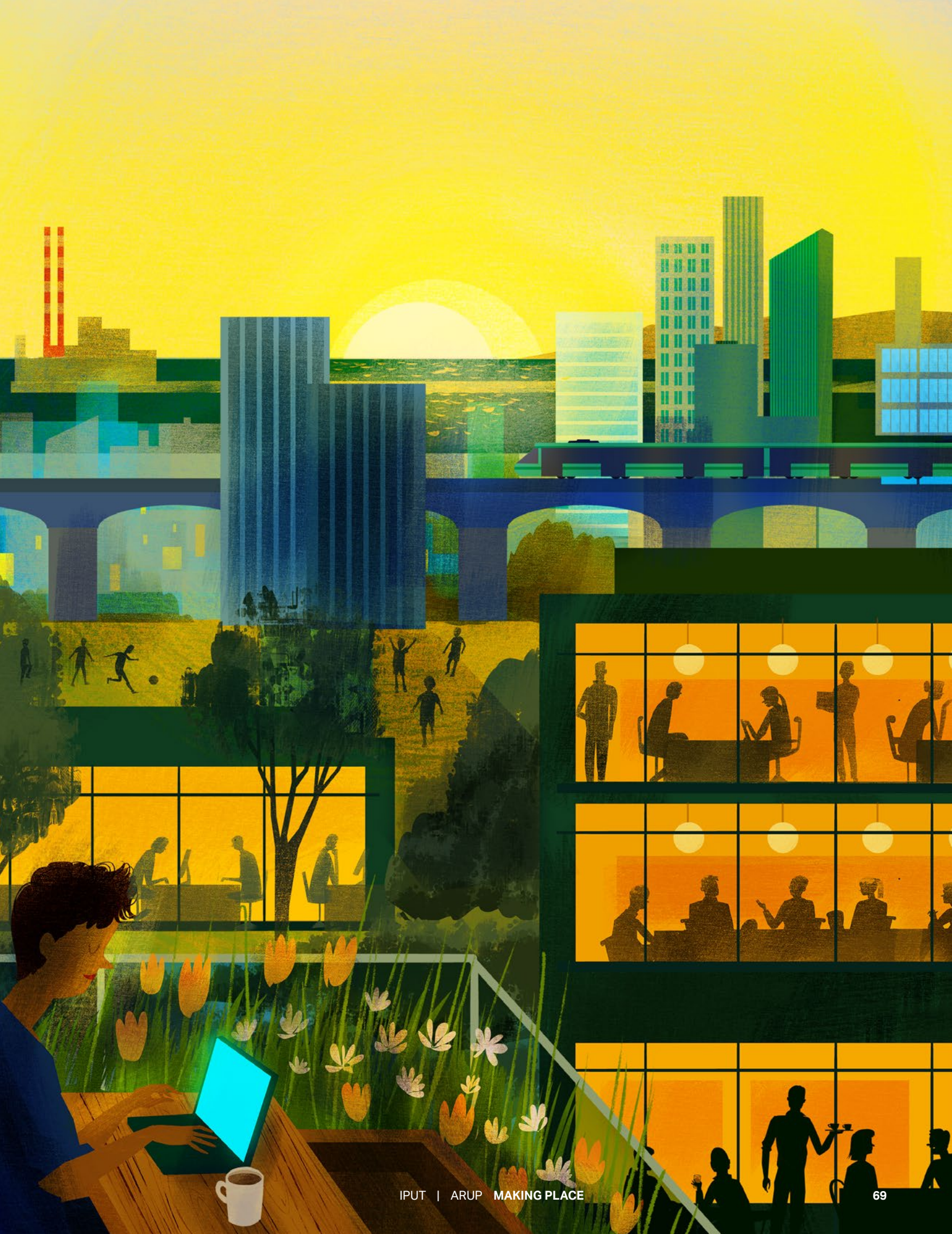
It is our hope and wish that this report will inspire a surge in workplacemaking, to better integrate work and life experiences through the urban fabric that exists between our offices and homes; to create a new typology of spaces that blur the difference between employee and citizen needs, between corporate and civic results. We are at an inflection point, with many employees unlikely to return to a five-day week in the office. The productivity of our knowledge economy and the success of our cities is likely to be impacted by how well these places succeed in bringing people together to share ideas, skills, and experiences that can lead to new, better outcomes.

