THE FUTURE OF WORK:
IN & OUT OF THE OFFICE

Contents

Editorial

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The future of work:
new practices, hybrid places
and multifaceted regions

Work, housing, travel, training, consumption, healthcare and entertainment… will never be the same again! We are living in unprecedented times of change and uncertainty that is revolutionising uses and lifestyles, with a very real impact on work, and ultimately on real estate and regional planning.

Not only did the global pandemic we have lived through accentuate certain trends that were already underway, such as the use value of office space, housing and outdoor spaces, it also changed how we relate to time, space and the essential things. The massive development of remote working – which at first we had to endure because of the pandemic – has shaken up the tertiary and residential real estate market and, as a result, the territorial balance. Other major trends, as diverse as climate change, the development of new technologies, geopolitical tensions and the economic and social crisis, are also having an impact on and profoundly transforming our relationship to work. In this context, we have re-examined our working methods using a holistic and collaborative approach that takes account of practices, methods, rhythms, organisations, corporate strategies and societal aspirations as we have sought

to understand the factors of change and their impact on how workplaces are designed and laid out, and how they operate. This covers offices, housing and third places in all their diversity, as well as the new geographies of work and their influence on the regions.

Consider working in the future… How will working methods be organised? What role will the office play? What value propositions will attract and retain talented individuals? What residential trends are linked to new modes of work? What will the balance be between office work and remote work?

The relationship with work is impacted by new challenges such as improving health and well-being at work, encouraging social bonds within the company and fostering cohesion, defining spaces according to uses, thinking "phygital" to make face-to-face and remote exchanges more seamless, adopting a hybrid model that promotes flexibility and limiting environmental impacts, while maximising the intangible value of the workplace. This global transformation is becoming strategic for organisations that have to implement these changes for the

long term. New working methods are truly becoming a lever for employee commitment and for attracting future talent.

Hybrid work, a search for meaning, better work-life balance, management through trust, flexibility, socialisation and the aspiration to well-being are the new "drivers" of the model sought by workers. More than ever, the question of the employee experience is central to people's concerns.

This transformation of the relationship to work is driving places and spaces to reinvent themselves to accommodate these new organisational models, work rhythms and aspirations. The many vital factors that need to be integrated into the design and layout of workspaces include hybridisation and increased intensity of use, modularity, scalability, local services, comfort and well-being, digitalisation, social interactions and collaboration, sustainability and openness to the city and its inhabitants. It's also a much broader territorial transformation, with a new balance to be found between office, home, third place and coworking to meet the city's need for everything to be at a short distance. In addition, the creation of satellite workplaces could lead to a territorial rebalancing at regional, perhaps national, level.

So there are plenty of challenges that need to be met in order to adapt to the diversity of the "New Ways of Working". Against this background, Bouygues Construction carried out a multi-partner foresight exercise with around one hundred stakeholders to analyse changes in working methods and propose possible futures. The principles of the approach are based on a systemic understanding of the subject, exploratory forecasting through collaborative co-design workshops and the involvement of a multidisciplinary team. So that this approach would be relevant, the team involved in the project included specialists with varied and complementary profiles: experts and researchers from the academic world and key organisations such as ANDRH (the French national association of HR directors) and ANACT (the French national agency for improving working conditions), HRDs, QWL consultants, companies, development and property professionals (brokers, developers, investors, co-living and coworking providers, architects, operators), as well as players in the field of social dialogue, users, and Bouygues group employees. The methodology used is at the crossroads of a number of interacting disciplinary fields, including architecture, sociology, redevelopment, economics, urban planning, human resources and law.

The aim of this new trend book, "Working in the Future," is to inspire and encourage action to prepare for the future by sharing ideas, testimonials, good practices and innovative initiatives through an open and systemic approach.

Faced with the complexity of the issues at stake and the current sense of uncertainty, transitions linked to new working methods in the broadest sense of the term require us to project, anticipate and call upon new modes of cooperation in order to find relevant responses by harnessing collective intelligence and developing a multidisciplinary culture to improve the quality of life, while respecting the limits of our planet.

We hope you enjoy reading it!

> " New working methods are truly becoming a lever for employee commitment and for attracting future talent. "

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Working in a changing world

> "In the world of work, practices, methods, rhythms and organisational modes are undergoing profound transformation, as in the case of the development of remote working, which took centre stage during the pandemic."

Covid-19 has both exposed and accelerated numerous pre-existing trends (offshoring and relocating, changes in working hours and rhythms, a search for meaning and balance in a tense societal context), forcing companies to think and decide more clearly about their future working methods and locations.

On the one hand, the changes that are in progress are linked to an increase in internal and external interactions for companies, owing to the growing expectations of citizens, the development of systemic thinking that includes the environment, and new technologies that encourage automation, platformisation and the development of remote interaction.

On the other hand, the risks that companies are facing make it necessary to better manage interactions between employers and employees, between private and personal life, between climate change and economic activity, and between interconnected IT systems.

What are the wider trends that are driving these developments?

What aspirations does society have for work?

At the core of an ageing and divided society

A more polarised society

The debates and divisions running through society are gaining greater attention, exacerbated by a rise in certain inequalities, the effects of social media and increasingly radicalised political discourse. These tensions played out spectacularly in the United States during the Capitol attack, in France during the "yellow vest" protests and to varying degrees around the world during the pandemic. They are conditioning the future of work, as companies are a reflection of social relations. More specifically, we can see the emergence of a global opposition between the communities characterised by David Goodhart[1] as the "anywhere" community (mobile, liberal, educated, the winners of globalisation) versus the "somewhere" community (rooted, conservative, the losers of globalisation).

Some current developments in work patterns, such as the rise of remote working, further reinforce this polarisation, notably by creating a gap between functions that lend themselves or otherwise to remote working, or by excluding those with little digital training, which can create a sense of injustice. The pandemic has introduced the notion of "essential" versus "non-essential" occupations to this division. Conversely, though, the implementation of remote working within a company makes it possible to consider broadening recruitment to wider geographical areas, and thus to include populations less integrated into the major metropolitan areas. In this respect, it could be a factor of inclusion.

An ageing society, with a generational turnover of the workforce

Although there are significant local disparities, the demographic data in Europe is irrefutable: a drop in the number of births, coupled with longer life expectancy, is leading to an ageing population, with population growth only made possible by immigration.[2] The proportion of the population aged over 65 is on the rise and the proportion of working people is declining, but the boundary between working life and retirement is becoming more permeable. Moreover, although not classified as work, the activities of retirees, especially in the voluntary sector, are often similar to having a job.[3]

Meanwhile, new generations are entering the labour market with new aspirations with regard to work, which remains central to the lives of Generation Z. Although the dominant model of stable salaried employment (permanent contracts) continues to prevail, there is a tendency for there to be less attachment to a particular company, reflecting the gradual weakening of corporate identities in favour of more individual ones. And because they were born with technological tools for both leisure and work at their fingertips, these new members of the workforce tend to set fewer boundaries between their personal and professional spheres. They also express expectations of companies that go beyond purely economic transactions, raising questions about their overall contribution to society and the environment more forcefully than previous generations did.[4]

FIGURE IT OUT

10%

is the estimated world average of working time in relation to total lifetime.[5]

The changing place of work as a part of life: time and values

Less time spent at work over a lifetime?

Working time can be seen to have decreased significantly overall over the last fifty years. In France, for instance, employees work an average of 350 hours less per year than in the mid-1970s.[6] At the same time, life expectancy has risen significantly, at least until just prior to the emergence of Covid 19.[7] This trend is repeated throughout the OECD countries, where it is now estimated that people work for an average of 9% of their lifetime.[8] This is probably the lowest proportion ever since the first Agricultural Revolution in prehistoric times combined with the highest overall standard of living, and has been made possible by the mechanical use of various energy sources to replace human labour. There is, however, an ongoing philosophical debate about the role of work in human life, whether it is seen as an essential source of fulfilment or as an alienating nuisance that we would happily do without.

[1] David Goodhart, *The Road to Somewhere,* 2017.
[2] Gilles Pinson, *Enjeux et perspectives démographiques* [Demographic Challenges and Perspectives], Institut National d'Études Démographiques, 2020.
[3] Diane-Gabrielle Tremblay, Le travail, la nouvelle retraite! [Work, the New Retirement], *The Conversation,* 2019
[4] Anne-Sophie Bellaïche, Pourquoi les générations Y et Z bouleversent l'entreprise [Why Generations Y and Z are Disrupting Business], *L'Usine Nouvelle,* 2019.

[5] Antoine Buéno, *Future: Notre avenir de A à Z* [Future: Our Future from A to Z], 2020, p.631
[6] INSEE, social portrait.
[7] The life expectancy of people in good health, on the other hand, remains static.
[8] Buéno, *op.cit.*

Company employees face both opportunities and threats from new ways of working

Employees are critical stakeholders in the demand for future ways and places of working. Their aspirations are complex and varied, however. Some players have tried to define profiles to gain a better understanding of their needs. In a survey on happiness at work, Microsoft, for example, presents four socionic types of employees defined by their relationship to work, ranging from the "passionate", who seek pleasure at work, to the "resigned", for whom work is nothing more than a source of income. While taking account of the diversity of expectations and the individuality of each employee, the following main trends stand out:

■ Working flexibly for a better quality of life

Employees want not only to be able to choose where they work day by day, but also to be able to choose and adjust their working hours so that they can achieve a better work/life balance. While 83% of people in France consider their work/life balance to be good, 17% still consider it to be bad.[6] Cutting down on commuting time, being able to sleep longer and being more flexible in choosing where to live through working from home seem to contribute strongly to a better quality of life.

■ Management through greater trust and empowerment

Employees want to see their scope of decision-making expanded, and to have more flexibility. This aspiration was particularly highlighted during the pandemic. However, while remote working seems particularly compatible with management by trust and autonomy, it can also lead to excessive control. An international study[7] found that 48% of employees surveyed considered they were being micro-managed, i.e. continuously monitored by their hierarchy task by task when working from home, and 59% were afraid of being monitored when using their remote equipment.

■ Training, learning and developing in the company

With the rise of remote working, integration and learning in companies can be more difficult. Researchers at the Center for Creative Leadership in Princeton showed back in the 1970s that 10% of learning is acquired through formal training; 20% through non-formal learning, moments taken during working hours, without objectives or identified means, but driven by the intention to learn and to pass on; and 70% through informal learning, i.e., everyday tasks, without specific organisation or structure. A whole portion of the learning process therefore needs to be rethought with the rise of remote working.

FIGURE IT OUT

66%
of employees surveyed in different countries now rank having a better work-life balance as their top priority, far ahead of a comfortable salary (49%).[5]

77%
of employees surveyed in 12 countries thought that training in technology and digital skills was critical to business success in 2021.[8]

👁 Read more

Mazars / Opinionway, "Future of work: Quelles attentes de la Gen Z pour l'entreprise de demain?" [What does Gen Z expect from the company of the future?], January 2019.

A search for meaning in personal and professional life

In the United States and in a number of other parts of the world, the phenomenon known as the "Big Quit" is making its mark, with particularly high monthly resignation rates in 2021, reaching almost 7% in certain sectors such as hospitality and catering[3], which are also having trouble recruiting. One reason that has been suggested is that the search for professional meaning is becoming a more decisive factor in the choice of work, a trend that has been strongly accentuated by the pandemic. But this term can cover several realities: for some, a "search for meaning" corresponds to the choice of a job they like; for others, it is above all a moral commitment; for some executives, it may be a search for a career that is closer to the field; finally, for many, it is the search for a balance between work and family life, particularly through reasonable working hours. Basically, the question arises of the orders of value: do we define our identity primarily through our work, do we strictly separate the personal and the professional or do we mix the two more easily?

New demands made by society on companies

Society's demands on companies go beyond simple Corporate Social Responsibility (CSR), and they are increasingly making themselves heard. In 2020, a coalition of European business leaders launched a wide-ranging public consultation on the role of the companies of the future, allowing everyone to define their priorities for action through the "Barometer of citizens' priorities for the company of the future".

FIGURE IT OUT

55%
of people in France thought about the meaning and usefulness of their work in the six months following the start of the pandemic, rising to 61% among 18-24 year olds.[1]

58%
of people in France regard themselves as being somewhat fulfilled in their work, but 20% claim that they are not.[2]

95%
of people in France feel that companies should be actively involved in social issues.[4]

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[1] YouGov poll for Cardiosens of 4,000 people in France, August 2020.
[2] Harris Interactive survey for the Cetelem Observatory, February 2021.
[3] Aux États-Unis, le mouvement de la grande démission s'étend au-delà de la tech [The Big Quit movement in the U.S. reaches beyond the tech sector], *Les Echos,* October 2021.
[4] Ifop, study for the Materiality Observatory, 2019.

[5] JLL, Employee preference barometer, 2021. [6] Ipsos survey, December 2020. [7] Capgemini Research Institute, October 2020.
[8] CISCO, *Autonomie et flexibilité des collaborateurs dans le nouveau monde du travail* [Employee autonomy and flexibility in the new world of work], 2020

Interview

Guénaëlle Gault

CEO of the Observatory of Society
and Consumption (ObSoCo)

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With the intent to restore meaning to life in general, there is a repositioning of work: many people would like to give less weight to work in their lives, but not less importance.

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How would you describe the changes that can be observed in the aspirations of the population?

G.G.: We do regular work on the imaginary worlds of the French through the Observatory of Utopian Perspectives, which is an important angle to understand society. All individuals have their own aspirations and imaginations on the one hand, and a framework of constraints on the other: their behaviour is a trade-off between all of these. By testing different utopian systems very closely, we have observed a divergence in recent years, a sort of crisis of modernity: a large part of the population now aspires to a lifestyle change. It appears that more than half of the French population aspires to an ecological utopia, organising society and the economy around a form of sobriety (quality over quantity); about a third of the population is oriented towards a security utopia, claiming a singular identity; finally, less than 15% favour the techno-liberal utopia, centred on technological progress in the continuity of modernity. Each individual saw the pandemic in terms of their own aspirational system, and since then, the initial findings seem to show that these preferences have intensified.

Looking beyond the divisions between these three utopias, what concrete developments can be seen in society?

G.G.: We are living through an ecological transition on the one hand, and a digital transition on the other. Both of these transitions are permeated by a fundamental change that is never talked about: the individualisation of society – not to be confused with individualism! This individualisation is a sociological process whereby individuals gradually break free from groups and injunctions to make their own life

choices. With each generation, this becomes more and more pronounced. Individualisation has a very liberating dimension: through greater autonomy, more accountability, everyone has the feeling that they can act with an impact on the world; but its counterpart is a centrifugal dynamic of society, where the lowest common denominator becomes the individual: this makes society more fragmented, more fractured, and the links and collectives have to be rebuilt from the bottom up. Utopian visions are positioned in relation to these underlying movements, while the pandemic has intensified this equation: at the time of the first lockdown, what appeared to be essential and indispensable was food, and the Internet.

What impact do these transformations have on the relationship to work?

G.G.: Aspirations include a growing desire for a profound and alternative transformation of society, of our development model and of our way of life. Concretely speaking, individual transitions are beginning. This obviously has many consequences on the relationship with work, always in the triad of aspirations / constraints / behaviour. With the intent to restore meaning to life in general, work is repositioned: many people would like to give less weight to work in their lives, but not less importance. The thing is that it is reinvested with fundamental expectations, it has to be given meaning: hence the desire to retrain, with some people who actually take the plunge. People are still invested in their work, but they are more likely to walk away if they feel an imbalance. For example, some people want a more balanced living environment, a place to live that is not sacrificed for work. Those who can work from home see a constraint lifted in the interplay of aspirations, constraints and behaviour.

Environmental change

Environmental challenges are affecting companies and transforming the way they operate. Whether it is to adapt to the impacts of climate change or to preserve resources, companies are making changes to their working practices.

Carbon footprint

More and more companies are vocal about their commitment to reducing their greenhouse gas emissions. Their working methods and locations are crucial factors. Potential solutions for reducing companies' carbon footprints include choosing a low-carbon, energy-efficient workplace that is close to where employees live and is easily accessible by soft modes of transport, and encouraging the adoption of environmentally friendly working methods (such as a virtuous organisation of remote working to limit the digital carbon footprint). It is also important to ensure that any announcement of measures to achieve carbon neutrality is followed up by actions that demonstrate the sincerity of their implementation.

FIGURE IT OUT

65%
of business leaders maintain that the climate forms part of their corporate strategy.[1]

73%
of them claim they are capable of reducing their emissions in the next five years, but only

13%
would do so to a significant

extent.

59%
of executives see science and technology as "the" solution to climate and environmental problems.[2]

82%
of people in France surveyed think that companies with a negative carbon footprint should be fined.[3]

[1] Study commissioned by the Observatory of Materiality, sponsored by the Institute of Responsible Capitalism, carried out by Ifop on representative samples of 1,000 people in France, 1,002 people in Germany and 1,009 people in Poland, aged 18 and over, 2019.
[2] BPI France, 2020.
[3] Ifop for the Cercle de Giverny: *L'État, les entreprises et la RSE* [The State, companies and CSR], August 2020.

Adapting work to climate change

Whether it is to safeguard their activities, to protect themselves against the vulnerability of a supplier or a customer, or to maintain the well-being of their employees, particularly when it comes to conditions in the summer, companies are feeling the need to build up resilience to face current and future climate change. Rethinking the characteristics of their buildings is only one part of adapting to climate change; it is also necessary to reconsider the vulnerability of their working methods, future development paths, etc.

Depletion of natural resources

The growing scarcity of natural resources is affecting the production costs of products that depend on these resources. More globally, this means that the structure of the economy and of jobs is directly linked to the stocks of resources available for production. Consequently, modes and places of work are obliged to adapt to variations in stocks of resources on which they depend. During the semiconductor shortage, for instance, many companies had to modify their IT equipment renewal policies to cope with lengthier procurement times.

Work and biodiversity

Companies have a major role to play not only in reducing their impact on the environment, but also in restoring and enhancing biodiversity. As they form the basis of the food chain, the preservation of ecosystems is essential to agricultural production, and also contributes to the maintenance of water, air and soil quality. Taking biodiversity into account modifies workplaces and working methods, which will be designed to limit their impact on the environment and encourage its conservation or rehabilitation. Actions to promote biodiversity obviously improve the quality of life in and around companies' sites.

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Benefits of a natural environment in the workplace

Interactions between the environment and working practices also have a positive dimension. Recent research has demonstrated a clear impact of nature on physical, emotional and cognitive health and well-being, in turn contributing to long-term work efficiency. Among many examples, bird song is the most likely of all sounds to stimulate attention and reduce stress[1]; a 90-minute walk in a natural environment reduces bad moods and depression[2]; and nearby green spaces (less than 3 km away) correlate positively with health.[3] Looking at it like this, there is a tendency to adopt workspaces that are somehow integrated with nature or include representations of natural environments: a 90-second exposure to a photograph of a forest favours emotional balance and stress reduction.[4]

The environmental impacts of remote working

Remote working has environmental implications. According to a study by Carbone 4, home-work journeys account for about 15% of transport-related emissions in France (excluding air and sea transport), i.e. about 20 MtCO$_2$eq. In addition to daily commuting, business travel is also a factor: according to the Pegasus Chair, video-conferencing has the potential to replace around four out of every ten business flights.[5]

The Ademe has tried to evaluate the impact of remote working on the environment more accurately by taking a very broad view that takes into account potential rebound effects. They estimate the reduction of commuting to work one day a week at 271 kgCO$_2$eq. avoided per year. Nevertheless, in a study published in September 2020, Ademe underlines several knock-on effects such as the "relocation" effect, i.e. the opportunity to move further away from the office, which in fact lengthens the home-work commute on office days. The increase in video bandwidth must also be taken into account: according to Leboucq's calculations, published in 2020, one minute of videoconferencing emits 1 kg of CO$_2$.