Workplacemaking is both a commercial and a community design practice with a triple bottom line for every stakeholder. Companies benefit from the bringing together of employees around shared tasks, and from the exposure of employees to other industries and diverse experiences that lead to more creative problem-solving. Cities benefit from the socialising of citizens with different backgrounds, skills, and outlooks, and from the knowledge spill-over that these interactions create between industries. Commercial developers benefit from the making of more desirable assets, that are more resistant to the fluctuations of the market by taking root in the needs of people and place. We invite these stakeholders to work together to implement the recommendations of The Great Recalibration, to put the place in workplace and the life in making a living.

The productivity of our knowledge economy and the success of our cities is likely to be impacted by how well these places succeed in bringing people together to share ideas, skills, and experiences that can lead to new, better outcomes.

“We are seeing a new paradigm in economic geography: successful landlords will be stewards of their neighbourhoods rather than just their buildings.”

**Yolande Barnes,
Professor of Real Estate at The Bartlett,
University College London, UK**



APPENDIX

Contributors

Project director

Léan Doody

Authors

Camilla Siggaard Andersen

Léan Doody

Alannah McCartney

Zung Nguyen Vu

Editors

Nicola Hudson

Tom Bridges

Sophie Camburn

Andrea Carpenter

Coeditors

Zara Walsh

Anita O'Rourke

Sam Horan

Key contributors

Robin Abad Ocubillo, Director, Shared Spaces Program, City and County of San Francisco, US

Yolande Barnes, Professor of real estate at The Bartlett, University College London, UK

Susan Freeman, Partner, Mishcon de Reya LLP, UK

Fiona Gallagher, Chief Executive Officer, Wells Fargo Bank International, Ireland

Jan Gehl, Professor, Urban Design Consultant, Denmark

Dan Hill, Director of Strategic Design, Vinnova, Sweden

James Morgensen, VP Workplace, LinkedIn, US

Peter Murray, Curator-in-Chief, New London Architecture, UK

Niall Gaffney, Chief Executive, IPUT Real Estate Dublin, Ireland

Carlo Ratti, Director, MIT Senseable City Lab, US

Jeff Risom, Partner and Chief Innovation Officer, Gehl, Denmark

Malcolm Smith, Arup Fellow, Masterplanning and Urban Design, Arup, UK

Anthony Townsend, Urbanist in Residence, Cornell Tech, US

Camilla van Deurs, City Architect in the City of Copenhagen, Denmark

Lisette van Doorn, Chief Executive Europe, Urban Land Institute, UK

Illustrator

Dermot Flynn

About the employee research

All figures, unless otherwise stated, are from YouGov Plc. Total sample size was 2,050 employees in Great Britain, of which 1,341 were entirely or mainly office-based before lockdown and form the basis of the data analysis and any data points presented throughout the report. Fieldwork was undertaken between 18th – 24th June 2020. The research was carried out online. The figures have been weighted and are representative of British business size.

The employee research has been conducted using an online interview administered to members of the YouGov Plc UK panel of 800,000+ individuals who have agreed to take part in surveys. Emails are sent to panellists selected at random from the base sample. The email invites them to take part in a survey and provides a generic survey link. Once a panel member clicks on the link they are sent to the survey that they are most required for, according to the sample definition and quotas. (The sample definition could be "GB adult population" or a subset such as "GB adult females"). Invitations to surveys don't expire and respondents can be sent to any available survey. The responding sample is weighted to the profile of the sample definition to provide a representative reporting sample. The profile is normally derived from census data or, if not available from the census, from industry accepted data.

YouGov Plc make every effort to provide representative information. All results are based on a sample and are therefore subject to statistical errors normally associated with sample-based information.

Figure notes

Figure 1 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 48% of women and 40% of men said that “in the future, I would like to be able to split my work week equally between my home and my typical workplace”. 23% of women and 25% of men said that “in the future, I would like to avoid working in an office or a typical workplace”. 9% of women and 13% of men said that “in the future, I would prefer to work in a typical workplace (like an office) most of the time”.

Figure 2 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.

Figure 3 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. When asked to choose the three most important factors when choosing a job from a list of nine factors, 1% chose the “quality and character of the neighbourhood around the workplace” and 7% chose “quality and character of the physical working environment”. The most common choices were “salary and benefits” (76%), “working hours” (52%), and “stability and job security” (48%). When asked to choose the three most important factors when choosing where to live from a list of ten factors, 44% chose the “quality of the local environment”. The most common choices were “the cost of housing and living” (48%) “the quality of the local environment” (44%), and “being near to/having access to employment opportunities within a reasonable commute” (36%).

Figure 4 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 73% have worked from home 3-7 days per week during the period of disruption caused by the coronavirus. 19% have worked from the office.

Figure 5 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 91% agree that “employees benefit personally from being able to work from home or work flexible”. 4% disagree.

Figure 6 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 282 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus and who are working in London. 35% would prefer to walk or run to work. 18% would prefer driving (excluding taxis). 25% would prefer the train and 23% the tube. People were encouraged to choose up to three preferred modes of commute.

Figure 7 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,059 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus and are working in Great Britain outside London. 25% would prefer to walk or run to work. 59% would prefer driving (excluding taxis). 19% would prefer a personal bike or scooter. People were encouraged to choose up to three preferred modes of commute.

Figure 8 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. Employees were asked to list the three most important factors of the environment outside the place of work from a list of 10 options.

Figure 9 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 994 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus, and who were working from home 3-7 days per week during the coronavirus lockdown. 56% of women agree that their “sense of personal health and wellbeing has improved during the period of disruption caused by the coronavirus”, compared to 46% of men. 39% of women disagree, compared to 47% of men.

Figure 10 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 994 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus, and who were working from home 3-7 days per week during the coronavirus lockdown. 80% agree that their “appreciation of the home and local community has increased during the period of disruption caused by the coronavirus”. 14% disagree.

Figure 11 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. When asked to choose the three most important factors of the environment inside the workplace, 43% said: “being able to have social encounters with colleagues”, making this the most popular choice overall.

APPENDIX

Figure 12 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 79% agree that “employees benefit professionally from sharing a physical environment (e.g. office) with their colleagues and managers”. 13% disagree.

Figure 13 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 282 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus and who are working in London. When asked to choose the three most important factors for choosing a job, 42% said: “team and company culture and values”, making this the third most popular choice overall. Only 32% of employees working in the rest of Great Britain chose this factor, making it the fourth most popular choice overall.

Figure 14 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 282 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus and who are working in London. 88% said that they have work-related interactions with colleagues at least once a day, such as for meetings and teamwork. For the rest of Great Britain, 77% have said that they have work-related interactions at least once a day.

Figure 15 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 65% said that their “work requires them to be focused and discerning”. The split between London and the rest of Great Britain is 71% and 63% respectively.

Figure 16 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. When asked “what would you generally consider to be your ideal commute time to and from work”, 15% answered 0 minutes, 22% answered under 10 minutes, and 50% said 10-30 minutes.

Image Credits

Page 36: Nightingale 1 photograph courtesy of Peter Clarke Photography.

Page 40: Arup’s London office photograph courtesy of Arup and Paul Carstairs.

Page 41: Eilis O’Connell RHA, Six Works photograph courtesy of IPUT Real Estate and Enda Kavanagh.

Page 44: Tropical Fruit Warehouse photograph courtesy of IPUT Real Estate and Enda Kavanagh.

Page 45: Village au Pied-du-Courant photograph courtesy of Camilla Siggaard Andersen.

Page 48: Arup’s Melbourne office photograph courtesy of Arup.

Page 48: International House, Brixton photograph courtesy of 3Space.

Page 49: Wilton Park, Dublin photograph courtesy of IPUT Real Estate and Enda Kavanagh.

Page 49: Copenhagen Street Lab photograph courtesy of Camilla Siggaard Andersen.

Page 52: 555 Market Street photograph courtesy of Camilla Siggaard Andersen.