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⊙ **Read more**

■ **La Fabrique Spinoza,** *Nature, santé et engagement, vers une nouvelle approche de la transformation écologique* **[Nature, Health and Commitment: towards a new approach to the ecological transition], May 2021.**

■ **Ademe,** *Étude sur la caractérisation des effets rebond induits par le télétravail* **[Study on the characterisation of knock-on effects induced by teleworking], September 2020.**

[1] References to ADEME study: Ratcliffe, 2013. [2] Bratman, 2015. [3] Maas, 2006. [4] Song, 2018.
[5] Pegasus Chair in the Economics and Management of Air Transport and Aerospacee, Montpellier Business School, June 2021

The economic context

An economic scenario compelling us to rethink work

The ebbs and flows of globalisation

Over the last few decades, we have witnessed a significant redefinition of the world economy through globalisation. Beyond goods, there has been an increasing spread around the world of services, information and people. Because of broader value chains, office work has become more international and digital. However, recent attempts at reshoring may mark a return to more local ways of working. The pandemic has led to an awareness of the economy's dependence on open borders: according to data published by the WTO on September 23, 2020, world trade in goods fell by 21% in terms of value in the second quarter of 2020, i.e. at the time of the first major lockdowns.

An overall slowdown in productivity gains

Productivity growth has been gradually slowing down since the 1950s in the United States and since the 1970s in Europe, resulting in a slowdown in GDP growth. Annual gains in labour productivity in France were 5.5% between 1950 and 1969, then they gradually decreased to 2% during the 1990s and to 0.8% between 2010 and 2017. Economists continue to debate the causes of this slowdown. The view advanced by Robert Gordon, for example, is that the new information technologies are innovations whose nature does not allow for a visible increase in productive efficiency. Other factors could also be responsible for this slowdown, such as the saturation of education levels, the ageing of the population and the increasing scarcity of natural resources. This context of slowdown constitutes a challenge for businesses, prompting them to rethink their work practices in order to be more efficient and innovative.

The growing value of intangible assets

Three key disruptive developments at the close of the twentieth century brought about the rise of intangible capital: the growing importance of innovation, new technologies and expansion of the service sector.[1] The value of companies' intangible assets (e.g. algorithms, brands, patents, and generative assets, such as know-how, skills, knowledge and capacity for innovation) is now estimated to far exceed the value of their tangible assets (buildings, means of production, etc.). Working practices themselves can be valued in this respect. Wealth is therefore more abstract, not to say paradoxical, difficult to control and protect, and it is a source of risk and uncertainty.[2]

[1] Maurice Lévy, Jean-Pierre Jouyet, *L'Économie de l'Immatériel: la croissance de demain* [The Intangible Economy: tomorrow's growth], Commission sur l'Économie de l'Immatériel, 2006.
[2] PCA-Stream, Stream 01, 2008.

The polarisation of wealth and labour

In response to growing economic inequalities within the population, new business models are emerging. In addition to examples from the social economy, models are developing that are transparent about the pay structure, or that adopt an equitable ratio that limits the pay gap between executives and the lowest paid workers in the company. Since 1995, economists in France have noted a decline in the number of medium-skilled workers in favour of the more highly skilled on the one hand, and of the very low-skilled and more casual workers on the other. The pandemic is likely to exacerbate this divide by hitting the poorest populations harder. Since 2012, the ERAPF (the entity that manages the civil service additional pension scheme in France) has made the validation of its Chief Executive's pay comply to a "socially acceptable maximum annual global remuneration corresponding to 100 times the minimum wage."

FIGURE IT OUT

1%
of the world's richest people corresponds to more than double the wealth of

90%
of the world's population.[3]

[3] Oxfam, *Time to Care*, 2020.

Changing relations between stakeholders and organisations

The rise of the self-employed

In France, the number of self-employed workers has risen 25% since 2003, which is ten times faster than salaried employees. There are now more than 3.6 million self-employed workers in France, with a variety of statuses. Freelancers are mainly involved in unregulated knowledge-based professions and now number around one million people in France, including between 100,000 and 200,000 platform workers. This is having an impact on the way companies work, as they call on them much more frequently and are influenced by certain aspects of their culture.

Towards the company as a platform?

The explosion in data and the proliferation of opportunities for digital communication are forcing companies into organisational changes, as they become more agile and seek to collaborate more rapidly and more often with their external stakeholders. This outsourcing could lead to some companies operating as intermediation platforms between their clients and the independent service providers who work in the background. This implies more collaborative, digital ways of working and often more open and digital workplaces.

Redefining the balance of power in negotiations

"Subcontracting, casual employment and flexible working hours are greatly weakening the possibilities of collective resistance to excessive subordination," points out Valentine Helardot, a lecturer at the Interdisciplinary Laboratory on Solidarity, Societies and Territories. "This constitutes a considerable break with the entire history of the wage society, which was very much built on collective struggles."

Greater job insecurity, rising unemployment and falling union membership in some OECD countries represent a shift in the balance of power in wage bargaining.

> " The history of the wage society was built on collective struggles "

Technological change

The growing integration of technologies in companies

Digital transformation is a process of increasing the integration of digital technologies within the functioning of companies, generally to improve productivity thanks to smoother and better organised exchanges of information. With more and more digital devices, overlapping technologies in the workplace and a tendency for exchanges to be made virtually, new tools are transforming the way we work by introducing new uses.

Over the last 40 years, this integration of information and communication technologies has gradually enabled the dematerialisation of information media, as a result of which we now depend on the operation of support systems. The hardware that has accompanied this transformation (computers, screens, smartphones, connected devices, etc.) has also given rise to new potential risks, particularly for workers' health. The pandemic caused this trend to gain momentum, which is estimated by McKinsey to have accelerated the digital transformation of companies by the equivalent of seven normal years since 2020.[2]

FOCUS

The material conditions required for increased distance exchanges

The development of four links makes digital exchanges possible at a professional level:

Connection
Dependent on the quality of the local physical infrastructure

Hardware
Smartphones, laptops, but also sensors, IoT objects, etc.

Software
Software tools, each with its specific features, undergoing rapid development

Use
The use of tools determined by practices, habits, trainin, etc.

FIGURE IT OUT

In 2025, it is estimated more than

34 billion

connected objects will be in circulation worldwide.

47%

of employees think that digital transformation is an opportunity to develop new ways of working.[1]

The challenges of cybersecurity

Because of the digitisation of company information and the fragmentation of workplaces, the risk of cyber attacks is on the rise. In view of this threat, companies are trying to strengthen their cybersecurity. For example, they are putting more secure authentication processes in place, recommending regular backups and raising awareness among their teams. These are good practices, but they do not make companies absolutely secure. In May 2020, for example, an air carrier was the victim of a cyber attack that leaked the personal information of 9 million customers. The consequences are considerable: a loss of customer confidence but also a class action lawsuit that could potentially lead to substantial financial losses. The pandemic saw a surge in attacks: a quarter of HR and IS executives surveyed for *L'Usine Digitale* in December 2020 admitted that their organisations have had to make concessions in IT security to ensure business continuity, especially in the public administration sector.[3]

What is the future of automation in the workplace?

Each industrial cycle pushes automation further

The first industrial revolution introduced coal as a source of energy and partially mechanised certain tasks, notably in textile manufacturing. The second industrial revolution simplified tasks to the extreme through the use of assembly lines, relying on more complex machines and new energy sources. The third industrial revolution in the 1970s used electronics, computers and robotics to partially automate production by reducing the role of workers in manufacturing.

Each of these transitions has led to a so-called "Schumpeterian" movement[5], with the disappearance of some jobs and the emergence of new ones, leading to periods of tension for those whose jobs are threatened, as in the case of the British Luddite weavers smashing up machinery in 1811. Will the consequences of the ongoing 4th industrial revolution be a new cycle of this kind, or the promise of a world without work?

Further robotisation for mechanical tasks, on the one hand, and artificial intelligence for intellectual tasks, on the other, are the driving forces behind the automation of today. Back in 1995, Rikfin wondered whether technology would cost the jobs of millions of workers. In this respect, universal income has since been tried in a number of countries as a solution for a world

where work would be carried out only by machines. In point of fact, quite the opposite has occurred: there was a fall in unemployment worldwide between 2000 and 2018 (from 6.4% down to 5%), and the unemployment rate is very low in the countries which have the highest level of robotisation, Germany and Japan.[6]

Artificial intelligence and a fear of replacing office work

Thanks to digital technology and artificial intelligence, the phenomenon of automation is now affecting administrative and financial tasks. According to the OECD, 14% of jobs were at high risk of automation in 2019. These include highly specialised intellectual occupations, such as legal assistance. In the longer term, it also includes all occupations that can be replaced by complex autonomous devices, such as self-driving cars that pose a threat to drivers. Even so, this automation can improve the quality of some jobs, for example by doing away with repetitive tasks that can sometimes make work less meaningful. But many of those who do not believe that they can easily acquire the skills to access the new jobs cannot shake off the fear of being replaced by a machine. So it is necessary to facilitate this transition from jobs that are destined to disappear to new jobs, particularly through training.

> " By 2025, the time spent on current tasks at work by humans and machines will be equal.[4] "

Read more

PwC, *Will Robots Really Steal our Jobs? (An international analysis of the potential long term impact of automation)*, 2018.

1 Julhiet Sterwen and Ifop, Digital Workplace Barometer, 2017.
2 McKinsey, July 2020.
3 According to an online survey of 267 HR, Digital and IS decision-makers by Infopro Digital Etudes for *L'Usine Digitale* and Stormshield conducted in December 2020.

4 WEF, Future of Jobs Report, 2020, www.weforum.org/reports/the-future-of-jobs-report-2020/in-full/executive-summary
5 "Creative destruction" described by Joseph Schumpeter: *Capitalism, Socialism and Democracy,* 1942.
6 Buéno, *op. cit.*

interviews

Malo Mofakhami

Lecturer in economics at Sorbonne Paris Nord University and researcher at the Employment and Labour Research Centre and the Paris Nord Economics Centre

> " There is real uncertainty today about the type of work that will be replaced by digital technology. "

> " The third phase of the evolution of digital tools is underway and needs to be defined with the arrival of hybrid work. How do we want to use them? To create social links in a different way? To create new uses thanks to data? There's no end to the possibilities. "

Jean-Christophe Pitié

Chief Operating Officer, Microsoft France

What effects have new technologies had on working conditions?

M.M.: These effects depend on several factors: product or process innovations (these have the most impact), the degree of novelty of the innovation, and the status of the workers involved. New technologies change the ability of workers to perform different tasks, which is always accompanied by a reorganisation of work, with direct or indirect effects on the quality of the job and on working conditions. Improvements in contracts and salaries, for example, can be observed in particularly innovative companies, because the integration of new technologies will allow the company to generate more profit and thus redistribute some of it. Having said that, the adoption of new technologies also carries risks. In general, anything that involves the reorganisation of work implies disruption, increased stress and pressure on employees, and an increased pace of work as the company's business grows. Today, we are entering an era of increasing innovation, so workers are confronted with these negative effects on a regular basis.

What are the specific characteristics of digital innovations when it comes to their impact on employment?

M.M.: Digital technology marks a shift in the relationship between technology and employment for several reasons, which give digital innovations their own characteristics. In the first place, digital technology has a broad impact because it applies to all sectors, not only to industry. It is general purpose technology, or GPT. In addition, digital technology does not only replace physical and routine work, but also certain aspects of intelligent and complex work. In the past, machines could only replace predictable mechanical movements, but there is real uncertainty today about the type of work that will be replaced by digital technology. This puts everyone under pressure, even skilled workers. A case in point, for instance, is the legal profession, where lawyers are seeing some of their tasks replaced by digital tools. Digital technology is also making intangible assets more important. Today, value is mainly intangible, consisting for example of brands, patents, know-how, algorithms, etc.

What will workplaces and working methods look like in ten years?

M.M.: Given all the uncertainties, it's very difficult to answer this question. All researchers are aware that the environmental transition will change the situation within a few years. It is clear that companies will be expected to be more socially and environmentally responsible as a result of new forms of regulation. This will encourage them to be mindful of needs for training and career development. Digital technology, which now seems to be sweeping through everything in its path, depends on the fact that the functioning of the economic system is guaranteed. Provided that we can afford food, housing and heating, we can allocate the rest of our budget to services, particularly digital services, which are now taking on an essential role. But should these basic needs change or become more difficult to access, digital work can become less important overnight. There may be a very rapid reconfiguration of the system towards other needs. The question of value is very relative: any economic system that changes its value realigns itself, and this creates great uncertainty about the future of work today.

What developments in digital tools are occurring as a result of the transformation of working methods?

J.-C.P.: As I see it, there have been three phases in the evolution of digital tools. In the first phase, digital tools allowed us to communicate. In the second, the phase we are currently witnessing, they allow us to collaborate. For example, we can now co-create remotely on a whiteboard, get a real-time translation of our colleagues if they're speaking another language, find shared information more quickly, and so on. The third phase of the evolution of digital tools is underway and needs to be defined with the arrival of hybrid work. How do we want to use these digital tools? To create social links in a different way? To create new uses thanks to data? There's no end to the possibilities.

In what ways are digital tools transforming the workplace?

J.-C.P.: First of all, digital tools facilitate remote and hybrid working, so there will be consequences in regard to the use of offices: for example, their surface area, their layout and the organisation of meeting rooms to accommodate the diversification of communication and collaboration tools. Similarly, since employees are now able to work from any location, companies may also be thinking about reconsidering their geographical location. Indeed, many travel providers are developing end-to-end solutions to facilitate business travel and offer personalised experiences to employees according to their requirements in keeping with their budget, schedule, etc. The integration of digital tools also makes greater flexibility in terms of possible workplaces. Rather than managing the fixed costs of real estate, companies will develop various models to renting out spaces. On the basis of collected data, the work platform used will be able to come up with the best location according to the needs of the employee, in the nearest hotel, for example, or through a system of office sharing, so-called "hot desking". And then why not set up partnerships between companies with a complementary geographical footprint which would allow them to share meeting rooms and individual work spaces?

What do you think about virtual workplace solutions?

J.-C.P.: I've tried the immersive experience of virtual reality and I find it fascinating in terms of its potential and also its responsibility! In worlds where we are represented by an avatar, we are able to recreate the human link that is missing in a remote formal meeting. The interest of gamification is that it allows us to regain a degree of informality. For example, it allows you to walk around rooms, to bump into someone by chance, to accept being part of less structured and planned exchanges, which doubtless are less effective in the short term but are more creative and build bridges between organisations. This experience is also very inclusive. If I am supposed to go to New York, for example, I may not necessarily want to increase my carbon footprint, nor my budget. Nevertheless, the tool does not replace the physical meeting, it is there to complement it. And a final point: the responsibility that this metaverse will imply for the management of data, avatars, the representation of people and the link will be critical and it will require great vigilance from all players.

Working in the remote age

Remote working and ubiquity

The gradual appearance of remote working

The concept of working remotely first emerged in practice in the United States in the 1970s, and then it came to France in the 1980s, backed up by the Minitel.[2] With the development of ICTs, working remotely gradually became more widespread over the following decades. In 2002, a European framework agreement specified the rights and security of work carried out away from the company's premises. In 2012, in France, the Warsmann law gave a legal definition that was set out in the Labour Code in 2017, notably by detailing the rights of remote workers and their employers. The sudden necessity for a large part of the world's population to work remotely as a result of the pandemic caused a confusion between the chaotic conditions of crisis telework, which is involuntary, poorly prepared and full-time, and telework that is chosen, carefully considered and better balanced.

Remote working marks a new stage of technological transformation enabling ubiquity, or the ability to be in several places at once virtually. This possibility is relatively recent in human history and profoundly affects the way we feel and live.

FOCUS
Who is concerned?

According to some studies, up to 40% of the French working population are technically able to work remotely, at least partially. The typical profile of the remote worker pre-pandemic was a man under 39 years of age living in a large city, a manager, with years of seniority in his company, from a private employer with more than 50 employees, in the service sector.[4] 7% of the French workforce were already working remotely before 2020, but the practice was implemented massively during the lockdowns and concerned 37% of the French workforce during the pandemic.[5] Remote working therefore only concerns a fraction of the population, to which we can add self-employed people who work from home.

Definition of remote working

Remote working can be defined as any form of work organisation in which work that could also have been carried out on the employer's premises is performed by an employee away from these premises, making use of information and communication technologies.[1]

FIGURE IT OUT

36%

of people in employment say they can easily work remotely.[3]

A heterogeneous notion

The conditions of remote working are very varied:

■ **Heterogeneity of each individual's perception**
Remote working is not perceived in a uniform way by everyone. Laurent Taskin from the University of Louvain, for example, differentiates three categories of remote workers according to their feelings, ranging from the "happy" teleworker to the "isolated" teleworker and the "stressed" teleworker who has to deal with a complicated management structure or a tense family situation.

■ **Heterogeneity of occupations and functions**
Some corporate functions, such as IT, digital, customer service, finance and accounting, seem to be better suited to remote working than others.[6]

■ **Heterogeneity of locations for remote working**
Remote working is often but not exclusively located in the home. It can involve hotels, bars and restaurants, transport, etc. According to co-workers, third places are more efficient settings for remote working than the home,[7] and this seems to be confirmed by about one third of nomadic employees.[8]

■ **Heterogeneity of the modes of organisation adopted by companies**
This subject will be explored in detail in part 2 of this trend book.

FIGURE IT OUT

51%

of employees identified reduced commuting time as the principal benefit of working from home.[9]

FOCUS
Identified effects of remote working

Working from home has been described as a form of "happy alienation"[10] offering many advantages but also entailing considerable pressures. Several studies have identified advantages and disadvantages for people who choose to work from home. The negative effects are all the greater when remote working is imposed:

	Advantages identified	Disadvantages identified
Organisation	Ease of being able to "deal with unforeseen situations" for **32%** of teleworkers[11]	For **28%** of employees there is an increase in the personal cost of their work
Working conditions	**47%**, of employees appreciate being able to work "in peace"	**57%** of them mention longer working hours[12]
Physical, psychological, emotional and cognitive health	■ 45 minutes more sleep per day ■ 5.5 days less sick leave per year[13]	■ Greater physical inactivity, seen by the French as the 3rd biggest danger of remote working[14] ■ Risks to psychological health felt by **46%** of employees[15] ■ After switching to remote working, **29%** of SME employees reported feeling isolated, and **24%** suffered from sleep disturbance[16]
Social and personal life	**21%** of employees mention that they are able to "live further away" from their workplace[17]	**74%** of workers believe that working remotely isolates employees[18]
Pressures	Being able to dress more casually is a key benefit for **56%** of teleworkers[19]	The lack of physical presence causes **56%** of employees to worry that remote working creates a pressure to be available for work 24 hours a day[20]

1 This is a slightly broader definition than that specified in French legislation in 2021.
2 INA, L'INA éclaire l'actu [The INA clarifies the news], "Le télé travail", Antenne 2 Midi, 19/09/1985.
3 Survey for the French Ministry of Labour, Employment and Integration, November 2020.

4 DARES, 2016.
5 ObSoCo/Chronos/ADEME/Bouygues Construction, *Observatoire des usages et représentations des territoires* [Observatory of Uses and Representations of Territories], 2021. Survey of 4,000 people.

6 Capgemini Research Institute, October 2020.
7 "Remote working in a third place is 29% more efficient than at home." *Néo-nomade*, Coworking, les nouveaux bureaux des entreprises, 2017.
8 "36% des salariés se déclare plus efficace en tiers-lieux qu'au domicile" ["36% of employees say they are more efficient in a third place than at home"], SFR, Quel Bureau Demain, 2014.

9 INSEE, Dares, 2016.
10 Leroy Merlin Source, Tanguy Dufournet, Djaouidah Séhili, Patrick Rozenblatt, "Travail chez Soi" ["Working from Home"], 2021.
11 APEC, 2017.
12 Obergo, 2018.
13 INSEE, Dares, *op.cit.*
14 Harris Interactive study for the Cetelem Observatory, 2021

15 Malakoff Humanis, March 2020.
16 Capterra study, January 2021.
17 APEC, 2017.
18 Odoxa-CGI, March 2020.
19 Microsoft, KRC Research, BCG, Work Reworked, August 2020.
20 Capgemini, September 2021.

#1

> The priority is for managers to trust in the ability of their employees to do their job well from a distance.

Christine Bocerean
Lecturer in psychology
at the University of Lorraine

Is it possible to measure how remote working impacts psycho-social risks in companies?

C.B.: There have been questions for several years on the impact of remote working in questionnaires designed to assess psycho-social risks. The early results were very surprising: as a general rule, people who worked remotely were found to be doing less well than those who don't work remotely, but at the same time they said they were very satisfied with the fact that they could work remotely. In reality, risks could certainly relate to the fact of remote working or to another source of unease which was the reason for the request to work remotely. The pandemic forced companies into this mode when remote working was possible, and everyone was asking themselves about the impact of both remote working and lockdown. Unfortunately, it is very difficult to distinguish between the obligation to work from home, the public health restrictions we experienced, the general fear of illness, the impact of the crisis on the economy and therefore the fear of losing your job, which is also linked to an awareness that the relocation of qualified jobs is made possible by remote working. No one can really distinguish clearly the influence of these three main "risk" factors on an individual, who is a whole being.

What particular risks and problems can be associated with remote working?

C.B.: With regard to psycho-social risks, impacts can first of all relate to the personal situation of individual teleworkers: whether or not they have a suitable workspace, are able to shut themselves away, can avoid being disturbed during working hours, and so on. But these impacts can also be linked to the loss of social relationships, which are essential at work, as they serve as a safeguard against more traditional risks, such as too heavy a workload, for example. Human relationships must therefore be maintained at a distance, whether with the team, superiors, colleagues from other departments, etc., which can be difficult to put in place. In addition, the link with line managers and supervisors can be a problem: remote working has given some people greater autonomy, but this does not apply to those who require a framework and regular objectives. The majority of workers also need frequent encouragement and recognition for the work they do, which is more difficult to provide at a distance. Finally, more globally, there are risks linked to the loss of point of reference that is the fact of going to work: this has an impact on eating habits, sleeping habits, the lack of structure to the day, an increase in addictive behaviours, and so on.

**What management methods can be implemented to address these challenges?**

C.B.: In my opinion, the priority is for managers to trust in the ability of their employees to do their job well from a distance. Constant monitoring is detrimental to managers and their teams. The challenge is to empower people, to make them autonomous, to support them sufficiently so that they are able to ask for help. It is also necessary to preserve time for group discussions, whether face-to-face or remotely, in order to protect the group. For the time being, companies have focused on the material aspect of remote working and IT tools, but I think that it is also necessary to give organisational tools to employees who work from home. Training of managers is essential, based on management by trust: advice, guidance, support, listening, recognition, constructive feedback. I would say this is a return to the traditional definition of a manager.

What cognitive constraints are in play when we are communicating at a distance?

N.A.: When you are videoconferencing, your brain doesn't have access to the same information that it does in reality. There are three levels of major cognitive constraints. The first is linked to the technology itself, which degrades not only some verbal signals but also all non-verbal signals. Depending on the quality of the connection and the tool, there will be micro-delays between the image and the audio, and there will be direct eye contact or facial micro-expressions that will disappear. Your brain is then obliged to reconstruct reality from a degraded base, which is something that demands extra mental energy from the brain. The second level concerns the increase in potential distractions, such as notifications, thumbnails, chat, etc., which will also disrupt attention and consume mental energy. And thirdly, the last constraint concerns our usage habits. The videoconferencing tool and its frequency of use are relatively new. We are still in a learning phase with regard to videoconferencing. Some people are not yet as comfortable with it as they are with emails or phone calls, where the rules of communication are much more familiar. These new uses also come at a cost to the brain.

What are the differences with face-to-face communication?

N.A.: Our brains switch off much more quickly in videoconferencing, because staying attentive and focused requires much more effort. In a face-to-face meeting, all the cues we have talked about are in very "high definition". There is a synchronicity between speech and vision, eye contact, the hands, the body position. In videoconferencing, the signals may be degraded or even no longer exist; you can't touch my arm, for example. All these elements are very powerful, and play a crucial role in capturing attention. They trigger a series of reactions including the production of acetylcholine, which activates the attentional networks in the frontal cortex. This will help with memory and the feeling of confidence. So in videoconferencing, as you can see, these mechanisms are less important.
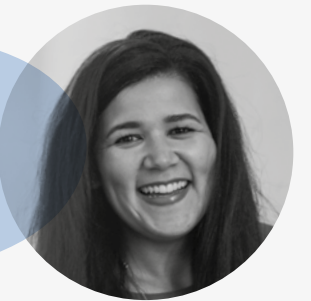
Nawal Abboub
Lecturer in Cognitive Sciences
at the École Normale Supérieure,
chief science officer of Rising Up

Are there solutions that can improve people's attention capacities?

N.A.: One thing to remember is that the brain's attention span is linked to the environment. Every place must have some kind of focus of attention. When we have to work on a substantive subject, the brain will perform better in an environment that is under its control, where its attention is protected. When we need to collaborate or to make important decisions, we need to pay attention to a lot of signals given out by others. The brain only performs correctly if it can access this information. If we are using video, we can set things up technically to allow people to be in a standing position, thereby freeing up the body's mobility, and also agree on explicit rules for communication. The work environment is one thing, but we mustn't forget the managerial practices that have emerged from these new organisations. We have to avoid practices that lead to what I call "uncontrolled multitasking", and create an over-solicitation of the brain that can lead to a loss of up to 40% of productivity on a task and increase both the error rate and stress levels. Successful routines should be put in place: for example, organise video conferences that are no longer than 45 minutes; use backgrounds to protect the personal privacy of those taking part; and don't display the thumbnails of all the participants, just the principal ones.

> The working environment and management practices are essential factors for the productivity of the individual.

"

Through their practices and behaviours, leaders and managers are setting the stage for new ways of organising work.

"

Frédéric Petitbon et Sophie Serratrice
PwC People & Organizations, New Ways of Working

2

The challenges of new working methods

Work patterns are evolving differently across different sectors, company sizes, cultures and personal preferences. Behind this situation lies a multifaceted reality, which each individual experiences differently according to their personal, economic and psychological circumstances. Despite this broad notion of diversity in individual situations, some global trends are becoming more apparent: more focus on health and well-being at work; the need to align internal stakeholders within companies for the benefit of their employees and external stakeholders; the distinction between face-to-face, hybrid and remote work models; the challenges of defining how these models should be implemented, and how management should be adapted.

The focus here is on workers who are working on tasks that can be undertaken remotely, at least in part, and how different players consider the challenges of current and future changes.

Health, well-being, community and innovation are at the core of the issues at stake

Quality of Working Life (QWL)

Health and general well-being in the workplace have become a growing concern for companies, something that the pandemic has only reinforced. Throughout the public health crisis, offices were seen as potential sources of virus transmission, whereas homes were seen as places with poor ergonomics, and sometimes hydrothermal or noise pollution. This also led to increasing emphasis on other issues such as endocrine disruptors, circadian rhythm disturbances, sedentary lifestyles and unbalanced diets. Workplaces and working methods need to ensure that both the physical and mental health of employees are protected. The implementation of health protocols, health services, work psychologists, comfort monitoring (air quality, temperature), inclusion policies, equality and respect for work schedules are all potential ways to respond to these challenges. But above all, management methods and social relations are crucial.

30

Defining psychosocial risks

Psychosocial risks cover the potential impact on mental, physical and social health, caused by working conditions and the organisational and interpersonal factors that may affect mental functioning.[3]

FOCUS

Team building and bonding to support mental health

One of the key aspects that contributes to a sense of well-being at work is day-to-day social interactions. The pandemic had a major knock-on effect, as working remotely became the norm in many teams, but without suitable preparation. A study carried out in 2020 in 14 countries, including 10 European countries, shows that stress, loneliness and anger increased by 20 to 25% compared to previous surveys.[1] In France, sleep disturbances skyrocketed and feelings of depression doubled over the same period.[2]

[1] Santé Mentale, Impacts psychologiques de la pandémie : premiers résultats de COH-FIT [Mental Health, Psychological impacts of the pandemic: first results of the Collaborative Outcomes study on Health and Functioning during Infection Times], November 25, 2020.
[2] Santé Publique France, CoviPrev: a survey that monitored behaviour and mental health during the COVID-19 epidemic, 2020, 2021. Comparison with 2017 data.
[3] Thanks to Christine Bocéréan for clarifying the concept of PSR.
[4] Gollac report, 2011.

Psychosocial risks define these issues in companies

Inadequate management of work methods and workplaces can lead to potential risks for the physical and mental health and general well-being of employees. To identify these psychosocial risks, the Gollac report analyses six workplace risk factors: work intensity and working time, emotional demands, autonomy and leeway, workplace relations and recognition (with peers, line managers, senior management, subordinates, customers, etc.), value conflicts, and work insecurity.
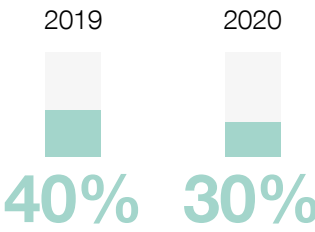
These six categories of factors may lead to physical problems (MSDs, cardiovascular issues, stomach problems, skin diseases, etc.) or psychological problems (stress, anxiety disorders, depressive disorders, aggression, addictions, burnout, etc.). However, in some cases they may actually also be considered as a positive factor. For instance, if an employee is experiencing a heavy workload, with the support of their manager and colleagues and by being generally appreciated, this heavy workload may not have any impact on their physical and mental health. In this instance, no psychosocial risk will be identified.[4]

New roles and services

Human resources departments now sometimes employ QWL managers. New roles are also developing in some companies, aimed to improve health, well-being and even overall satisfaction at work, proving the increasing attention that companies are paying to these issues. A Chief Happiness Officer, Chief Wellness Officer or coach encourages social interaction within the company, creating work conditions that will help employees to be happy, and organising events to bring employees together. This can be both useful and interesting as long as it is in line with the company's work methods and culture. Areas for relaxation and sports are only useful if employees feel free to use them without it affecting their work; similarly, organic fruit baskets, massage sessions and other wellness services cannot compensate for a toxic work environment. These measures can bring real well-being to employees if they are not a mere facade for the company's activity.

Innovation and serendipity

Innovation is key for companies to remain competitive and to adapt to economic shifts. And yet, innovation is frequently viewed as the result of investment in research, but also as the result of creative and idealistic moments that are achieved through physical encounters, questioning and debate. These physical encounters can either be formal, informal or even serendipitous. Serendipity, i.e. the transformation of informal and unexpected encounters into new ideas, is a recognised vector for innovation. Consequently, the conventional notions of innovation have been disrupted by the emergence of remote working. Until now, creativity and ideation were based on physical collaboration. But how can innovation then be achieved from a distance? Science cannot currently answer this question, although there are now many services that attempt to recreate physical creative environments virtually. The drive for ideation and creativity is influencing the way and places people work. They call for more teamwork time, more collaboration, more communal spaces to share ideas.

[5] Microsoft, 2020. [6] ARP Astrance, 2021. [7] Greenworking, 2017.

FIGURE IT OUT

Number of managers saying that their company has an innovative culture:

2019	2020
40%	**30%**

The main challenge is to stay connected with their teams to share new ideas and innovations.[5]

People who work in offices with basic natural elements such as plants and natural lighting are **15%** more creative.[6]

Over 80% of value-creating work interactions occur in informal situations.[7]

31

How should companies adapt to the new ways of working?

Different stakeholders within companies may have very different views on the challenges associated with new ways of working and their impact on the workplace – each party sees these issues through its own prism. However, it seems essential for these players to align themselves for the benefit of employees and their work.

FIGURE IT OUT

93%

of HR managers think that working from home will affect their company's management practices.[1]

1/4

of HR managers used the pandemic to develop agile, lean working practices etc. in their companies.

75%

want to make them permanent.[1]

HUMAN RESOURCES
Adjusting processes for different workplaces

The pandemic led to new work methods and organisations being tried out, but they now need to be given a permanent framework. As working from home became the new normal, HR policies had to be revised in order to clarify its future application. This includes the need for HR to take into account the differences between the functions of a company where remote working is possible and those carried out in the field. Every company has its own set of issues, some HR are common to all:

■ Recruit and retain

Employee and talent expectations are changing: teleworking arrangements, corporate culture, autonomy, work-life balance, and the overall quality of the workplace are now key issues when it comes to recruiting and retaining staff. Another challenge is how to successfully onboard new recruits who work remotely in whole or in part.

■ Evaluate and train employees

More flexible working hours and greater autonomy mean that employees' performance is also being assessed in a different way. Changes in work methods and technologies also require HR to reconsider employee training so that their skills always correspond to their needs.

■ Making sure employees are healthy and happy

With employees being able to work from different locations, HR is finding it increasingly challenging to provide well-being and health at work everywhere. This calls into question the employer's legal responsibility if an employee is off the company's premises, in the event of an accident for example. Just before the health crisis, Malakoff Humanis pointed out that assessing the health and safety of remote work locations was the main challenge identified by managers.[2]

■ Setting ground rules

Establishing ground rules helps to maintain unity within the company and this is especially true when certain modes of working are not equally accessible to all functions. These ground rules also help to define what the corporate culture is, though the balance between this and team autonomy in more operational functions can sometimes be difficult to achieve.

FACILITY MANAGEMENT AND PROPERTY MANAGEMENT
How to redefine real estate strategy as a location ecosystem

Corporate real estate departments play an active role in changing how and where people work. They have been forced to rethink their real estate strategies to accommodate new working methods and environmental requirements as the pandemic has sped up some of the changes already undertaken by companies. A few issues stand out from all these concerns:

■ Assessing needs for office space

Closely tied to economic fluctuations, real estate is generally the second largest expense item for companies after salaries. As remote working develops, new ways of organising work space, such as hot desking, make it possible to re-evaluate space requirements. This however requires elaborate calculations: 20% of remote working does not equate to 20% less space.

■ Greater flexibility in property choices

According to the 2018 Parella/Esquisse survey, 70% of the 200 French companies questioned were primarily concerned with adapting their real estate to new working methods. On top of that, there is also the need to adapt to changes in the workforce that can be difficult to anticipate. Some third places offer "office extensions" that are not subject to conventional commercial leases, a solution that could become more and more common for companies.

■ Provide comfortable and high quality premises

The question of comfort and ergonomics in the office and in employees' homes is becoming increasingly complex, especially with the rise of working remotely in environments where it is difficult to check for compliance. Some companies directly provide their employees with home office equipment.

■ Encourage responsible real estate

The environmental impact of commercial real estate is of course a growing concern, with an emphasis on low-carbon and energy efficient buildings, access to soft mobility and the preservation of biodiversity. The existing portfolio needs to be adjusted to make sure that it offers the appropriate facilities.

FIGURE IT OUT

71%

of companies would like to scale down their offices.[3]

97%

of real estate experts believe that users will want tailor-made solutions, which may include shorter, more flexible and less restrictive leases, and increased use of coworking spaces.[4]

90%

of companies think that new ways of working no longer correspond to their current office layout.[5]

[1] BCG / ANDRH, 2020.
[2] Study of teleworking, Malakoff Humanis, March 2020.

[3] Parella, 2020. [4] EY, 2020. [5] Parella, 2020.

INFORMATION SYSTEMS AND DIGITAL TRANSFORMATION
Finding a solution for new digital working methods and locations

As digital tools have become key to the way we work, the IT department is becoming a major player in how these workplaces evolve. Among others, the following challenges are becoming a major concern for IT departments:

■ Provide seamless and secure IT services

IT tools have become essential for employees, regardless of their location – at the office, at home or in third places (public transport, cafés, public spaces, etc.). Providing a seamless and secure service may be challenging, and for that reason, cybersecurity is becoming a matter of particular concern.

■ Providing solutions adapted to working from different locations

As hybrid work models are becoming the norm, having the appropriate digital tools is key. To be able to work both face-to-face and remotely, alone or in a team, from an open space, from home or from a third place, IT departments must provide employees with suitable tools, although these tools depend on the quality of the broadband connection.

■ Train staff to use new technology tools

Adopting new work methods and workplaces largely depends on skilled IT use, and managers need to ensure that there is a process of training and adoption of these programmes.

■ Optimising the organisation of the company's information flows

Flexible working hours and workplaces require high quality information systems to ensure smooth exchanges. IT management must ensure that information flows are both sufficient and clear.

FIGURE IT OUT

76%
of employees say that Internet and telephone connection issues have a direct impact on their productivity.[1]

8
companies in 10 were targeted by a cyber attack in 2020.[2]

[1] C&W, 2019. [2] CESIN.

34

Aligning internal stakeholders around a common project, to provide employees with appropriate working methods

Engaging the company through work methods and workplaces

Long-term strategic vision and the company's general engagement depend on the company's management, which, in conjunction with all of the company's functions, has a fundamental role to play in making decisions about working methods and workplaces. Managers involve their companies by looking at things from different angles:

■ Sustaining a corporate culture and uniting around a common project

How and where people work can be a strong foundation for the company's culture. A strong preference for remote or, alternatively, face-to-face work, for example, can be a way of asserting a distinctive identity and uniting people around the strengths of this model. Similarly, an atypical workplace can reflect and shape the company's values.

■ Communication and employee input in decisions

It is important that employees are comfortable with how and where they work. Employee satisfaction with the workplace is key to attracting and retaining employees, ensuring their health and well-being and improving their motivation and productivity

■ Preventing any unfairness between remote and on-site roles

The rise of remote working applies to only certain functions that are compatible with being carried out at a distance. Management must therefore take steps to ensure that feelings of injustice between workers do not arise.

■ Investments to boost team productivity

Senior management needs to invest in the technology, equipment, infrastructure and new lines of business that provide the most productive and sustainable ways and places to work in.

■ Integrating environmental constraints into the company's strategy

So that climate commitments and other environmental challenges are met, coordination across functions is essential. Work practices and the company's real estate footprint have a significant carbon impact and are consequently among the main levers for action.

FIGURE IT OUT

86%
of SME managers feel involved in global goals for lower carbon emissions.[3]

34%
of employers still have no official policy to manage hybrid work arrangements.[4]

[3] BPI France, Le Lab, 2020. [4] Willis Towers Watson, 2020.

35

Not only companies themselves, but a wide range of stakeholders too

LOCAL AUTHORITIES
Are regions competing to be more appealing?

The rise of digital technology and the globalisation of value chains have put a growing number of regional areas in competition with each other. Faced with this situation, local authorities are trying to attract companies, investors, households, tourists and public administrations to boost local economic activity and create sustainable jobs. Through the development of new services, transport infrastructures, digital infrastructures, clusters or local third places, local authorities are influencing how and where people work.

The pandemic has led to a clear shift in territorial attractiveness strategies, according to the way companies work:

■ Questioning resilience

The pandemic has radically affected local strategies, testing the resilience of health, education and food systems and their connection to networks. Some territories have started rethinking their economic attractiveness strategy on the basis of resilience.

■ New aspirations

The pandemic prompted people to move, which has created new opportunities to diversify the attractiveness strategies for local areas. In parallel, an increasing awareness of environmental issues combined with a renewed focus on local communities is creating new expectations, encouraging local authorities to rethink their strategies.

■ Remote workers

Certain local authorities try to appeal to people who work remotely, a key demographic for territorial marketing campaigns in this time of crisis. In June 2020, the city of Alès reserved 705 advertising spaces for a week in the Paris metro.[1] The question is whether employers will agree to their employees moving away from their headquarters and, if so, what distances will be acceptable?