Page 52: Earlsfort Terrace photograph courtesy of IPUT Real Estate and Enda Kavanagh.

Page 56: The Verde Building photograph courtesy of Tishman Speyer Properties.

Page 56: Molesworth Street photograph courtesy of IPUT Real Estate and Enda Kavanagh.

INDEX

- 1 (1) Nikola Tesla thought of alternating-current electricity while out on a leisurely stroll. See Johnson, S. (2010) *Where good ideas come from*. Published by Allen Lane. (2) J.K. Rowling invented Harry Potter from a crowded train. See <https://www.newsweek.com/how-jk-rowling-created-harry-potter-510042>. Steve Jobs decided to propel the iPad after an encounter at a birthday party he never wanted to go to. (3) See <https://www.businessinsider.com/steve-jobs-describing-the-moment-he-decided-to-do-the-ipad-2013-5?r=US&IR=T>
- 2 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. Of this group of people, 24% would like to avoid a typical workplace like an office altogether, while 44% would like to split their work week equally between the home and the office. Please note that this group includes all typically office-based employees, whether they worked from home or the office during the coronavirus lockdown.
- 3 The YouGov survey covered the following areas; the North, East and South of England, the Midlands, London, Scotland and Wales. The survey did not cover Northern Ireland.
- 4 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus. 44% chose "quality of the local environment" as a top-three consideration for choosing where to live out of the listed options, making this the second-most popular choice overall. 48% chose "the cost of housing and living". 76% chose "salary and benefits" as a top-three consideration for choosing a job out of the listed options, while only 1.3% chose "quality and character of the neighbourhood around the workplace" and only 6.6% chose "quality and character of the physical working environment".
- 5 Yuko, E. (2020) *The Rise, Fall, and Rise of the Home Office*. Bloomberg. Retrieved from <https://www.bloomberg.com/news/articles/2020-06-11/the-rise-fall-and-rise-of-the-home-office>
- 6 Green, M. (2017) *The surprising history of London's fascinating (but forgotten) coffeehouses*. The Telegraph. Retrieved from <https://www.telegraph.co.uk/travel/destinations/europe/united-kingdom/england/london/articles/London-cafes-the-surprising-history-of-Londons-lost-coffeehouses/>
- 7 The New York Stock Exchange formed in 1792 with signing of the Buttonwood Agreement, named after the Buttonwood tree that the traders were supposed to have met under. The Gotham Center for New York City History (2018) *The New York Curb Market*. Retrieved from <https://www.gothamcenter.org/blog/the-new-york-curb-market-which-has-no-organization-whatever-the-enclosure-of-new-yorks-last-outdoor-stock-market-1900-1921>
- 8 Guinness Storehouse (2020) *Archive Fact Sheet: Terenure Housing Estate*. Retrieved from https://www.guinness-storehouse.com/Content/pdf/archive-factsheets/guinness-philanthropy/terenure_housing.pdf