[1] According to *Le Midi Libre*.

FOCUS
Territorial marketing as a trend indicator

As a topical issue, various rankings have been published on the subject of how appealing an area may be:
- **Best cities to live in**
- **Best cities for millennials**
- **Cities with the highest recruitment rates**

In 2020, France Attractive ranked the top French cities for remote workers, dividing them into two categories: metropolitan areas, with Lille, Bordeaux and Lyon in the lead, and medium-sized cities, with La Rochelle, Pau and Angoulême on top.

PARTNERS, SUPPLIERS AND CUSTOMERS
Promoting external cooperation

How and where we work can be a major factor in the quality of collaboration with customers, partners or suppliers. These can be important levers for:

■ Establishing a long-term partnership

Working on the basis of the same principles of trust and responsibility helps to sustain the partnership relationship.

■ Streamline communication between stakeholders

As businesses operate in a digital and globalised world where people can work from different locations with different time zones, they need to align themselves with partners for better communication.

■ Moving towards social and environmental responsibility

This is increasingly requested from both sides. As a result, favouring shared workplaces and encouraging environmentally friendly ways of working are becoming more and more common.

■ Encouraging shared innovation

Shared innovation can be achieved by encouraging physical or digital meetings through informal spaces or collaborative tools, and by developing corpoworking, i.e. providing shared work spaces in the office for partners.

TALENTS
Understanding future recruits' expectations

To attract talent, companies are adapting the how and where they work to meet their aspirations, such as:

■ Flexible and agile management

Today's talent, particularly those who are digitally literate, want flexible management with more autonomy. A 2016 IFOP survey already revealed that autonomy was the third most important factor for students in their choice of company.

■ High quality company benefits

91% of employees believe that catering, concierge and health services in the workplace make a company more attractive in terms of recruitment. For 84% of employees, they make them feel more part of the company.[5]

■ Paying attention to work-life balance

As work and personal life are becoming more intertwined, talent is increasingly concerned about work-life balance. The company can contribute to this balance through various measures, such as ensuring that logout periods are respected.

■ Helping to find purpose and freedom

The company's organisation and management methods can provide part of what talents are looking for in terms of purpose and freedom. In fact, a participative method of organisation, trust-based management, autonomy and empowering workers in their tasks are all ways of meeting these aspirations.

FIGURE IT OUT

69%
of real estate experts believe that offices will continue to be the preferred place for exchanges with clients and business partners.[2]

87%
of executives under 30 see working remotely as an important factor in choosing a company.[3]

93%
of real estate experts believe that the workplace and the quality of the work environment play an important role in attracting new talent.[4]

[2] EY, 2020. [3] APEC, 2020. [4] EY, 2020. [5] Nexity-Ipsos study, 2015.

FREELANCERS
Are we moving towards hybrid employee-freelance teams?

Over the last decade, companies have increasingly called on external stakeholders for specific assignments. Freelancers, with a variety of statuses, are among them. The use of freelancers, i.e. self-employed people in knowledge-based professions, is an emerging trend. A 2018 study by Deloitte forecast a 33% increase in freelance employment in companies by 2020. In any case, collaborative work between freelancers and companies leads to certain questions in terms of work organisation and management:

■ Better company integration

Freelancers are usually recruited by the procurement department without the involvement of the HR department. This can sometimes affect the relationship with the company. How to integrate freelancers when they are "recruited" for an assignment has not yet been established. The creation of a "freelancer-friendly" label within companies is being considered. The goal is to raise the profile of companies that strive to better integrate freelancers, so that they can be identified.

■ Retention strategy

One of the main challenges for most companies is to retain freelancers. Not many companies have addressed this issue. But if companies were to at least assess freelance workers' satisfaction – before, during and after their assignments – they would be able to make the necessary adjustments to their processes to retain external talent. To compensate for this, the Chief Freelance Officer role is becoming more and more common. Midway between HR and procurement, their mission is to coordinate freelancers' activities within the company to build more efficient hybrid teams, composed of employees and freelancers, and thus encourage the retention of the best individuals.

■ A flatter approach to project-based work

Freelancers do not have the same approach to work as they are not subject to a hierarchical relationship. They work on an ad hoc basis and often navigate between different corporate cultures. This means that a freelancer does not necessarily expect to be managed, but rather seeks to collaborate horizontally on a given project; this entails a new way of organising work.

Interview

Samuel Durand
Author, speaker, producer and consultant

> " Self-employment is gradually becoming a more important part of the business world. "

How do self-employed people fit within the new work organisations?

S.D.: Historically, work was conceived for a society based on salaried employment. This meant that the self-employed were excluded from certain institutions and decisions. However, in recent years, the self-employed have been able to create their own ecosystem, with banks, health insurance companies, collectives, platforms and workspaces offering services specifically for them. They are becoming more prominent as companies seek their services more often. That being said, the aspirations of the self-employed differ from those of people who are employed by a company. Freelance culture is based on more project-oriented, flatter and more collaborative management. As the demand for freelancers rises in companies, a new type of work organisation is required, at least for hybrid employee/freelance teams. Companies can also learn from freelancers, either by inviting outside people into their offices using the corpoworking model, or by sending their employees to innovative third places where communities of freelancers come together.

Is the digital nomad phenomenon specific to freelancers, or does it also apply to employees of companies?

S.D.: This phenomenon no longer only concerns freelancers but can now be applied to employees. Two trends are heading in this direction: the concept of "workation", i.e. working from a holiday location, is growing. Employees have become aware that it is possible to work from a holiday location and still have good working conditions. This contributes to the nomad culture. On the other hand, off-site company events are set to become increasingly popular. Any savings made from office downsizing should be reinvested in these culture-enhancing seminars. Employees will probably no longer meet in the office every single day, but rather a few times a month, for a few days in a team, in a pleasant location. It will then be completely possible to be a digital nomad. However, business models that are based on a culture of attendance are being challenged: if control is exercised over attendance, the content of the work is rendered meaningless. On the contrary, if the focus is on achieving goals, then innovation and autonomy are encouraged.

How can a company maintain its unity, its common mission, if it no longer has a central, shared workplace?

S.D.: Keeping the company together is a question of management. A project-based approach, based on trust, is conducive to this. Documentation also plays a key role in maintaining unity at a distance. Companies that encourage digital nomadism provide handbooks that outline the various rules and the company culture. Last but not least, empathy is essential, especially in cross-cultural and asynchronous teams. You have to be prepared to take the time to accommodate the other person, be mindful of the time differences in each person's day, and communicate in a clear way to foster a mutual understanding.

Organisational models and workflow

The model of a central workplace is being challenged by the fact that certain tasks can be carried out remotely: the office, the home and the third place complement each other. Companies are therefore wondering how to best set up a structure, balancing rigidity (organising work hours and workplaces through restrictions) and flexibility (leaving everyone free to organise themselves as best they can), so that the diversity of these places becomes a source of opportunity rather than a constraint. The appropriate solution depends on the activity and the culture of each company.

Face-to-face and remote: a wide range of hybrid models

The organisational models within a company say a lot about how companies operate; organisational routines, how people are involved in decision-making processes, the division of labour, and internal communication are all key factors. One of the main elements in the way companies are positioned starts with how they relate to remote working:

■ Some companies prefer to have employees working on the premises, and focus on the social aspects of this organisation, while maintaining a certain status quo in terms of management styles.

■ At the other end of the spectrum, remote-based companies are now emerging and consider face-to-face meetings to be a one-off opportunity for employees to share, more than an everyday occurrence.

■ Hybrid models, which can vary a lot, aim to find a good compromise between the two, based either mainly on physical presence or on a workplace dedicated to specific times and tasks. McKinsey estimates that 87% of companies will adopt a hybrid model post-pandemic.

FIGURE IT OUT

In 2020,

88%

of people in France want to define how and when they use their office space.[1]

The economic impact of remote work for a company

Having employees work remotely has economic impacts for the company, primarily through productivity changes for the individual and for the sector. In addition to that, hot desking can lead to space savings and subsequent real estate savings. However, remote working may also generate new costs: coordination of the remote team, access to third places, organisation of seminars to promote social interaction and corporate culture, etc.

The gradual shift in how we relate to the work team

It has been argued that as the range of contracts diversifies, working conditions become more flexible, work-life balance is increasingly blurred and self-employment is on the rise, the way people relate to the workplace is radically changing. The model based on permanent contracts and subordination may become less standard, leading to "more fragmented, individualised, à la carte, less subordinated and more collaborative employment," according to the human resources expert Denis Pennel.[2]

👁 **Read more**

Susan Clarke, Ben Hext, *Five Best Practices For Success in The Hybrid Working Era,* Vedantix, May 2021.

New leadership models and workflows

Being a manager in a fast changing world

Digital tools and practices, remote working and asynchronous working are disrupting managerial practices. The way in which teams are monitored needs to change, and team performance assessment can no longer be based on face-to-face indicators. Managers also need to find solutions to help their teams develop their skills, and to encourage soft skills in a hybrid and sometimes asynchronous context, which makes it more difficult to analyse them. In this context, team motivation must be based on the purpose of the work, employee autonomy and the trust accorded to employees individually. Companies are positioning themselves on different models, between vertical and horizontal, control and trust.

Workflow challenges

Since the 1970s, along with an overall cut in work hours, working patterns have become more diverse. The traditional model of a five-day working week with fixed hours in a defined place is no longer the norm for everyone. Shorter working hours have become more common – shorter weeks or five-hour days, for example. In France, since 2018, more than 400 companies, including Télérama, Mamie Nova, Macif and Brioches Pasquier, have trialled, and in some case actually implemented, a four-day week. This weekly model can take several forms, like reducing the number of working hours per week (32 hours or 28 hours for example) or increasing the number of hours per day over the week (35 hours over four days). A study conducted by the Workforce Institute and Future Workplace in May 2019 shows that 60% of people in France would be in favour of a four-day week to achieve a better balance between their work and their personal lives.

In addition, more and more employees are asking for more flexible working hours as a result of the rise of remote working; the possibility of sabbaticals, or even so-called "unlimited" leave, which is in fact linked to specific targets; and exemptions from the Sunday rest rule. In the 2000s, INSEE noted the appearance of numerous regulations on this subject. In 1974, only 12% of the French working population said they worked at least one Sunday a month, but by 2016 this figure had risen to 28%, i.e. more than one in four. The emergence of multiple jobs (so-called "slashing") is also significant.

FIGURE IT OUT

56%

of people in France prefer flexible working hours.[3]

64%

of managers felt that in 2020 they had not yet received training in delegating or empowering their teams remotely.[4]

👁 **Read more**

Welcome to the Jungle / Ipsos Game Changers, Les salariés et le rythme de travail [Employees and the rhythm of work], Vague 2, January 2021.

patagonia

Flexible hours to accommodate family and recreational activities

Patagonia has chosen to develop an unusual corporate culture based on the values of sport and the environment. Working hours are flexible to allow employees to go out and play sports and test the company's equipment when conditions allow it, via its "let my people go surfing" policy. Beyond the values, employees are involved in the recruitment process (in the same way as teal organisations). Candidates are interviewed by not only their potential line managers, but also by their future colleagues. Networking is actively used as a recruitment tool – employees are asked if they know a competent friend who could be recruited. Lastly, the company offers its employees the possibility of taking a two-month green sabbatical paid for by the company to work with the NGO of their choice. They can get involved in environmental and social projects.

Reference: Patagonia

[1] APEC, 2020.
[2] Denis Pennel, *Travailler pour soi, Quel avenir pour le travail à l'heure de la révolution individualiste?* [Working for yourself: what future for labour at the time of the individualist revolution?]
[3] Ipsos for Welcome to the Jungle, December 2020.
[4] BCG, August 2020.

How will the new uses, practices and work rhythms impact on different types of workplaces? So-called "office" jobs that can actually be performed remotely are no longer only performed in offices, but also in homes, in public transport and in a vast ecosystem of third places where work is one of the activities that can be carried out, such as coworking spaces, cafés, hotels, public amenities, and so on.

Very closely linked to the urban environment and to real estate, changes in the workplace are reflected in the choices made regarding the location, design, layout and operation of these places. They also have an impact on regional attractiveness and development strategies.

3

Workplaces of today and tomorrow

Global changes in workplaces

The diversification of locations results in these working environments competing with each other. The office, the home and third places are being transformed to adapt to new uses. Models of cooperation between different workplaces are also emerging, with the prospect of offering a fluid articulation between them. Although the changes in the world of work impact on each location in different ways, certain major trends can be identified:

■ Hybridisation

Conducting remote exchanges from different locations is not easy; new "phygital" devices, i.e. physical to digital interfaces, will be put in place in the different locations to facilitate this interaction between face-to-face and remote contact.

■ Specificity

In an environment combining several workplaces, each of them will have a comparative advantage for certain uses. It will be possible to distinguish the spaces from one another by focusing on their specific characteristics.

■ Optimisation

The search for efficiency and adaptation to real needs, driven by both the environmental and the economic context, will also have a broad impact on all workplaces.

■ Holism

Each place must be considered as being part of the overall response to the need for health and well-being, life balance and comfort at work.

FIGURE IT OUT

66%
of employees surveyed around the world want a hybrid model that integrates the office, the home and a third place, such as a coworking centre or a café.[1]

[1] JLL, 2020.

FOCUS

A multitude of workplaces

Rather than assigning specific teams and individuals to each office building, service companies and public authorities can now think of their real estate quite differently: as a tool that enables their employees to carry out their work. Thus, rather than a desk in an office, the company provides its employees with the ability to make use of a range of locations: the head office, secondary offices, coworking and third-party spaces in the vicinity, bookable meeting rooms, adapted modes of transport, and at home.

Working in the office

The office still ranks as the number one workplace in terms of the average amount of time that employees want to spend in different places. It must therefore be the subject of in-depth reflection with regard to new working methods, in terms of its design, layout, operation, daily use and choice of location.

FIGURE IT OUT

Ideally, employees surveyed would like to spend an average of

55%

of their work time in the office.[1]

Preparing for future uses from the design phase

Whether for newly constructed buildings or for the extensive transformation of existing ones, the use value of a property can now be determined on the basis of various measurable criteria (as Vibeo has shown, for example). Beyond this use value, various principles respond to changes that have occurred in work:

■ Designing the office with a focus on sustainable development

Beyond the requirements of energy efficiency in buildings and the importance of choosing low-carbon construction solutions, construction is now thought about from the perspective of the circular economy and with respect for biodiversity. At the same time, the financial sector is structured to issue international environmental standards as clear as accounting standards, notably through the creation of the International Sustainability Standards Board (ISSB), headed by Emmanuel Faber.

■ Reversibility, upgradeability, quality and service infrastructures

An office that has been designed with a view to easy transformation at a later stage for future uses will be better adapted to changes in work and in the needs of both its users and its territory. This will therefore increase its long-term value. Similarly, the space should be designed to be capable of accommodating new services requested by users.

[1] Mon bureau post confinement II [My post-lockdown 2 office], ESSEC Workplace Management Chair, 2020.

"
The KPI for the office of the future might be happiness.
"

Franco Faraudo
The KPI for the Office of the Future Might be Happiness, Propmodo

An office building that can be turned into housing
Reference: Bouygues Construction

◉ Lyon, France

The Work#1 office building in Lyon has been designed so that it can easily be converted into low-cost housing units at a future date, using the Office Switch Home concept.
Reference: Work#1. Architect: David Chipperfield. Developer: Linkcity. Construction: Bouygues-Bâtiment Sud-Est.

Fluidity in the office between indoors and outdoors

Working in a garden with the comfort of an office
Reference: Bouygues Construction

◉ France

The concept of the fertile office: a space for working or for meetings dedicated to a company, in a semi-open greenhouse lined with vegetation. It is fully equipped with electrical and network sockets, allowing for efficient working.
Reference: Fertile office, Jardins de Gally

Working outdoors, a stone's throw from your desk
Reference: Bouygues Construction

◉ Issy-les-Moulineaux, France

Bridge, an office complex in Issy-les-Moulineaux, near Paris, provides outdoor work spaces equipped with seating, sockets and a good Internet connection. Some of these terraces are located in the semi-open space of the impressive 32-metre high atrium, while others are located outside on the south facade and on the roofs, which are partly planted.
Reference: Bridge Building. Developer and investors: Altarea and Crédit Agricole Assurances. Use: global head office of Orange. Constructor: Bouygues Bâtiment Île-de-France.

An office building designed with mobility in mind

A giant tower with no car park but with its own rail station

◉ London, U.K.

It may seem surprising, but The Shard, the tallest tower in London, provides no dedicated car parking for its offices. Instead, it was built directly above London Bridge station, giving it exceptional accessibility to the public transport network.
Reference: The Shard, London. Developer: Sellar Property. Architect: Renzo Piano.

An iconic head office built right next to transport hubs
Reference: Bouygues Construction

◉ Paris, France

Locating a business as close as possible to major transport hubs is a solution for offering efficient accessibility to employees who want to move further away from their place of work, but also to customers, partners, suppliers, production sites, etc. Grand Central takes this approach one step further: it is located immediately next to Saint-Lazare station in central Paris.
Reference: Grand Central building, now called The Island, the global head office of Pernod Ricard. Architect: Jacques Ferrier. Construction: Bouygues Bâtiment Île-de-France.

Interview

> An office should be defined by both its tangible and intangible qualities.

Marie Puybaraud

Global Head of Research,
JLL Corporate Solutions

How is work-related real estate changing?

M.P.: Over the past few years, offices have become a kind of self-serving refuge: everyone has made their office their own, like their own little turf, and we need to break out of this closed-off approach. The office should instead be a place for collaboration, social interaction and well-being. More broadly, current developments are leading to a change in positioning when it comes to the value of buildings. It is an opportunity to highlight the quality and services offered by the various places and make the human connection central to the economic and social model, rather than the mere capacity of the buildings. In recent years, the very high cost per square metre has pushed the various players to optimise the use of office buildings, but this paradigm is now changing. An office should be defined by both its tangible and intangible qualities and not by its surface area or number of occupants: architects and planners should create places to experience and provide well-being for employees.

So what does this office of the future look like?

M.P.: Although new buildings allow more innovation, the office of the future is a building that already exists. Faced with growing environmental concerns, the priority is to adapt and enhance existing buildings. The office of the future is a place for social interaction, focusing on people and collaboration, a space that is environmentally friendly, planet-friendly and fully integrated into a community.

What can we expect in terms of housing?

M.P.: Well, community-based life could be a real solution to enable work in the housing of the future. The condominium model, which is widespread in the United States and Asia, could be used as inspiration: about 80% of the surface area

is dedicated to housing, about 10% is commercial space open to the public, while about 10% is dedicated to communal spaces for residents. The latter can include swimming pools, sports halls, rooms for family events, etc., but it can also include meeting rooms, for example. In recent years, coworking spaces for residents have become increasingly common.

How would the breakdown of the territorial footprint of companies evolve?

M.P.: It is likely that the geographical spreading of companies' real estate footprint will increase, as transport networks improve and employees want to work closer to home. This shift from the current footprint will be slow, as there is a strong inertia in the location of companies, especially in Europe. In the meantime, the model of the well-connected hub remains the most feasible solution for companies with an existing office.

The way technology affects the workplace also has a wider impact on the city and its infrastructure. New uses induced by ongoing developments, in terms of transport and the use of new work spaces, require us to rethink urban routes and how to place people at the heart of territories. I often talk about the concept of the empathetic neighbourhood, and I am currently working on a large-scale project with Quebec. Creating spaces that are in line and in harmony with the territories, the community and public infrastructures must be our target.

Designing the office of the future

The interior design of an office space helps to make a relatively neutral space suitable for the needs of a given company: the way it functions, its identity and culture, its working methods. Usually carried out by the initial occupant, it is a crucial element in defining an office and the new ways of working are significantly affecting it.

Health and wellness in the office

The previous chapter highlighted how important it is to fully integrate health and well-being at work in company strategies. Workplaces and ways of working need to protect employees' physical and mental health by limiting psychosocial risk factors. This requires a combination of different approaches in the workplace, such as:

■ **Design bright, quiet, pleasant workspaces,** close to nature, monitoring comfort indicators such as natural light, air quality and temperature.

■ **Provide sports facilities,** relaxation areas, health services and occupational psychologists.

■ **Serve balanced meals.**

The concept of well-being is quite culturally specific and can take different forms according to the culture:

■ **In Scandinavian countries, steps towards employee well-being are taken by implementing changing rooms with showers,** storage and equipment areas – all common features to encourage active mobility for journeys to the office.

■ **Asian countries tend to focus on group workouts, coaches and gyms.** Workplaces are also used for social and family time, especially in South Asia, where offices are sometimes open to families at the weekend.

■ **In the United States, the office is also a source of pride:** Google, for example, allows employees to organise their birthday parties at their workplace.

FIGURE IT OUT

83%
of those surveyed consider office layout and design essential to productivity.[1]

79%
of Gen Z expect the company to provide a physical and friendly workspace that builds social connections.[1]

[1] Elan Workplace.

Encourage physical exercise at work

📍 Lille, France

Decathlon recently designed a "shower container" for sports enthusiasts who practise or want to practise near their workplace, or those who cycle or run to work… The first free bathroom facility for sport enthusiasts (3 showers for men and 3 for women) has been set up in Lille on the Euratechnologies site.

Reference: Decathlon, Lille Euratechnologies.

Art in the office

According to a 2019 WHO report, art in the workspace fosters a state of emotional well-being and reduces employee stress. "Contemplating works of art develops cognitive and creative skills," notes Jean-Pierre Changeux, professor of neuroscience at the Collège de France. The more art that is displayed in the office, the greater the sense of openness. The art can also be used to communicate about the company and its image.

Reference: 1 bâtiment, 1 Oeuvre [1 building, 1 work of art], an initiative partnered by Bouygues Bâtiment France Europe.

👁 **Read more**

Plan Bâtiment Durable, Suzanne Déoux, Florence Péronnau, "Bâtiment responsable et santé" [Responsible Building and Health], 2019.

Representing company culture

The workplace can be used as a showcase for employees, partners and clients, and can act as a representation of the company's identity. As a result, the office can be used to convey a specific image that will attract and retain talent.

Headquarters that reflect the company's value proposition

📍 Dublin

To illustrate Airbnb's commitment to its "home-like" city travel model, the company's headquarters symbolically embodies these values: meetings are held in a dozen replicas of flats and houses rented on the platform. In local offices around the world, Airbnb has developed a number of ways of embodying its values.

Reference: Airbnb head office, Dublin

A distinctive workplace that is part of a company's unique identity

📍 Paris

Two companies, Pons and Huot, have joined forces to create the Green Office in Paris. Its nine workstations are composed of Perspex half-bubbles, embedded in the same space and the same table. Beyond the functional aspect, it is above all the singularity of this surprising structure that is a strong illustration of corporate culture.

Reference: Pons and Huot, Paris

[1] EY, Urban Land Institute, Vincent Raufast, Transformation du travail : quels impacts sur l'immobilier d'entreprise ? [Transformation of work: what impact on corporate real estate?], 2020.
[2] Opinionway barometer for CD&B, 2017.

FIGURE IT OUT

61%

of international real estate professionals believe that the workplace and the overall quality of the working environment are essential to developing a corporate culture.[1]

89%

of people surveyed think that the workplace is an important part of the positive experience of working.[2]

73%

of people surveyed think that it contributes to a sense of pride in working for the company.[2]

When design matches the company's products

📍 Stockholm

King, the video game company which produces Candy Crush, has moved into premises in the centre of Stockholm in Sweden. The atmosphere is reminiscent of the Candy Crush game as well as other games published by the company, while offering different working environments and spaces adapted to different uses.

Reference: King, Stockholm. Design: Adolfsson & Partners

Designing spaces for different purposes

An open campus with spaces for different uses

📍 Gentilly, France

Sanofi's Val-de-Bièvre Campus was specifically designed with different spaces that could be used for different purposes: video conference booths, 3 m² confidentiality bubbles for phone calls, etc. The atrium and the "Community Centres" on the upper floors, which act like "village squares", serve as a forum for informal collaboration and interaction. Particular attention has been paid to the acoustics to provide privacy for employees.

Reference: Sanofi, Val-de-Bièvre Campus, 2015.

FIGURE IT OUT

50%

of employees think that their workspace has a major impact on their health,

48%

on their well-being.[3]

[3] Actineo barometer, 2019

Design that embodies the different uses of the workplace

📍 Pantin, France

In keeping with the hot desking era, BETC's headquarters at the Magasins Généraux in Pantin offers a variety of layouts for different uses instead of the traditional workstations on its floors.

Reference: Magasins Généraux, BETC, 2016

Creating a phygital environment to encourage collaboration

Phygital collaboration, i.e. the combination of face-to-face and remote working, is an emerging trend which is leading to changes in office design. As things progress, the need to exchange information between different sites is likely to continue. To make phygital interactions easier, office spaces need to be rethought to minimise any feelings of exclusion of the minority group, or also to limit the various communication issues that can arise in a hybrid work model.

A portal to other connected places

Telepresence solutions turn a large vertical screen into a window to one or more other sites. The vertical format allows people to see each other from head to toe and on an almost life-size scale. This allows remote teams to meet in a more natural and spontaneous way than with traditional video conferencing, for both formal and informal exchanges.

Reference: La Vitre

A meeting room with space for everyone, whether present physically or remotely

In May 2021, Google announced the new facilities it had installed, which are intended to facilitate phygital collaboration. The «Campfire» meeting room experiment that was tested in 2021 is designed to encourage equal participation by face-to-face and remote employees, by including physical space in the meeting room to people who are attending remotely.

Reference: Campfire meeting room, Google

Alternative layouts: making the workplace different

A cost-effective modular office in a warehouse

📍 Los Angeles

Pallotta Teamworks was a for-profit charity with a limited budget. In a disused warehouse, containers, tents and raw wood were used to create an innovative and economical office space.

Reference: Pallotta Teamworks, the Apostrophe. Architect: CWA

The return of the individual customisable office on campus

📍 Emeryville

After experimenting with a full open space in their previous building, Pixar decided to opt for more enclosed offices. The individual offices are arranged in five or six U-shaped groups, with a central gathering area in the middle enabling people to collaborate spontaneously. It is possible and encouraged to personalise the space, to allow employees to develop their creativity in a free flowing atmosphere. Some offices look like toy collections, while others take the form of little huts.

Reference: Pixar Campus, Emeryville

Operations: new services, new business models

Improving the employee experience: responding to end-user demands

Employee satisfaction is a key concern for certain departments, particularly Human Resources, to attract and retain employees. Today, Quality of Working Life (QWL) labels such as Well or Osmoz make it possible to certify the quality of service of an office building. To achieve this, various avenues are being explored by providing new types of services in the workplace.

■ A well-run and lively office to foster interaction

The office often serves as a company's physical landmark, where employees and external stakeholders – partners, suppliers and customers – can gather. As such, 69% of real estate professionals surveyed by EY in November 2020 believe that the office will still be the preferred place to interact with customers and business partners.

■ A workplace with a focus on amenities

According to a 2015 Nexity-Ipsos study, "Amenities and services […] promote employee well-being (98%), a company's appeal in terms of recruitment (91%), enable employees to be more engaged in their work (86%) and strengthen the feeling of belonging to the company (84%)." Amenities bring real added value to the workplace but must now be adapted to the new ways and places of work.

A study released by JLL in its 2019 Top 10 CRE Trends report highlights that 72% of the people who work in the office would like to have better amenities available. Among the most requested were fitness and wellness offerings as well as catering services. These are followed by networking events, day-to-day services (dry cleaning, childcare), wine and beer tastings and beauty services.

Catering services are gradually changing to be more flexible in terms of times and locations, for instance through partnerships with franchises and home deliveries. Concierge services are also being revamped: new types of services are being added to the existing ones (dry cleaning, parcel delivery): automatic lockers, a virtual receptionist terminal that notifies employees of the arrival of their appointment by e-mail, a more hospitable reception area with drinks, etc.

■ A workplace meant to be shared

Sharing workspace offers companies more flexibility in their physical space needs as well as new sources of revenue if they own a site. On the other hand, managing the use of shared space will often require the use of an intermediary.

Some companies are considering opening up their own on-site gyms to the local community, which not only provides them with a source of income but also helps them to be more integrated in the local community. Others are considering renting out some of their spaces for evenings or weekends for events.

👁 Read more

Fabrique Spinoza, Nouveaux espaces de travail et expérience collaborateur[[New work spaces and employee experience], 2019.

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79%
of Gen Z expect the company to offer a physical and friendly workspace, to help create social connections.[1]

[1] Mazars, Future of work : quelles attentes de la gen Z pour l'entreprise de demain ? [What does Gen Z expect from the company of the future?], February 2019. Based on an Opinionway survey of 2,000 young people aged between 15 and 34.

A tailored range of amenities

A wide range of services at the office and elsewhere

The concierge and corporate service provider Bien-Être à la Carte took advantage of the pandemic to rethink its offering beyond company premises.

À la carte meals

Elior, a major player in corporate catering, is repositioning itself to broaden its offer and meet the changing needs of end users, both in companies and at home.

Office location strategies

Are companies choosing locations differently?

Putting a halt to daily commuting and serious challenging the living environment, the pandemic also called into question the logic of the territorial location of companies: whether they should move towards a more centralised and conveniently situated headquarters, towards geographically dispersed offices, closer to employees, or even towards virtual offices, companies are seriously questioning their model.

Moving towards a centralised model?

As working remotely is becoming the norm, local offices may be replaced by central and easily accessible locations close to transport hubs.
The idea would be to optimise the building stock and to also provide the majority of employees with a contractual arrangement enabling them to work from home on a regular basis. In addition to workspaces, there are also third places close to employees' homes; in this case, the headquarters can become a showcase for the company's culture.

Moving towards a decentralised model?

To give employees the opportunity to live wherever they want, the company can implement offices located as close as possible to the regions favoured by their employees, e.g. major regional cities, coastal areas, etc. This will also help the company diversify its territorial footprint.

Moving towards a model that combines both trends?

JLL introduces the "Hub & Club" concept as a potential new alternative to traditional large headquarters. This model consists of having offices in multiple locations, with a core headquarters (the "Club") and satellites (the "Hubs"), closer to where employees live.

Moving towards... no office?

Some companies have a more radical approach. The Remotive.Io website, which regularly tracks the number of French companies offering full remote jobs, with no office space, observes that this figure is constantly growing, from 600 in 2016 to 2,500 in 2020.

Moving towards a location ecosystem

It is quite conceivable that these different strategies will converge into a set of locations, some private and others shared, offered à la carte to employees as close as possible to their needs. The ecosystem of places that stems from it is completed by working from home. But in that case, what is the place of the company in the home?

[1] Parella, Évolution des modes d'aménagement des bureaux et nouveaux modes de travail en 2020 [Changes in the way premises are arranged and new ways of working in 2020], survey conducted from 23/07 to 15/09/2020 among 130 SMEs and companies with more than 500 employees, mainly in the Paris region.

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81%
of people surveyed agree with the statement "We need to make the head office more attractive."

90%
of companies consider that new ways of working no longer correspond to their office layout (main reasons given: management styles, image).[1]

Working from home

Many studies show that employees in companies see working from home as the number one alternative to the traditional office. It seems that working remotely has become the new normal. What measures need to be taken to modify homes so they can best adapt to this new trend?

Housing design: anticipating the new, adjusting the old

New expectations of society for housing[1]

The combination of working from home becoming the norm as well as other factors related to the pandemic and its lockdowns, has changed what we expect from housing. Various trends include…

Private outdoor spaces

Gardens, balconies and terraces are the most frequent reason for 49% of people in France to move home. A private outdoor area is ranked as the most valued feature of their home, followed by location, light, layout and aesthetics.

Larger surface areas

For 47% of people in France who want to move, a larger home is the first or second most important reason. For 15- to 25-year-olds, floor space is the number one thing they want to change in their current home.[2]

Improved technical quality

68% of people in France who are not satisfied with their homes blame inadequate thermal insulation, and 61% poor soundproofing.

The importance of natural light

People who worked from home during the pandemic are particularly concerned about **the brightness of their homes, more so than the average French person.**

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How housing contributes to inequalities in the quality of working life

Although 90% of remote work is done from home, the home is not intended for work.[3] The growing trend for contracts stipulating distance working reveals disparities in the quality of working life from home. Depending on the nature of the individual's job, the equipment available to them and their personal situation (particularly in terms of family and financial circumstances), working conditions at home may be unsuitable.

Read more

■ **Comprendre les aspirations des français [Understanding the aspirations of the French]: ObSoCo/Chronos/ADEME/Bouygues Construction, Observatoire des usages et représentations des territoires [Observatory of Uses and Representations of Territories], Vague 3, 2021.**

■ **Comprendre les aspirations des jeunes générations [Understanding the aspirations of the younger generation] : JAM / Bouygues Construction, Habiter demain – les nouveaux imaginaires du lieu de vie par la jeune génération [Living in the future – new ways of imagining the living environment by the younger generation], 2021.**

[1] All data in this box, except where noted, from ObSoCo/Chronos/ADEME/ Bouygues Construction, *Observatoire des usages et représentations des territoires* [Observatory of Uses and Representations of Territories] – Vague 3, 2021
[2] JAM / Bouygues Construction, Habiter demain – les nouveaux imaginaires du lieu de vie par la jeune génération [Living in the future - new ways of imagining the living environment by the younger generation], 2021.
[3] Malakoff Humanis, 2019-2020

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On average, the employees surveyed would ideally like to spend

37%

of their working hours at home.[4]

Prior to the pandemic, only

17%

of remote workers had a dedicated area in their homes to work in.[5]

Designing homes to live and work in

Housing can be redesigned by landlords, designers, architects and builders, and needs to be designed for a variety of uses (sleeping, eating, working, entertaining, socialising) and intimacy. Housing design must not only offer more flexibility, but also better soundproofing so that multiple activities can take place. The way accommodation is designed is also being rethought with a particular emphasis on health, with attention given to better air flow, positioning windows for light and views of nature, etc.

A housing project designed for remote workers

◉ Mélesse

In the early 2010s, a set of flats and houses was designed in a suburban area, each featuring a dedicated home office. All of them were equipped with fibre optics to ensure the necessary connection to work remotely, but it was above all the services and shared spaces that were dedicated to this activity, with a building designed to house a meeting room, a workroom, an exhibition room and shared services.

Reference: 170 homes specifically designed for remote working in Mélesse by the Jeulin Immobilier group

[4] Mon bureau post confinement II [My post-lockdown 2 office], ESSEC, 2020. [5] ObSoCo, 2021.

Redesigning homes… how and by whom?

What are the physical adjustments or ways of organising work to accommodate the consequences of working at home for employees?

Individual accommodation with constraints

As working from home has progressively become the norm, 27% of households that include a home-based employee set up a permanent workspace in a room with another use in 2020. New workspace solutions have been introduced in kitchens, living rooms and bedrooms. However, due to spatial constraints, it is sometimes difficult to adapt the home appropriately. Some lack space, thermal and sound insulation, a good broadband connection or even enough lighting.

What were once informal arrangements are now part of the company's responsibility

According to Xavier de Mazenod, the pandemic has made remote working in France more formalised than it used to be. The public health crisis, which led to the implementation of a contractual approach to remote working, brought about a sudden need to formally address the question of how to arrange accommodation for work. Employers are now considered to be responsible for their employees' home arrangements. As a result, companies are now actively considering how to provide their employees with a good quality of life for work at home.

How far can and should a company be involved at home?

To achieve a high level of productivity, home-based workplaces must be designed to promote the health and well-being of employees. There are several ways in which the company can make contributions to the home, though employee demands tend to vary: buying equipment, providing a financial package with or without proof of purchase, contributing to overheads, contributing to the rent, etc.

To work in more comfortable conditions, according to an Actineo survey in 2021,[1]

73%
of those surveyed would like their employer to make a financial contribution towards home improvements.

The most popular option, favoured by
34%
of those surveyed, is a free choice regarding equipment with a financial contribution from the employer (with proof of purchase).

A survey conducted by Ifop[2] concludes

81%
of employees working in an office feel it is logical for their employer to cover the costs of equipment at home (computers, chairs, tables, etc.).

39%
of employees find it normal for their employer to pay them more when they work from home.

36%
of those who work from home find it logical for their employer to contribute to their rent.

That being said, there are still reservations.[1]

27%
say they do not want any financial contribution.

15%
feel that they already have everything they need.

12%
want to take care of things on their own.

This can be interpreted as a desire to preserve their home lives from any company interference.

[1] Actineo survey, January 2021. [2] Ifop survey, March 2021.

How can work-life balance be optimised?

Bringing work into a personal space raises the question of the boundaries between the private and professional spheres.

Having a dedicated room to work in helps to have a physical boundary between private and professional activities: when you go in, you're at work and when you leave, you're at home.

There are also some advantages to having a room that normally serves a different purpose: once the room is no longer an office, after having removed equipment, the risk of working outside of allocated hours is reduced to a minimum. Nevertheless, it is important to have a fully adapted set-up that allows for a quick "conversion": a suitable chair, a keyboard, or even symbolic objects that can be put away once the working day is over.

The occupational psychologist, Christine Bocéréan, does, however, stress the importance of such arrangements: "What counts is less the material conditions than the person's discipline." It is becoming essential to establish transitions between work and leisure in our everyday lives.

> **What matters is less the material conditions than the person's discipline.**

An exercise desk

A reclining computer stand to work lying down

An outdoor office for "focus"

A desk-bed

An open-air office on the balcony

A pull-out desk

A minimalist put-away micro-workspace

Work as the added variable changes the operation of housing

The economic impact of working from home for the employee

Working from home incurs costs for the employee:[1]

28%

of employees say that their work-related costs have increased.

The breakdown of these expenses between the employee and the employer has not yet been legally clarified, which can often result in expenses to be paid by the employee: running costs (water, electricity, heating, coffee), costs of supplies (paper, pens, notebooks, ink cartridges) and costs of furniture and computer equipment (chair, desk, screens, headset, printer).

A need for new services at home

As working remotely becomes more widespread, some services provided for employees in companies have had to change to be available at home as well. Company catering, team-building activities and concierge services are being brought into employees' homes.

[1]Obrego study, 2018.

A phygital staff canteen combining online space and home delivery

Following an online order the same morning, i-lunch delivers balanced meals to the homes of remote workers in the Paris region, and offers them the opportunity to connect with their colleagues via a video link to an online canteen space dedicated to the company. Users of i-lunch can also enjoy video classes in cooking, nutrition, yoga and fitness.

Reference: i-lunch

Corporate caterers are turning to home delivery

📍 Paris

Elior also took advantage of the growth in working from home to acquire a digital catering company, Nestor, which was set up in 2015. With around 10,000 meals delivered every week in Paris, Nestor, which originally focused on B2C, is now repositioning itself with Elior as a B2B service, running a "digital canteen" for companies.

Reference: Nestor

Corporate concierge service provided in the home

A subsidiary of Sodexo, Circles, has expanded its "Be Connected" concierge service. Companies can now offer employees working from home a range of services they used to enjoy on the company premises delivered to their door, such as dry cleaning and shoe repairs, organic food hampers, cooking kits, and so on. Circles has also started to organise remote events such as themed lunches, cooking tutorials and wellness workshops, which are in high demand.