- 9 Cadbury (2020) *About Bournville*. Retrieved from <https://www.cadbury.co.uk/about-bournville>
- 10 The term 'white collar worker' is widely accredited to the American writer Upton Sinclair.
- 11 The term 'knowledge worker' was first coined by the Austrian-born American management consultant, educator, and author Peter Drucker in the 1960s.
- 12 Naithani, P. (2010) *Overview of work-life balance discourse and its relevance in current economic scenario*. Asian Social Science Vol. 6. Retrieved from https://www.researchgate.net/publication/43920251_Overview_of_Work-Life_Balance_Discourse_and_Its_Relevance_in_Current_Economic_Scenario
- 13 See for example Florida, R. (2002) *The Rise of the Creative Class*. Published by Basic Books.
- 14 Benito, A. and Oswald, A.J. Andrew (1999) *Commuting in Great Britain in the 1990s*. University of Warwick. Retrieved from <https://warwick.ac.uk/fac/soc/economics/staff/ajoswald/benito.pdf>
- 15 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 994 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus, and who were working from home 3-7 days per week during the coronavirus lockdown.
- 16 Gehl, J. (2010) *Cities for People*. Published by Island Press.
- 17 Ibid.
- 18 Elliot, M.A. McColl, V.A. and Kennedy, J.V. (2003) *Road design measures to reduce drivers' speed via 'psychological' processes: a literature review*. TRL Limited. Retrieved from <https://trl.co.uk/sites/default/files/TRL564.pdf>
- 19 Jaffe, E. (2015) *Why our brains love high ceilings*. Fast Company. Retrieved from <https://www.fastcompany.com/3043041/whyour-brains-love-high-ceilings>
- 20 Arup (2016) *Cities Alive. Towards a Walking World*. Retrieved from <https://www.arup.com/perspectives/publications/research/section/cities-alive-towards-a-walking-world>
- 21 Lawlor, E. (2014) *The Pedestrian Pound*. Just Economics and Living Streets. Retrieved from <https://www.justeconomics.co.uk/uploads/reports/Just-Economics-Pedestrian-Pound-Living-Streets.pdf>
- 22 See Armbrorst, T. D'Oca, D. and Theodore, G. (2017) *The arsenal of exclusion and inclusion*. Published by Actar Publishers.
- 23 Panduro, T.E., Lundhede, T., and Thorsen, B.J. (2014) *Virksomheders værdisætning af byrummets kvaliteter*. Københavns Universitet. Retrieved from <https://docplayer.dk/816760-Virksomheders-vaerdisaetning-af-byrummets-kvaliteter-panduro-toke-emil-lundhede-thomas-thorsen-bo-jellesmark.html>
- 24 Cabc Space Design Council (2004) *The value of public space*. Retrieved from <https://www.designcouncil.org.uk/sites/default/files/asset/document/the-value-of-public-space1.pdf>
- 25 Rhone, A. et.al. (2017) *Low-income and low-supermarket-access census tracts, 2010-2015*. United States Department of Agriculture. Economic Information Bulletin Number 165. Retrieved from <https://www.ers.usda.gov/webdocs/publications/82101/eib-165.pdf?v=6118.7>
- 26 *Fields in Trust* (2020) *Green Space Index*. Retrieved from <http://www.fieldsintrust.org/News/latest-green-space-index-highlights-importance-of-parks-and-green-spaces>

I N D E X

- 27 Cars are more expensive to own and maintain, compared to walking and public transportation. See Stacey, T. and Shaddock, L. (2019) Taken for a ride. The Equality Trust. Retrieved from <https://www.equalitytrust.org.uk/sites/default/files/resource/attachments/Taken%20for%20a%20Ride.pdf>
- 28 For further information about the 15-minute city, read, for example, Professor Carlos Moreno, Leon Krier (New Urbanism), and David Sim (Soft City).
- 29 UN Environment (2017) Global Status Report 2017. Retrieved from https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf
- 30 Carbon neutral cities alliance (2020) Carbon Neutral Cities Alliance Members. Retrieved from <https://carbonneutralcities.org/cities/>
- 31 Brody, Jane E. (2017) Social Interaction is Critical for Mental and Physical Health. Published by the New York Times. Retrieved from <https://www.nytimes.com/2017/06/12/well/live/having-friends-is-good-for-you.html>
- 32 Carpenter, Ann; "Social Ties, Space, and Resilience"; Federal Reserve Bank of Atlanta, September 2013
- 33 Brody, Jane E. (2017) Social Interaction is Critical for Mental and Physical Health. Published by the New York Times. Retrieved from <https://www.nytimes.com/2017/06/12/well/live/having-friends-is-good-for-you.html>
- 34 All statistics in this paragraph reference the same source. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 35 Cullen, Zoe B. and Perez-Truglia, Ricardo (2019) The Old Boys' Club: Schmoozing and the Gender Gap. Published by the National Bureau of Economic Research. Retrieved from <https://www.nber.org/papers/w26530>
- 36 Manuti, Amelia et.al. (2015) Formal and informal learning in the workplace: a research review. Published by International Journal of Training and Development. Retrieved from https://www.researchgate.net/publication/271772029_Formal_and_informal_learning_in_the_workplace_A_research_review
- 37 Hawley, K. (2012) Trust - a very short introduction. Published by Oxford University Press.
- 38 Dews, F. (2015) These maps from Raj Chetty show that where children grow up has a major impact on their lifetime earnings. Brookings. Retrieved from <https://www.brookings.edu/blog/brookings-now/2015/06/02/these-maps-from-raj-chetty-show-that-where-children-grow-up-has-a-major-impact-on-their-lifetime-earnings/>
and
Wolfers, J. (2015) Why the New Research on Mobility Matters: An Economist's View. The New York Times. Retrieved from <https://www.nytimes.com/2015/05/05/upshot/why-the-new-research-on-mobility-matters-an-economists-view.html>
- 39 Morgan, J. (2014) Why Every Employee Should Be Building Weak Ties At Work. Forbes. Retrieved from <https://www.forbes.com/sites/jacobmorgan/2014/03/11/every-employee-weak-ties-work/#5a6c3c723168>
- 40 All statistics in this paragraph reference the same source. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 41 Ibid. 21% of employees in organisations with more than 250 employees strongly agree, compared to 16% of employees in organisations with less than 250 employees.
- 42 Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 350 employees under 35 years who were entirely or mainly office-based before the period of disruption caused by the coronavirus and working from home 3-7 days per week during the period of disruption caused by the coronavirus.
- 43 Gorgul, E. et.al. (2016) Sense of place or sense of belonging? Developing guidelines for human-centered outdoor spaces in China that citizens can be proud of. Procedia Engineering. Retrieved from https://www.researchgate.net/publication/319634664_Sense_of_Place_or_Sense_of_Belonging_Developing_Guidelines_for_Human-centered_Outdoor_Spaces_in_China_that_Citizens_Can_be_Proud_of
- 44 Gallup (2008) The Five Stages of Workplace Tribes. Retrieved from <https://news.gallup.com/businessjournal/106903/five-stages-workplace-tribes.aspx>
- 45 CABE and Asset Transfer Unit (2010) Community-led Spaces. Published by the Commission for Architecture and the Built Environment and the Asset Transfer Unit. Retrieved from https://www.designcouncil.org.uk/sites/default/files/asset/document/community-led-spaces_1.pdf
- 46 Communications MDR (2016) Environmental scan of the culture sector: Ontario culture strategy background document. Prepared for the Ministry of Tourism, Culture, and Sport Communications. Retrieved from <https://www.ontario.ca/document/environmental-scan-culture-sector-ontario-culture-strategy-background-document>
- 47 All statistics in this paragraph reference the same source. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 48 Melis, A.P. (2013) The evolutionary roots of human collaboration: coordination and sharing of resource. Annals of the New York Academy of Science. Retrieved from <https://doi.org/10.1111/nyas.12263>
- 49 Harvard Business Review (2018) How collaboration wins: leadership, benefits and best practices. Retrieved from <https://hbr.org/resources/pdfs/comm/citrix/HowCollaborationWins.pdf>
- 50 Docherty, I., Gulliver, S. and Drake, P. (2004) Exploring the Potential Benefits of City Collaboration, Regional Studies, 38:4, 445-456. University of Glasgow. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/03434002000213950>