Reference: Circles

Housing solutions that encourage the sharing of resources

Co-living or shared housing is a new form of residential accommodation that is starting to be seen more frequently in developers' offers. In an interview with Xerfi in January 2021, Vincent Desruelles, an expert in real estate, construction and services, forecasts exponential growth in co-living in France, from 2,600 beds in 2020 to 14,500 in 2023. Similarly, a study by Businesscoot predicted 115% growth in the European co-living market between 2020 and 2022. These types of accommodation that focus on the sharing of spaces or services can be a solution to have access to an extra room for an office, an outdoor space, reliable WiFi or even entertainment. These offers of new forms of housing claim to provide innovative types of construction to help address the lack of sociability or space.

A network of co-living apartments dedicated to young freelancers... on a subscription basis

Hackerhouse offers a monthly subscription allowing members access to co-living spaces around the world, which are rated primarily for their qualities as dynamic workspaces. This accommodation targets young entrepreneurs and freelancers eager to travel and meet people. The site works as a platform that allows investors to open a hackerhouse.

Reference: Hackerhouse

A customised flat share with space for remote working

La Casa brings together a dozen housemates in large houses fitted out with large shared spaces based on a particular theme (cooking, sports, cinema, etc.). To ensure a harmonious community, newcomers are only admitted when residents have voted them in. Thanks to the large size of the shared spaces, both indoors and outdoors, it is easy to envisage remote working, even though this is not a central part of the offer in these community-based homes.

Reference: La Casa Coliving

Other solutions are based on C2C networking, for example, to enable people to rent an office, a coworking space or a meeting room in another person's home. These platforms act as a kind of Airbnb for home office rentals. They herald new forms of property operation focused on a more collaborative type of use.

Rent a workspace from a neighbour as easily as a DIY tool

Kiwiiz has launched a category for renting rooms on its platform allowing neighbours to rent objects and services between them. An individual can rent a coworking office, a meeting room, an event space or even a garden in another individual's home. Without dissociating the rental dedicated to work from other rentals of goods and services, this platform adds the use of work to a wide variety of uses that can be shared between neighbours.

Reference: Kiwiiz
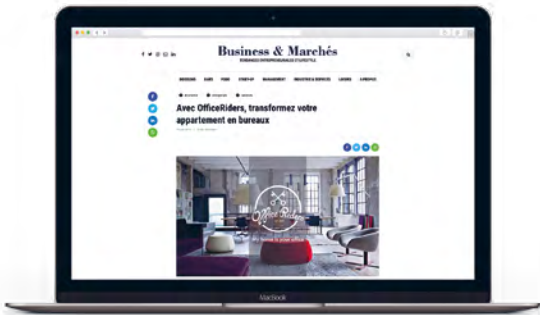
Book a home to work in for the day

Equivalent to Airbnb for home office rental, this platform proposes to make housing space available for more collaborative use. Reservations, generally located in spacious flats or large houses, can be made individually for a quiet coworking space, or collectively for a meeting with several people, or even a more exotic setting for a company seminar.

Reference: OfficeRiders

Residential choices at the heart of deciding where to live

What kind of residential trends are linked to the new working patterns?

The ability to work remotely now gives many employees a much greater choice when it comes to where they live. Faced with the growing aspiration to a better quality of life, some people are announcing an "urban exodus", while others, such as the economist Olivier Bouba-Olga, believe that such a description of the evolution of residential choices is "particularly excessive".[1] According to French notaries, "the pandemic has brought to light new behaviours with regard to real estate […] but to date there has been no urban exodus."[2] Meanwhile, a study by the Observation Platform for Urban Projects and Strategies concludes that the expression urban exodus can lead to a "double misunderstanding": it is not a question of a surge of urban populations to the countryside that bears comparison with that of the rural exodus in the 19th century, but of a measured movement of departures that only affects the largest cities. Which geographical areas will benefit from these new residential choices: suburban, peri-urban, rural regions or medium-sized towns? The analysis of the evolution of residential choices in France, linked in particular to new working patterns and other factors that have been hastened by the pandemic, is the subject of various approaches, offering an overview of how the situation is changing:

■ Analysing data from the French Ministry of Education, Olivier Bouba-Olga found that the number of families with children enrolled in primary schools fell slightly in metropolitan areas between 2020 and 2021, whereas this figure was rising before the pandemic. The opposite trend was observed in communities that are less densely populated and are generally more rural.[3]

"
When a constraint is removed and people really consider moving, they gradually shift from the ideal of the village to its more pragmatic counterpart: a new myth is born, that of the medium-sized town.
"

Guénaëlle Gault
CEO of the Observatory of Society and Consumption (ObSoCo)

The economist highlights the heterogeneity of local situations, with some metropolises less affected by the departure of children from primary school (such as Orléans) and others more so. The Greater Paris metropolitan area was the most affected at national level in terms of the number of new school students.

■ According to an ObSoCo survey in May 2021, 726,000 people in France had decided to buy a second home.[4] This seems to indicate the development of double or even triple residences, only available to the most comfortably off, of course.

■ On the basis of data provided by the property market, various players have attempted to measure changes in residential choices.[5] Laurent Vimont, CEO of the Century 21 estate agents' network, notes that sales of houses have increased more than sales of flats. Sébastien Blanc, Director of the New and Construction Markets at the SeLoger group, describes a "phenomenon of increased suburbanisation in France's ten biggest cities."

■ Working primarily with data on mail forwarding provided by the French Post Office, the POPSU Territoires study detects a positive migratory balance to small and medium-sized towns, on the one hand, and to suburban municipalities and rural areas, on the other.[6] Although the study stresses that these flows are very limited in scale, it notes that "small flows can produce large effects" on rural towns and villages. It is also observed that these population movements are not revitalising all rural areas, but rather territories that benefit from specific advantages (climate, accessibility, etc.).

[1] Olivier Bouba-Olga, Assiste-t-on à un exode urbain au profit des villes moyennes et des territoires ruraux? [Are we witnessing an urban exodus to medium-sized towns and rural areas?], *Le Monde,* January 2022
[2] Property Outlook published by French Notaries, 28/10/2021. [3] Bouba-Olga, *op. cit.* [4] L'ObSoCo, May 2020.
[5] POPSU, 2021 Colloquium, urban exodus press survey.
[6] POPSU: Jean-Marc Offner, Jean-Baptiste Marie, Aurore Meyfroidt, Fabienne Dran: Exode urbain? Petits Flux, Grands Effets - les mobilités résidentielles à l'ère (post-)covid [Urban Exodus? Small flows, big impacts –residential mobility in the (post-)Covid era], February 2022.
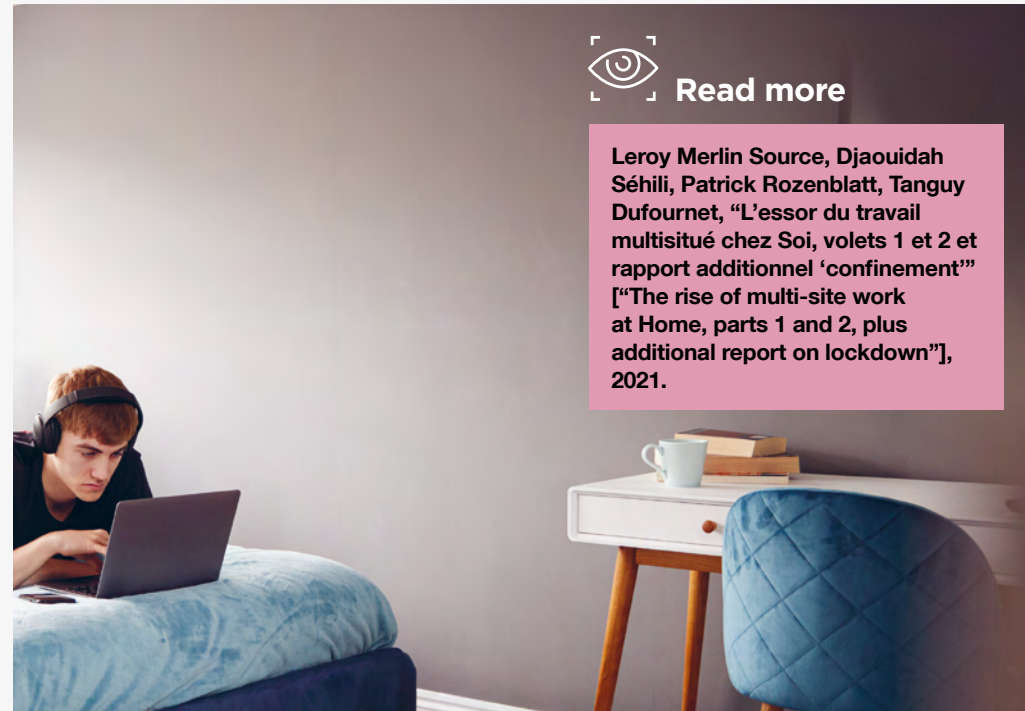
Interview

Djaouidah Séhili

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#3

Read more

Leroy Merlin Source, Djaouidah Séhili, Patrick Rozenblatt, Tanguy Dufournet, "L'essor du travail multisitué chez Soi, volets 1 et 2 et rapport additionnel 'confinement'" ["The rise of multi-site work at Home, parts 1 and 2, plus additional report on lockdown"], 2021.

Patrick Rozenblatt

Sociologist, emeritus professor, Lumière Lyon 2 University, Max Weber Centre, CNRS

Sandra Villet

Illustrator and designer

How do you define working from Home?

D.S.: We are occupational sociologists, so our starting point was changes in work and we ended up looking at work at Home. What we observed was that the classic full-time job in the same workspace was tending to become more and more atypical, with the development of different statuses and the incentive to become self-employed – in which case one generally starts out by working from Home. The rise of digitalisation has led to a shift from traditional forms of work to spaces outside the walls of the company, particularly to the individual's home. Working at Home does not stop at remote work: it can be linked to statuses other than that of employee.

P.R.: The advent of e-mails has generated a form of communication where we no longer really know whether it is work-related or not. For adults, temporality is no longer marked by activity times and rest times. Management has theorised this with the formula "anytime, anywhere, any device". We are in a model where one's home has become just another place of work: as a consumer (by ordering online) or as a user of public services (by filling in a form online), we relocate part of the work of the company or the administration to our Home.

What do people experience when they work in multiple locations? And what does it change in practical terms for the home?

T.D.: There is a continuum between several spaces in multi-site work: home, company, third place, café, and so on. In the context of family negotiations, the demands of work push some people to go and work in a café rather than at home, or on the contrary to go out to distance themselves, to recharge their batteries, because space at Home has become a work space, and is no longer the space of reassurance and rest. These dynamics, which are plural and complex, perfectly illustrate how spaces are intertwined: a perceived blurring of the boundaries between the interior and the exterior.

D.S.: In our first research project, we identified four social relationships that were to be modified as a whole by multi-site work: those linked to the outside, i.e. outside the home; those linked to the inside, i.e. inside the home; those linked to social time; and those linked to what we have called self-representation. Interior spaces are then rethought, revisited and transformed. These transformations do not occur over a short period of time, but through negotiation with the members of the household, with oneself, with the outside world, with one's relationship to time. It is learned through a process of trial and error, by going backwards and forwards, to arrive at a transformation of the interior space that can go as far as the open-space model, where no space, no room, is able to remain exempt from work. Because of our phones, the first space where we work in the morning, and the last space where we work at night, is the bedroom.

P.R.: These days, as work flows through all the places in the household, you feel "at Home" everywhere under the gaze of others. To give an image, you could argue that work has updated the Marcel Aymé short story, "The Man who Walked through Walls" ("Le Passe-Muraille"): it's no longer enough to close the office door to isolate yourself. We've entered into social relationships that risk being tense, because there can be surveillance both inside and outside the office.

Talking about this "Passe-Muraille" phenomenon, have you considered the hypothesis that work no longer ends at the office door, but at the on/off switch on the smartphone or the computer?

T.D.: We are going to use these tools to learn how to work at Home: it's a matter of trial and error, of trying to regulate space and time, of setting up a framework where there isn't one; with difficulties, because the equipment serves one individual, while the demands imposed by the work are placed on the whole household. The question that arises is: how do we negotiate space and time? In order to ensure that work times are respected by others, tacit rules can be introduced, for example the closed study door means do not disturb. This closed door rule can be applied by the children, too.

D.S.: A room dedicated to work becomes a real issue when there are several members of the household working. How do you regulate use and access to it? Who can make use of it and who can't? We had two very clear examples of two families where it was the wife who worked in the home before the pandemic, and who had a dedicated work room for years. In both cases, as soon as remote working was enforced by the pandemic, the room was appropriated by the man of the house, which is a significant development.

T.D.: Social landlords are wondering about how to occupy ground floor spaces in apartment buildings: they are thinking about setting up open-space areas, work spaces. So the question being asked is, is housing now turning into a vector for work? The four walls of the home are subject to more and more standards, rules and constraints. These rules contribute to the formation of identities.

S.V.: I drew people at home from life as they were organising their work. The relationship with the body is completely changed by the fact that they work at home. The first thing I noticed was the clothing, which ranged from pyjama trousers to a work suit. In our survey, each situation we encountered revealed a certain number of rituals for starting work, finishing work and taking a break. When you work at Home as a professional, it is up to you to invent your relationship with work, which will result in a certain number of moments and acts, such as getting changed for work, settling down to start, making yourself a cup of tea. These are all breaks in the day and in your interior design. While the main work area may be a dedicated room, working at Home may involve the co-existence of other work areas in the home that allow the body to adopt different postures for a given period of time: the sofa, at a coffee table in the living room, etc. And the body is often mistreated through these positions, but also through the need for calm, which is not agreed by consensus and can be a problem within the household itself.

> *Because of our phones, the first space where we work in the morning, and the last space where we work at night, is the bedroom.*
>
> **Djaouidah Séhili**

A wide choice of third places for working remotely

In a broad sense, we refer to all spaces used for remote working as third places, excluding homes and offices. These include:

■ Coworking spaces

These cover a wide range of value propositions, from quality workspaces close to home to off-site meeting places, from flexible and service-oriented alternatives to traditional leases for companies, or even local or specialised communities of workers.

■ Hotels

They can be a place to work when travelling on business, or help bring teams together outside the usual business environment, and can offer their holiday guests dedicated remote working spaces during their holidays and weekends.

■ Cafés, bars and restaurants

They provide a convenient transitional workplace when travelling for work, or offer an informal alternative to working from home, especially for the self-employed.

■ Means of transport

In some cases, daily commutes can actually be productive, or offer dedicated work stops for business trips.

■ Recreational areas

Some of these can offer a change of scenery or a place for people to work in their spare time.

Third place genesis

"Third places" is a term coined by the American sociologist Ray Oldenburg in *The Great Good Place* (1989). Oldenburg developed the concept in opposition to the "first place", i.e. the home, and the "second place" (the traditional workplace).

■ Innovative businesses

These attract nomad workers while on the go.

■ Public facilities

Some provide free work spaces for all.

There are many types of workplaces, with very different economic models and management methods. They are also intended for different audiences: employed or freelance remote workers, people on business trips, teams needing for collective workspace, etc.

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Third places – a major ecosystem that goes beyond work

Third places currently constitute a vast and complex ecosystem. In addition to the workplaces that interest us here, third places can also be defined as places for:

■ **Alternative entrepreneurship:** fablabs, hackerspaces, open source project incubators
■ **Alternative consumption:** social supermarkets, shared gardens, recycling centres
■ **Alternative learning:** wikischools, digital practice areas

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In 2018,
10%
of people in France surveyed work in third places, but
20%
thought they would in 2028, according to a Businesscoot study.[1]

Office workers would like their working time to break down as follows:[2]

Third places	Company	At home
6%	**55%**	**37%**

61%
of people under 35 would ideally like to be able to work from time to time in third places such as coworking spaces.
44%
among them would work in bars, cafés and restaurants.[3]

[1] Businesscoot, The coworking market, July 2020.
[2] Mon bureau post confinement II [My post-lockdown 2 office], ESSEC Workplace Management Chair, September 2020.
[3] Harris Interactive survey for the Cetelem Observatory, April 2021.

Work with a variety of locations

The pandemic generated some surprising examples of facilities temporarily transformed into remote working spaces in the absence of their usual clientele. Here is a selection.

Working online from a Ferris wheel
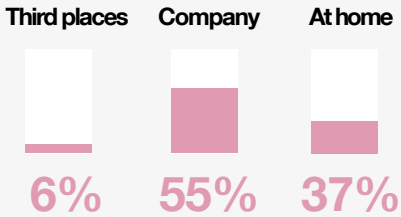📍 Kawasaki

Working in an office pod
📍 Tokyo

Working in a party villa
📍 France

Working in a fully-equipped booth in the middle of the street

📍 London

In London, some old phone boxes have been converted into genuine nomad offices. At a cost of €3.50 per twenty minutes, the Pod Works booth allows you to print or scan a document, charge your mobile devices, make phone calls, use a 25" screen and make use of the WiFi for a video conference. Regular customers can take out a monthly subscription.

Reference: Bar Works, Pod Works, London, UK

Working surrounded by nature

📍 Brandenburg

The German start-up Outside Society offers companies wishing to organise outdoor work sessions the opportunity to rent a 34 m² glass box for the day. These transparent boxes, set in the heart of the countryside, are equipped for work and powered by solar panels.

Reference: Outside Society, Germany

Setting up a meeting on a boat

📍 Marseille

This sailing boat based in Marseille offers cruises dedicated to team building sessions, but also management meetings, colloquiums, annual general meetings for up to thirty participants, in the heart of the French Calanques.

Reference: Schooner Alliance, Port of Marseille, France

Third places to work on the go

Two distinct needs can be covered by working on the go:

■ **Ensuring productive business trips**

When travelling for work, mobile workers are often looking for easily accessible temporary workspaces to make their trip as productive as possible. This can include working in stations, on public transport or in spaces close to their destination. Wojo offers unlimited access to more than 300 workspaces in hotels, train stations and concept stores throughout France. The service is available via a monthly subscription.

■ **Optimising daily commutes**

By making their daily commute more productive, workers can optimise their working time. With the right equipment, certain means of transport (buses, trains and, who knows, maybe even, self-driving cars in the future) can turn the daily commute into productive time and become real workplaces in their own right.

Finding a nearby workspace through a platform

📍 France

Intended for both individuals and companies, the Neo-Nomade platform provides access to more than 3,000 workspaces in France, ranging from Wi-Fi cafés to coworking spaces. Since 2014, a "Pro" package allows employees of member companies to use these spaces with a coworking pass, which grants access to over 1,000 partner spaces (such as Wojo, Regus, Spaces, Wework, Deskeo, Morning, Stop & Work, etc.).

Reference: Neo-Nomade, France

Working on the bus going to work

📍 Belgium

Office On Wheels targets companies and business parks that are not easily accessible by public transport. They offer office buses equipped with workspaces, coffee machines, screens, sockets and a high-speed connection so that employees can work on their way to the office.

Reference: Office on Wheels, Belgium

Working in the station

📍 France

The Work & Station concept was developed by the French national railway company SNCF to provide free, accessible spaces in stations for all travellers. This micro-working facility, introduced in 70 stations in the Paris region by 2018, includes desks, tablets, electrical and USB outlets, as well as a WiFi connection so that passengers can get on with their work while waiting for their train.

Reference: Work & Station, SNCF, France

Working in a hotel during the day

Dayuse is a platform that allows users to book a hotel room by the hour, half-day or day, for a quality workspace. In 2020, the platform had roughly 5,000 partner hotels in 25 different countries. The price of a room for the day is usually 30-75% cheaper than the overnight rate. With 150,000 users worldwide in 2017, Dayuse was earning an average of 10-15% additional revenue to its partner hotels.

Reference: Dayuse

Third places that mix business with pleasure

Achieving better work-life balance: employees are looking for a more fluid and flexible way to combine their work and personal lives (leisure, shopping, family time). To help achieve this balance, a number of players are taking action.