INDEX

- 51 All statistics in this paragraph reference the same source. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 52 Ibid. People working in businesses with more than 250 employees are 11% more likely to interact with colleagues at least once a day than people working in businesses with less than 250 employees. People working in London are 14% more likely to interact with colleagues at least once a day than people working in the rest of Great Britain.
- 53 Friedman, L.F. and Loria, K. (2016) 11 scientific reasons you should be spending more time outside. Business insider. Retrieved from <https://www.businessinsider.com/scientific-benefits-of-nature-outdoors-2016-4?r=US&IR=T#7-sharper-thinking-and-creativity-7>
- 54 Griffey, H. (2018) The lost art of concentration: being distracted in a digital world. The Guardian. Retrieved from <https://www.theguardian.com/lifeandstyle/2018/oct/14/the-lost-art-of-concentration-being-distracted-in-a-digital-world>
- 55 Oppong, T. (2019) To achieve real progress, focus on high-value productive actions. Thrive global. Retrieved from <https://thriveglobal.com/stories/make-progress-productivity-work-life-career/>
- 56 All statistics in this paragraph reference the same source unless otherwise stated. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 57 Ibid. 78% of those who earn more than £70,000 a year say their work requires them to be focused and discerning, compared to 53% of those who earn less than £25,000 a year.
- 58 Ibid. In London, 43% ranked space for quiet and focused individual work as a top-three consideration amongst the listed options, compared to 34% of those working in the rest of Britain. 71% of people working in London say that their work requires them to be focused and discerning compared to 63% of people working in the rest of Britain.
- 59 Montgomery, C. (2013) Happy City. Published by FSG Books.
- 60 Collected body of work by Robert E. Thayer while affiliated with California State University, Long Island. For example (1994) Self-regulation of mood: strategies for changing a bad mood, raising energy, and reducing tension. Journal of personality and social psychology, Vol 67.
- 61 Arup original interviews with employees working from home. Conducted June 2020.
- 62 All statistics in this paragraph reference the same source unless otherwise stated. Employee Survey. Conducted by YouGov on behalf of Arup and IPUT. June 2020. Survey results for 1,341 employees who were entirely or mainly office-based before the period of disruption caused by the coronavirus.
- 63 Ibid. Survey results for 994 typically office-based employees who worked from home 3-7 days per week during the period of disruption caused by the coronavirus.
- 64 Ibid. Survey results for 1,341 typically office-based employees. Respondents were asked to choose three main factors for their choice of commute after the period of disruption caused by the coronavirus out of the listed options. 51% chose "time and speed of the commute to my workplace", 37% chose "cost and expense of the overall commute", 30% chose "convenience and availability of transport options from my home to my place of work".
- 65 The Economist (2012) Out of sight, out of mind. Retrieved from <https://www.economist.com/business/2012/10/13/out-of-sightout-of-mind>
- 66 Retrieved from <https://www.arup.com/projects/fitzpark>
- 67 Bryant Park Corporation (2020) Retrieved from <https://bryantpark.org/about-us>
- 68 Retrieved from <https://www.wired.com/2012/05/ford-techshop/>
- 69 Retrieved from <https://basecamp.com/books/remote>
- 70 Ward, G. De Neve, J. and Krekel, C. (2019) It's official: happy employees mean healthy firms. World Economic Forum and London School of Economics. Retrieved from <https://www.weforum.org/agenda/2019/07/happy-employees-and-their-impact-on-firmperformance/>
- 71 Greater London Authority (2019) High streets & town centres: adaptive strategies. Page 156. Retrieved from https://www.london.gov.uk/sites/default/files/ggbd_high_streets_adaptive_strategies_web_compressed_0.pdf
- 72 Københavns Kommune (2018) Kantzoner i København. Administrationsgrundlag. Retrieved from https://kk.sites.itera.dk/apps/kk_pub2/index.asp?mode=detalje&id=1819
- 73 City & County of San Francisco (2020) See <https://groundplansf.org/parklets/>
- 74 Un Habitat (2020) City-Wide Public Space Strategies: a Guidebook for City Leaders. United Nations Human Settlements Programme. Retrieved from https://unhabitat.org/sites/default/files/2020/03/cwpss_guidebook_20200116.pdf
- 75 See Armbrorst, T. D'Oca, D. and Theodore, G. (2017) The arsenal of exclusion and inclusion. Published by Actar Publishers.
- 76 Retrieved from <https://gehlpeople.com/projects/mission-rock-neighborhood-revitalized/>
- 77 Retrieved from <https://theconversation.com/reinventing-density-how-baugruppen-are-pioneering-the-self-made-city-66488>
- 78 U+I is a regeneration company specialising in working in partnership with local authorities and other public sector organisations. Retrieved from <https://www.uandiplc.com/>
- 79 The core of Sluseholmen was developed by a single practice, which set out "game rules" for other architects to follow in the shaping of different aesthetic expressions and design details that give the neighbourhood a great sense of character and variation. Retrieved from <https://www.archdaily.com/330652/sluseholmen-arkitema-architects-sjoerd-soeters>

IPUT REAL ESTATE DUBLIN

We are Ireland's leading commercial property investment company and the largest owner of offices and logistic assets in Dublin. We are a long-term investor with a 50-year track record in real estate. We own and manage a portfolio comprising over 5 million sq ft, with a net asset value of over €2.75 billion.

We have an international reputation for delivering the highest quality in everything we do. Our goal is to own exceptional buildings that set new standards in design and sustainability in order to attract best-in-class occupiers, drive long-term shareholder value and contribute positively to the communities in which we work. By sustainably investing in the public realm, we make a positive contribution to the social and cultural fabric of our city.

We are passionate about our buildings and our presence in the city. We make long-term investment decisions for the benefit of our stakeholders, with an emphasis on excellence in design, sustainability and the occupier experience.

iput.com



ARUP

Arup is an independent firm of designers, planners, engineers, architects, consultants and technical specialists, working across every aspect of today's built environment. Together we help our clients solve their most complex challenges – turning exciting ideas into tangible reality as we strive to find a better way and shape a better world. Founded in 1946 by Sir Ove Arup, a gifted engineer-philosopher with an original and restless mind, our firm has always had a keen sense of purpose. Arup now has more than 14,000 people working in 88 offices in 33 countries and our projects have taken us to more than 160 countries.

For over seven decades Arup has been at the forefront of the most ambitious and challenging design and engineering. From concert halls to national stadiums, renewable energy to driverless cars, we continue to add to that history every day. As an independent firm, owned in trust for its members, we are guided by our founder's spirit and principles. We choose work where we can make a real difference in the world, stretch the boundaries of what is possible, delight our clients and achieve socially valuable outcomes.

arup.com

IPUT Real Estate Dublin

47-49 St. Stephen's Green
Dublin 2, D02 W634, Ireland

T +353 (0) 1 661 3499
E info@iput.com

IPUT Enquiries

DUBLIN

Anita O'Rourke
E aorourke@iput.com

Zara Walsh
E zwalsh@iput.com

Media Enquiries

DUBLIN

Jonathan Neilan
FTI Consulting

T +353 (0) 1 765 0886
E jonathan.neilan@fticonsulting.com

LONDON

Claire Turvey
FTI Consulting

T +44 (0) 20 3727 1241
E claire.turvey@fticonsulting.com

ARUP

50 Ringsend Road
Dublin, D04 T6X0, Ireland

T +353 (0) 1 233 4455
E dublin@arup.com

Media Enquiries

DUBLIN

Joe Burns
Ireland Group Leader,
Buildings

T +353 (0) 1 233 4455
E dublin@arup.com

CORK

Liam Luddy
Europe Science,
Industry & Technology Leader

T +353 (0) 21 422 3200
E liam.luddy@arup.com

IPUT Disclaimer:

This report has been published by IPUT Plc (the "Company" or "Fund") for information purposes only. Certain information contained herein may constitute "forward-looking statements". No representation, warranty, undertaking, express or implied, is or will be made or accepted by IPUT Plc or by any of its Directors, Employees or Advisors in relation to the accuracy or completeness of this report or any other written or oral information made available in connection with this report. Any responsibility or liability for any such information is expressly disclaimed.

ARUP Disclaimer:

Arup Disclaimer: In accordance with our normal practice, we would state that this report is for general informative purposes only and does not constitute a formal valuation, appraisal or recommendation. It is only for the use of the persons to whom it is addressed and no responsibility can be accepted to any third party for the whole or any part of its contents. It may not be published, reproduced or quoted in part or in whole, nor may it be used as a basis for any contract, prospectus, agreement or other document without prior consent, which will not be unreasonably withheld. Our findings are based on the assumptions given. As is customary with market studies, our findings should be regarded as valid for a limited period of time and should be subject to examination at regular intervals. Whilst every effort has been made to ensure that the data contained in it is correct, no responsibility can be taken for omissions or erroneous data provided by a third party or due to information being unavailable or inaccessible during the research period. The estimates and conclusions contained in this report have been conscientiously prepared in the light of our experience in the property market and information that we were able to collect, but their accuracy is in no way guaranteed.



IPUT REAL ESTATE
DUBLIN

IPUT plc
47-49 St. Stephen's Green, Dublin 2, D02 W634, Ireland

T +353 1 661 3499
info@iput.com

iput.com