Combining work and exercise

📍 Chicago

This Chicago gym has updated its range of services and now also offers work spaces to combine exercise with high-quality work. Sports enthusiasts often used the gym's WiFi network to finish a task in between workouts. This place, which offers daily and monthly membership rates, focuses on the benefits of exercise for work productivity.

Reference: Brooklyn Boulders, Chicago

Work and play on a luxury atoll

📍 Maldives

The Workation Package offered by the luxury resort Nautilus Maldives includes a desk with an ocean view, an assistant, drinks, and laundry service. But when it comes down to it, if you're travelling to the Maldives, would you want to work or rather just switch off?

Reference: Workation Package, Nautilus Maldives

Is a holiday village a good place to work from?

📍 France

In the summer of 2020, Pierre & Vacances launched the "Telework Offer": for any 7-night stay, a discount would be offered in one of the 20 residences or villages selected for their quality work environment. These sites, often by the sea, in the mountains or in the countryside, offer free high-speed WiFi, provide a 4G key for those wishing to work by the pool or on the beach and offer various services such as children's day care clubs.

Reference: Pierre & Vacances, Telework offer, France

Working and travelling

Introduced in 2021, this all-terrain van is designed to combine personal and professional life on the road. The retractable workspace located at the rear of the van consists of a desk, an on-board mobile WiFi access point, a coffee machine, an ergonomic office chair and excellent lighting. There is also a rooftop terrace accessible from the bedroom area for those who want to relax. This could be a solution for digital nomads, or for salespeople who are constantly on the move and lack a quality office in their vehicle.

Reference: Nissan, Caravan Office Pod Concept

Weekend breaks: some work, some play

The hotel's "workation" offer helps to achieve a better work-life balance by offering the possibility of working remotely while staying for a weekend through incentives:

■ Check in as early as 8am or check out at 6pm, allowing you to do a full day's work at the hotel on the first and last days of your stay

■ 50% discounts on Thursday and Sunday nights to prolong the weekend by working remotely

■ Access to high-speed WiFi, 24/7 fitness and all hotel services

Reference: Hyatt Regency, Palais de la Méditerranée, Nice

Service-oriented third places – flexible, community-based workplaces

These workplaces are a real alternative to traditional offices. They are flexible because they are not subject to a commercial lease. Companies can pay subscriptions for their staff, or even rent entire floors for seminars. These office alternatives often come with a wide range of optional services:

■ **Services for employees' well-being**

Fitness studios and classes, a concierge service, a cafeteria, catering.

■ **Administrative services to support the company and its employees**

Domiciliation services, accounting, marketing, financial, IT services, conferences, training.

Bringing together a community of workers with common interests

On top of a quality workspace, some coworking spaces also encourage people to become part of a community where sharing and collaboration are at the heart of the value proposition. These places make it possible for companies, freelancers, partners, service providers and employees to meet and exchange ideas to work together, create synergies as well as innovate, and provide all the necessary facilitating. According to the members of the community's professional and personal needs, there can be several initiatives to promote interaction, such as shared meals, networking, evening events, training, conferences, debates, competitions and exhibitions. These initiatives can come from the operator of the third place or from the community itself. Depending on the way the third place is positioned, the community can be more or less local and varied.

Adjusting workplaces to different needs

⊙ France

Wojo offers flexible solutions that adapt to the needs of companies, thanks to its wide range of spaces and diverse work environments. The "Office offer" targets companies looking for private office space, either by the day for two or more people, or through a monthly subscription for each employee.
There are several different kinds of office spaces available at Wojo. For instance, at Wojo Madeleine in Paris, there are both quiet and more lively coworking spaces, a bar, a gym, lounges and kitchen areas, a rooftop, terraces, etc. Within the same space, Wojo makes it possible to have a change of scenery at a single address. In addition, Wojo offers other types of services, most notably in Accor group hotels.

Reference: Wojo office, Paris 13 Tolbiac, France

À la carte coworking spaces at the heart of international mobility hubs

⊙ Paris

Multiburo is a European network of approximately 300 premises ranging from 10 to 1000 m² for companies of all sizes. Some of these are right in the middle of mobility hubs (such as the Montparnasse train station in Paris), while others are in city centres or on the outskirts. On a subscription or hourly basis, they offer individual workstations, meeting rooms and various other services: domiciliation, concierge and mail management, IT services, conferences, etc.

Reference: Multiburo, Montparnasse station

Working in a community specialised in networks

⊙ Greater Lyon

Over 1,200 co-workers, remote employees, entrepreneurs and freelancers work on a regular basis in one of the 17 spaces of the Greater Lyon coworking collective. A total of 1,300 events are run by these different spaces, which are home to 150 start-ups. By creating their own network, the coworking spaces complete each other while still having their own specificities. The "Comptoir Etic", for example, is home to players in sustainable development, while the "Atelier des Médias" is aimed at freelancers working in the web, image and media sectors.

Reference: Coworking network, Greater Lyon

Third places to work closer to home

Working in a quality space close to home

As we have already noted, some homes have proved to be unsuitable to work from, owing to lack of space, noise and thermal insulation, connectivity or even lighting. In January 2021, about 1/3 of remote workers did not have a dedicated space to work in. Some third places offer shared workspaces to local residents, minimising the need for employees to commute and providing them with a quality workspace. These third places are sometimes managed by local authorities, who see them as a public service, a vector of attractiveness and employment, and also a driver for the environment.

Working in a library – free access and good for concentration

⊙ Paris

The Pompidou Centre's public information library has quiet workspaces that are perfect for individual workers, freelancers and remote employees who wish to work alone. The library is heated and air-conditioned and provides Internet access and power outlets to visitors, all free of charge.

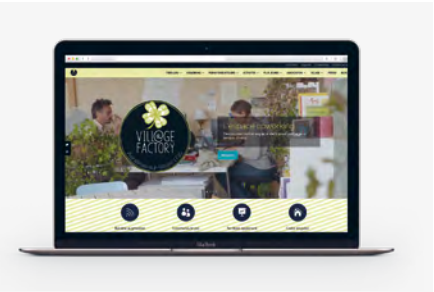*Reference: Public Information Library, Pompidou Centre, Paris*

A community revives a village

⊙ Asnières-sur-Vègre

This coworking space is in the former school in a village of 400 inhabitants. The space is managed, fitted out and tended to in a collaborative manner by a community made up of members who have subscribed to the coworking space. The rates for this third place are well below the average rates for coworking spaces, thanks to the fact that the community itself manages part of the maintenance and running of the space.

Reference: Vill@ge Factory, Asnières-sur-Vègre, France

A flexible range of services for workers

⊙ Saclas

This space offers hot desking, unlimited printing and scanning, monitors, a phone corner, a reading corner and unlimited coffee and tea on a subscription basis. It is also possible to receive a client in the common area.

Reference: Coworkgreen, Saclas

Working remotely in a suburban setting

⊙ France

"La Coworquie" is a coworking space located in a town of about 5,500 residents halfway between Lyon and Saint-Etienne. It provides local residents access to a quality workspace without having to make the daily commute to the surrounding towns and cities, where traffic jams are a regular occurrence. There are various offers: half-days for occasional teleworkers, or monthly, with the possibility of having a private office as well as additional services.

Reference: La Coworquie, Mornant, France

Working in a virtual space

The new approach to coworking where employees can come together is in virtual spaces. In 2021, Mark Zuckerberg announced his ambition to enable people to live and work "in the metaverse", holding meetings through avatars, for example. There are several different visions when it comes to using VR as a supplement to physical workspaces, just as there are several different ways to create these virtual offices. So which of these initiatives will last?

Meeting colleagues in the metaverse

The development of virtual reality solutions now makes it possible to recreate a realistic work environment. According to its advocates, virtual reality can help create more formal or informal connections, as well as reduce eye strain that results from video conferencing. "Many companies are increasing their use of VR with training, collaboration, design and manufacturing use cases," says Jitesh Ubrani, research director for the International Data Corporation. "We expect the commercial segment to grow from 38% of the worldwide market in 2020 to 53% by 2024." These virtual spaces can also take on more mundane, two-dimensional forms that can be used with a regular laptop computer.

FIGURE IT OUT

The International Data Corporation forecasts that shipments of virtual reality headsets will grow rapidly, with an annual growth rate of

48%

from 2020 to 2024.

A virtual break room for remote workers

Sine Wave Entertainment has launched its 3D virtual "social hub" for remote teams to emulate the sense of working together in the workplace. Available through a computer or a VR headset, people navigate this colourful online world with an avatar. The Breakroom world includes a town square where people can meet, a presentation auditorium, private and public meeting rooms, a range of communication tools (VOIP, instant messaging and email), video conferencing, shared media and desks, as well as live social events such as concerts, movies, quizzes and seminar sessions. Following the internal success of this space, Sine Wave decided to market it to third-party companies.
*Reference: Sine Wave Entertainment, Breakroom.*

Combining virtual spaces with video interactions to recreate a casual setting

Developed by the Coding Machine teams during lockdown, Work Adventure recreates a shared space for company members in a game-like format: each person moves their character in a retro 2D video game world, and a videoconference window appears instantly as soon as they approach one or more of their colleagues' characters. This helps to recreate informal meetings from a distance. There are also different versions for corporate events: for example, there is a cinema that shows corporate videos, a conference room where you can only see the webcam of whoever is on stage and a hostel where you can talk to up to 8 people by sitting at a table with your avatar, as well as other areas where you interact with those you meet.
*Reference: Work Adventure, the Coding Machine.*

Augmented reality to merge face-to-face and remote working

Instead of two parallel worlds – real and virtual – augmented reality allows virtual elements to be added to what the eye sees; whether utopian or nightmarish, it aims to incorporate digital elements into the physical senses.
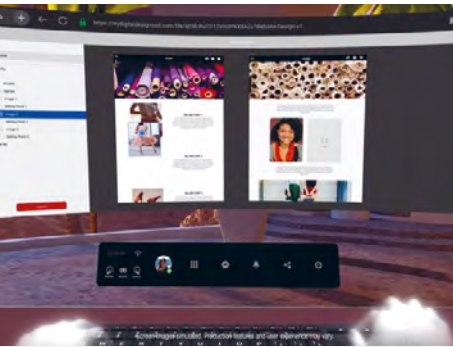
Working with equipment created in augmented reality

Meta (the company formerly known as Facebook) is developing "Infinite Office", a new office suite designed for VR. It allows a multi-screen workstation to be generated, while relying, if necessary, on physical devices, such as a keyboard for example. Meta intends to develop this concept with its own Oculus Quest virtual reality headset, as well as compatible accessories developed by partners like Logitech.
Reference: Infinite Office, Meta
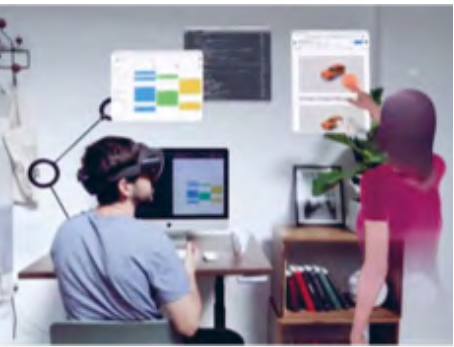
Superimposing colleagues and work materials to the real world

Spatial allows several people to meet in an AR environment. In addition to simply chatting, users can exchange files or share their computer screen, etc. Colleagues are depicted with realistic avatars, modelled from user-supplied selfies. It is possible to host up to thirty people in a room, place notes in the space, share a presentation wall, a flip chart or files, or exchange directly via Slack and Figma. The service can also be customised for corporate clients.
Reference: Spatial

A full range of augmented reality services for businesses

Microsoft's HoloLens 2, an AR device, is being offered to businesses for a number of different purposes, ranging from assisting technicians in their tasks, to helping with remote work and providing in-field video conferencing solutions for technicians during an operation.
Reference: HoloLens 2, Microsoft

A wind of change in the regions

Transformations in working methods and workplaces can have important economic, social and environmental implications for territorial development. The changes that occur could disrupt territorial balances and trigger new growth for certain areas. Local authorities are observing – and trying to influence – the dynamics at work by offering incentives and responding to the demands of households and businesses. For what purpose?

New ways of working create new opportunities

Thanks to the digital boom and the globalisation of value chains, a growing number of regions are competing with each other, a situation that has led to the implementation of new strategies to attract companies, investors, households, tourists and public administrations in order to boost local economic activity and create sustainable jobs. The development of new services, transport infrastructures, digital networks and local clusters and third places are all ways in which local authorities are influencing places and ways of working.

Territories adapt to new work aspirations

During the Covid-19 pandemic, trends associated with new work patterns were difficult to distinguish from those caused by the conditions of the pandemic. Population movements linked to the pandemic also accelerated trends that are changing the territorial balance of households and businesses. Indeed, the widespread implementation of remote working, the growing use of third-party facilities, the desire to enjoy a better living environment and to take advantage of cheaper land prices are all opportunities for territories to adopt more diversified attractiveness strategies. Similarly, a growing awareness of the environmental crisis and the return to more local consumption are creating new expectations that regions must meet, and are prompting local authorities to reconsider their strategies.

[1] All figures in this section from ObSoCo/Chronos/ADEME/Bouygues Construction, *Observatoire des usages et représentations des territoires* [Observatory of Uses and Representations of Territories], 2021

FIGURE IT OUT

If working people were to move,

2 times more

would move further away from their place of work than closer to it.[1]

Creating regional growth by attracting businesses

Back in the noughties, there was an explosion of territorial marketing that highlighted the identity of regions, their specific qualities, seeking to brand them and to differentiate them in a positive way. In more recent years this approach has become more widespread, with a standardisation of the arguments for attractiveness as different regions often try to attract the same audiences. Today, remote workers are targeted by some areas that want to rely on a residential economy, while others apparently want to focus on local economic growth. For several years now, some local authorities have also been focusing on cooperation. "Normandie Avenue", a brand created in 2006 by the Normandy cities of Caen, Rouen and Le Havre, is a pioneering example of this approach, although the culture of competition is often more prevalent.

Supporting residential trends

There are some regions that are eager to take advantage of the changes in residential choices of households to boost their populations. But this can be achieved in different ways: by attracting remote workers, for instance, or by bringing in people who want to start a local business.

👁 **See also**

■ **What residential trends are linked to new modes of work?** (page 61)

■ **ObSoCo/Chronos/ADEME/Bouygues Construction,** *Observatoire des usages et représentations des territoires* [Observatory of Uses and Representations of Territories], **2021.**

Quality of life as a criterion of attractiveness

Territorial attractiveness is now the subject of various rankings: the best cities to live in, the best cities for millennials, the best cities for new hires. In 2020, France Attractive published the first ranking of the top cities to welcome remote workers. There were two tables: the first covered metropolitan areas, with Lille, Bordeaux and Lyon coming out on top, while the second focused on medium-sized cities, with La Rochelle, Pau and Angoulême heading the list.

FIGURE IT OUT

In 2021

55%

of people in France said they would like to "live somewhere else", which is

7% more

than in 2017.

City centre dwellers in large metropolitan areas are

3 times more likely

to want to live elsewhere "very much" than inhabitants of more isolated towns and villages.

Of those employees able to work remotely,

63%

would prefer to live elsewhere, compared to

54%

of those who are unable to work remotely.

If they were to move,

26%

of employees able to work remotely would like to do more remote work (or could envisage working 100% remotely) while remaining in the same company.[1]

Regions are finding ways of attracting remote workers

Some local authorities are now attempting to appeal to remote workers. This was a target that appeared in territorial marketing campaigns during the pandemic. However, there is a risk of developing a residential economy dependent on the income of inhabitants obtained from outside the territory. A limiting factor is that of employers: how many will accept that employees working remotely are located far – not to say very far – from the office, and how many will demand rapid availability when needed, and therefore a home closer to the company's headquarters?

An island offers dedicated extended stays to attract digital workers

📍 Madeira Island

Madeira Island is inviting remote workers to spend a few months as "citizens of the digital nomad village" of Ponta do Sol through dedicated offers. Coworking space, an Internet connection, social activities and a local welcome are planned to ensure a comfortable stay.

A French department invests in connectivity to encourage remote working

📍 Eure-et-Loire department

The Eure-et-Loir department in the Centre region of France has invested more than €43 million since 2015 to increase broadband quality and speed in the rural areas of its territory, through the installation of both optical fibre and very high speed radio.

An advertising campaign targeting remote workers needing more space

📍 Indre department

The regional development agency of the Indre department in central France ran a poster campaign in the Paris metro in summer 2020 to promote the quality of life in the department. The standout argument? Space for remote working!

ET VOUS, LE TÉLÉTRAVAIL, C'ÉTAIT COMMENT ? #MoiDansMonJardin

L'Indre en Berry
Démarrez une nouvelle vie ! L'Agence d'Attractivité vous accompagne indreberry.fr

A country offering special visas for digital nomads

Many countries have expressed their willingness to attract "digital nomads" during the pandemic, including Dubai, Georgia, Mauritius, Cayman Islands, Barbados, Bermuda, Aruba and Antigua and Barbuda. Mexico offers a visa allowing people to reside in the country for up to four years without local employment, subject to conditions of resources and income.

Supporting third places to offer shared workspace

The public authorities are encouraging the emergence of these third-party workplaces, even though their economic model is often fragile.

Third places that can ease urban congestion

📍 Amsterdam

To help reduce its carbon footprint, the city of Amsterdam has developed a network of 30 "Smart Work Centers", accessible on a monthly subscription. These coworking spaces provide different rooms (meeting rooms, individual offices, kitchen, etc.), and are located close to residential districts. Municipal employees were the first to work there a few days a week, followed by freelancers and private sector employees. According to the head of technology services for the city of Amsterdam, these third places reduced traffic jams by 20% between 2008 and 2013, and caused a 40% reduction in the surface area of administrative premises.

Reference: Smart Work Centers, Amsterdam

A department supporting telecentres

📍 Seine-et-Marne department

The Seine-et-Marne Departmental Council has taken the initiative of developing and supporting the creation of telecentre and coworking projects. Areas covered by this support include reducing the burden on transport infrastructures, promoting the attractiveness of the region and acting to develop it. It also aims to improve the well-being and quality of life of working people in the Seine-et-Marne department.

Reference: Telecentres 77 initiative, Seine-et-Marne department

Les tiers-lieux pour vivre mieux
J'ai besoin de ...
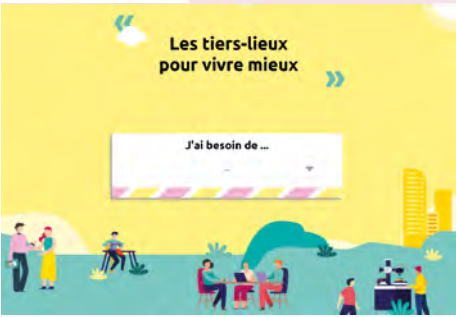
A network of local third places run by a region

📍 Nouvelle-Aquitaine

In 2016, the Nouvelle-Aquitaine region established a network of regional third places in the form of a collective interest cooperative company, "the third place(s) cooperative", which aims to create a network of third places in the region, promote their sustainability and develop pilot projects by monitoring existing practices.

Reference: La Coopérative Tiers-Lieu(x)

A region creates a local label to encourage the development of quality third places

Occitania

The Occitania region has created the "Occitania Third Place" label, awarded to spaces that meet various criteria such as being accessible to a variety of audiences, long opening hours, workspaces with shared workstations, a user-friendly space, guaranteed broadband Internet access and compliance with employment law.

Reference: Tiers-Lieu d'Occitanie label

A national label for third places as a way of improving territorial balance

The French government finances projects that have been awarded the "Territory Factories" label. There were 80 in 2020, following a call for projects in 2019, through a financial bonus of €100,000 per third place. "Territory factories" should be a resource for people running projects locally, as a place for training and learning through "doing things together" and as an opportunity for digital inclusion for people not familiar with the Internet. Also important is the need for a strong territorial base and a balanced long-term economic model.

Reference: Fabriques de Territoires

A comprehensive and coherent local ecosystem

A more resilient territorial development model

The pandemic has had a dramatic effect at regional level, with the resilience of healthcare and education systems put to the test. In many cases, attractiveness strategies are no longer limited to economic development, but resilience is also factored in.

Attracting through leisure activities

Bretagne

From November 4 to 24, 2019, the "Bretagne – Passez à l'Ouest!" [Brittany – Go West!] campaign invited skilled people to move to Brittany to take advantage of its professional opportunities as much as its quality of life.

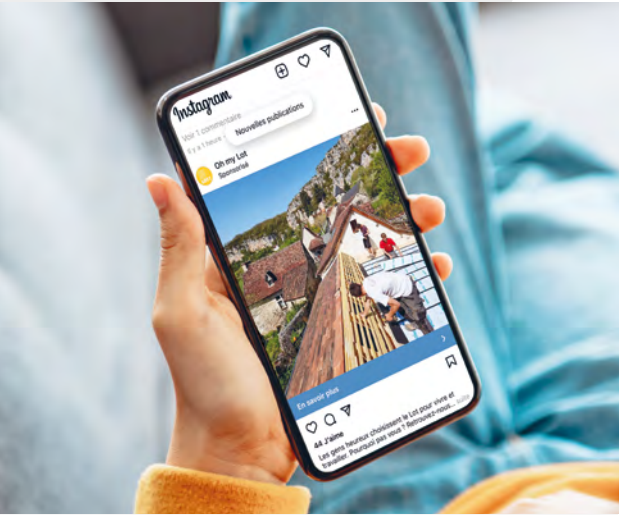*Reference: Bretagne – Passez à l'Ouest! [Brittany – Go West!]*

A campaign in the Paris metro targeting employees in need of air

Alès

The city of Alès, in the south of France, placed 705 posters in the Paris metro for a week in June 2020, reaching a potential audience estimated at 4.9 million people. Alès is also targeting other audiences: the city is devoting an annual budget to initiators of entrepreneurial projects, following a competition.

Reference: Alès ne manque pas d'air [Alès has plenty of air]

A rural village's initiative to open a third place boosts local development

Nouvelle-Aquitaine

Le Ballon, a village in Nouvelle-Aquitaine, launched a joint initiative with citizens and local producers to set up the "Au Local" third place, which is based on three services: a purchasing syndicate for local products giving consumers the benefit of farm gate prices in a single location; a space for knowledge-sharing workshops, e.g. cooking, sewing, nature appreciation or cultural workshops led by volunteers; and a professional workspace equipped with screens, printers and quality broadband access (which is rare in the region). The facility, which was financed by a local public investment, is accessible through separate subscriptions according to the desired use (consumer, producer, professional), and entails members doing work on the site on a voluntary basis.

Reference: Au Local, Le Ballon

Attracting through the quality of local work

Lot

"Oh my Lot!" is the tongue-in-cheek branding of the Lot department in south-western France, jointly financed by the department, communities of communes, the Chamber of Commerce and Industry, the Chamber of Crafts and Trades, and a number of local organisations. Its aim is to attract new residents to live and work locally. Upstream of initiatives to support relocation, the agency has run numerous successful campaigns, notably on Instagram, focusing not only on quality of life but also on job opportunities and involvement in the local economy.

Reference: Oh My Lot!

Interviews
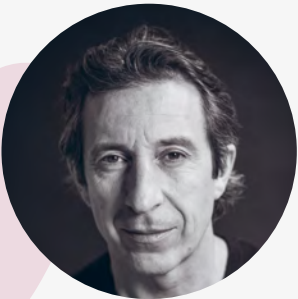
Philippe Chiambaretta

Architect, founder of PCA-Stream,
Philippe Chiambaretta Architecture

What impact do changing working practices have on companies' choice of location?

P.C.: Before the pandemic, we seemed to be observing an unstoppable phenomenon of metropolisation, called on to have as many physical exchanges as possible to allow for serendipity: we had to be in the major metropolises, meet each other, accumulate meetings, and this was how the knowledge economy was going to be born. But the pandemic caused an unforeseen, violent and global upheaval. Like an inversion of polarity in a magnetic field, during the crisis we were called on to do the very opposite: seeing each other became dangerous, we had to keep away from each other, no longer touch each other, and so on. No one knows what will happen in the long term, but of course, some people will question the interest of staying in the metropolis and will claim a new connection with the region: even if it were only 5% of people, it would be significant! For their part, large companies are questioning their real estate strategy in the broadest sense, and their location in a given area. Some sectors are undergoing profound transformation and need to recruit highly valuable profiles, such as data scientists for example. And to recruit them, we need to meet their expectations in terms of real estate. Offices must represent their values and facilitate the appropriate management methods. Architecture is a response to a global reflection, not just a competition for form.

So what kind of transformation of workplaces is taking place in offices, housing and third places?

P.C.: It hasn't become clear yet what the working methods of the future will look like. There will be at least a fraction of remote working in the daily lives of many employees, automatically reducing the number of people working in offices, and perhaps leading to smaller but more central company headquarters. Obviously, offices need to be modular, easy to reorganise on a regular basis, but above all they must be more generic buildings which are easy to convert from one function to another. When it

comes to housing, the problem of adapting to remote working is related in the first place to the size of existing apartments. If you don't have an extra room where you can cut yourself off, will you automatically move to a third place? Will we see the appearance of "phone booths" where you can isolate yourself in housing as you can in open-plan offices? When existing buildings are remodelled, it will be important to think about the acoustics in order to isolate very close but very different uses. Then we can imagine local third places to work remotely, near your home but outside your home: blocks of flats have garbage rooms, so why can't they have remote working rooms? In large cities where space is scarce and expensive, we are obliged to concentrate on small spaces, and we then create ecosystems which bring the life/work transition much closer. And finally, the supply of third places is flourishing. When Starbucks came to France fifteen years ago, no one would have imagined that people would spend all day on their computers in a Parisian café: today, people work in hotels, bars, and so on. Everywhere! There is a plethora of third place brands from different players, independent, property or hotel owners, but at this stage it's unclear which ones will to survive. No one predicted the Uber phenomenon; in much the same way, tomorrow you're going to have an app that will tell you where you can work, especially in spaces that people have made available in their homes!

You work at home or in the café, and enjoy leisure activities at work: are we seeing spaces become less specialised?

P.C.: Of course we are. Functionalism, together with modern thinking, was a desire for efficiency very much inspired by Fordism: breaking down gestures. We progressed from crafts to industry by breaking down into sequences, by specialising people, which is part of the modern malaise. In the 1920s and 1930s, when modern thinking appeared in architecture, with Le Corbusier in particular, movements like hygienism and Taylorism were behind it. Housing was separated from offices, pedestrians from cars: we were more efficient… But life isn't just a question of efficiency! Modernity never ceases to divide and separate, whether it's 17th century philosophical modernity or 20th century architectural modernity. Today, we are entering an era of "reliance", as Edgar Morin put it, with the idea of complex thinking, to try to put back together the pieces of what has been broken by modernity. This is true for the city, but also for life: there is a shift from the model of routine commuting between home and work to a greater fluidity, which also has its disadvantages, such as the incursion of your work into the slightest recesses of your private life. But for some people, it means they can work in Ibiza while lounging next to a swimming pool! In any case, there's no reason for spaces to be specialised, especially since we don't know how we will work tomorrow, study tomorrow, feed ourselves tomorrow, learn tomorrow.

Architecture therefore needs to converge on a more universal framework, which will allow buildings to be adapted without demolition. Architecture is caught between uses, construction processes and mobility. The predominant factor that will determine all these choices is sustainable development and climate change, which will condition everything in future years.

> **"** Geographical proximity is a crucial factor for the transmission of tacit knowledge. **"**

Anne Plunket

Professor of Economics at Paris-Saclay University (Economics and Geography of Innovation and Network Analysis) and member of the RITM Laboratory (Networks, Innovation, Territories, Globalisation)

How do territories go about attracting high-tech companies?[1]

A.P.: Entrepreneurs generally locate innovative companies in an environment specialised in their field, i.e. close to companies carrying out a related activity, and near to research laboratories, for example. They are looking for privileged access to knowledge and networks connected with their field of activity. Then, when the company becomes more mature, three factors may justify a change in the choice of location: a search for new partners, for new skills or for increased funding. If the initial location no longer allows access to sufficient resources for development, it can be reconsidered. European companies may thus decide to create a satellite office in a key cluster in the United States, for example, in order to access better financing. However, for very attractive areas such as Silicon Valley, for example, there is the problem of obtaining land. The continuous increase in land prices and salaries may ultimately discourage incoming companies.

Is the grouping of the corporate and research worlds in the same territory a prerequisite for innovation?

A.P.: A concentration of companies always favours the diffusion of knowledge as a result of competition and of customer-supplier relations. The impact will depend on the type of innovation produced and the type of knowledge required. If the company develops incremental innovations, i.e. improvements to products or processes without changing their fundamental characteristics, the company relies mainly on existing knowledge. Geographical location therefore makes less of an impact.

On the other hand, if the company develops radical innovations, i.e. products that are completely new or that incorporate new technologies, it must diversify its knowledge base by collaborating with external partners. In this process of identifying, understanding and integrating external knowledge, geographical distance plays a key role. At least initially, the absorption of this disruptive knowledge requires frequent interaction, until such time as a common language and knowledge base have been created. Once the project is underway, the possibility of remote working can be considered.

Proximity plays a crucial role when the knowledge is tacit rather than codified. Codified knowledge often takes written form (research articles, patents, work procedures in a company) and can be accessed and assimilated relatively easily in spite of geographical distance. When knowledge is tacit, it results from the specific know-how of the person who created it. This knowledge is more difficult to transmit and so calls for frequent interaction and therefore direct geographical proximity.

[1] Defined by the OECD as companies investing a fairly high percentage of their turnover in R&D, in the region of 5%, and relates in particular to sectors such as aeronautics, automobiles, pharmaceuticals, information and communication technologies and nanotechnologies.

4

Scenarios for the future

> ❝
> **While it is impossible to predict the future, strategic foresight offers the tools for successful policy making in the face of high uncertainty.**
> ❞

OECD
OECD, Introduction to the report "Strategic foresight for the COVID-19 crisis and beyond: Using futures thinking to design better public policies", June 10, 2020.

We have conducted a process of strategic foresight, aiming to identify possible changes in modes of working and their implications for regions and for workplaces. Because it is impossible to predict the future, we have constructed several scenarios based on the main factors of change identified during collaborative foresight workshops. By drawing on current knowledge and factoring in uncertainties, this approach makes the transformations underway more visible and concrete, as it does risks and emerging trends. It offers a **tool for anticipation and action, by enabling us to prepare, position and evaluate our strategy in relation to various possible future scenarios. As the philosopher Maurice Blondel wrote, "The future cannot be predicted, it must be planned."**

Strategic forecasting

Methodology and aims

In order to imagine possible futures, we worked collectively to develop three strategic foresight scenarios. This approach employed a number of principles:

A systemic approach

Our approach stood at the intersection of several interacting disciplines. In order to ensure a global and credible vision as well as perspective and overlapping points of view, the analysis was carried out beyond the sole dimension of urban planning and property.

Exploratory forecasting

The uncertainties surrounding the future rule out predictions: we do not know today what the situation will be in ten years' time. Nevertheless, on the basis of present knowledge, it is possible to form different possible and plausible scenarios through a progressive and iterative approach.

Multiple partners

To ensure that the vision of the future is accurate, we opted for a co-construction process involving experts and practitioners from various backgrounds. A community of around 80 professionals was formed, including Bouygues Construction personnel, experts and researchers from the academic world or government organisations, human resources specialists and trade union officials, as well as representatives of the various urban development and real estate professions: brokers, development, co-living and real estate operators, architects, and, last but not least, users. We were supported in this process by our partners, Chronos and Astrées. It gave rise to a series of strategic forecasting workshops.

Several possible futures

Participants in the process selected 20 key factors of change to be analysed in order to understand the changes in modes of working and their impact on the workplace. We have summarised a selection of the key factors to give an overview of the analysis carried out for each of them. The uncertainties surrounding each factor led us to consider several possible hypotheses for the future, which, taken in combination, generated three contrasting scenarios for the future. It is also possible to imagine other possible future scenarios, combining different compatible assumptions to weave a coherent narrative.

How will we work in 2030?

MANAGEMENT MODELS

How will companies shape their internal interactions to meet the demands of their employees and to improve their efficiency?
- A more pyramidal or a flatter organisation structure?
- Management based on control or on trust?

In the light of these uncertainties, consider four contrasting hypotheses for the future:

LIBERATED MANAGEMENT

Greater autonomy, a flatter structure, a manager who accompanies, achievement as recognition.

SCENARIO #1

HIERARCHY BUILT ON TRUST

Organisations remain pyramidal, but without validation procedures, and allow everyone considerable autonomy.

SCENARIO #1

PYRAMID BASED ON CONTROL

Organisations remain pyramidal with vertical management, validation procedures and constant evaluation of indicators.

SCENARIO #2

FLAT AND EVALUATED

Companies are less pyramidal but evaluate each person's performance transparently. Decisions are peer-validated by qualified people.

SCENARIO #3

ARRANGEMENTS FOR REMOTE WORKING

How will the possibilities and practices of remote working be defined?
- Will working habits shift towards more remote working or more physical presence?
- Will company policy tend to be more flexible or more restrictive?
- Will approaches to remote working become more standardised or more varied?

ANYWHERE, ANYTIME

Each employee can choose to work from any location with flexibility.

SCENARIO #1

RESTRICTED REMOTE WORKING

In view of its limitations, remote working becomes more regulated and more restricted in companies.

SCENARIO #2

OPTIMISATION OF TIMES OF PRESENCE

Remote working is dominant and the office is only used when absolutely necessary.

SCENARIO #3

A VARIETY OF PRACTICES

Every company has its own unique approach.

COMPANY LOCATION STRATEGIES

How will companies choose to allocate space in their workplaces, and their location?
- Will companies prioritise everyday or occasional accessibility?
- Will the location be based on a narrow or a broad territory

CENTRAL HUB

A single, central, iconic headquarters.

SCENARIO #1

SHORT CIRCUITS

Companies decentralise or re-centre on smaller territories.

SCENARIO #2

MULTI-LOCAL

Companies will have more varied and more numerous local roots.

SCENARIO #2

NO FIXED ADDRESS

Companies tend towards fewer offices of their own and make more use of shared premises.

SCENARIO #3

IN ADDITION:

BEHAVIOURS RELATING TO MOBILITY

More travel or less mobility?

Mainly using active, shared or individual modes?

REGULATIONS AND LABOUR RELATIONS

Clearer and more efficient regulation of working methods and workplaces?

Social dialogue that gets bogged down or that is innovative?

PLATFORMS

Will service delivery platforms develop or disappear?

Will legislation be favourable to the self-employed or not?

What will be the context in 2030?

OCCUPATIONAL HEALTH AND WELL-BEING

How involved will companies be in their employees' physical and mental health?

■ Will it be possible to measure health and well-being at work through company health KPIs, or will this remain an abstract concept subject to interpretation?
■ What will be the regimes of responsibility for occupational health in ten years? Will employees be solely responsible for their health, or will company responsibility include regular check-ups?

In the light of these uncertainties, consider three contrasting hypotheses for the future:

A CONTROLLED ENVIRONMENT

Companies develop effective indicators and are more involved in the health of their employees through inspections of their equipment and working space.

SCENARIO #1

SUPERFICIALITY OF WELL-BEING

Well-being and health take on greater importance, but have barely become a central value. Measures remain rather superficial.

SCENARIO #2

INDIVIDUAL RESPONSIBILITY

The company has less legal responsibility for the health and well-being of its personnel. This responsibility now falls more heavily on the employees.

SCENARIO #3

RHYTHMS AND LIFESTYLES

What changes will there be in people's practices and use of time in relation to work?

■ Will the boundary between work and personal time become blurred or reinforced?
■ Will work become more intensive or take on less importance in people's lives?

URBAN-RURAL

Contradictory societal aspirations lead to frequent commuting between metropolitan and rural areas.

SCENARIO #1

STRICT DISSOCIATION

Personal and work time are kept strictly dissociated through working practices.

SCENARIO #2

PROFESSIONAL/ PERSONAL POROSITY

The boundary between personal and professional time is increasingly blurred until the two mix together.

SCENARIO #3

A BOOM IN LEISURE TIME

A general reduction in working time leads to an increase in leisure activities.

BEHAVIOURS RELATING TO RESIDENCE

In the light of economic, personal and professional demands, what changes will there be in households' residential aspirations, and their actual behaviours?

■ Will individuals prioritise the desire for short distances, or the desire for more space and individual homes?
■ Will the most attractive regions become more densely urbanised?

METROPOLISATION

Metropolises grow more attractive, especially in dynamic regions.

SCENARIO #1

IN PURSUIT OF NATURE

Enthusiasm for nature is focused in privileged areas.

SCENARIO #1

SCENARIO #3

SEARCH FOR BALANCE

Individuals choose the middle way between a desire for quality of life and a desire for proximity.

SCENARIO #2

RESILIENCE OF THE NEW RURALITY

Rural areas with strong local dynamics are very attractive.

SCENARIO #2

SCENARIO #3

IN ADDITION:

SOCIAL LINKS

Will social ties weaken following the pandemic, be strengthened or refocus on personal ties outside the context of work?

SOCIAL INEQUALITIES

Social inequalities as a political or a more citizen-based issue? More or less social inequality?

ECOLOGICAL CONCERNS

Will the environment have greater or lesser significance in societal choices? Will legislation be more or less sector-specific?

DIGITAL

What changes will there be in the cost and availability of digital equipment? How will connectivity improve in areas that are currently poorly served? How will uses change?

What workplaces and what territories in 2030?

STRATEGY FOR TERRITORIAL ATTRACTIVENESS

What targets will local and regional authorities set and what measures will they take to attract the necessary resources?

■ Regions seeking local development or relocated value chains, benefiting from the residential economy linked to remote working, for example?
■ Will regions look for growth with bigger populations or will they move towards an alternative model?
■ Will there be more competition or rather greater cooperation between regions?

In the light of these uncertainties, consider four contrasting hypotheses for the future:

NETWORKING OF REGIONS

Regions increasingly cooperate to maintain close contact.

SCENARIO #1

LOCAL DEVELOPMENT

Territorial resilience becomes a paradigm for local thinking. Self-reliance is a key part of territorial development.

SCENARIO #2

SCENARIO #3

ALTERNATIVE TERRITORIES

Territories abandon growth models and no longer seek to attract new populations.

SCENARIO #2

NEW WAYS TO ATTRACT REMOTE WORKERS

Local authorities compete with each other as they invest to attract remote workers, developing a residential economy.

SCENARIO #3

URBAN PLANNING AND DEVELOPMENT

What political, economic and environmental choices will dictate urban planning and development?

■ A strong limitation on urban sprawl, or effective restrictions on urban density?
■ Incentives to transform existing buildings?

DENSIFICATION

In order to limit distances and urban sprawl, taller buildings are encouraged and metropolitan areas become denser.

SCENARIO #1

ADAPTATION OF EXISTING BUILDINGS

A strict restriction on new build leads to better use of existing buildings: energy refurbishments as well as transformations to enable a change of use of existing buildings.

SCENARIO #2

URBAN SPRAWL

The dream of individual houses and space and a lack of restrictive policies encourage further construction.

SCENARIO #3

DESIGN AND ADAPTATION OF HOUSING

How will existing housing be adapted to working in the future, and what innovations will there be for new housing?

■ More compact, convertible office solutions?
■ Adaptations of homes carried out by individuals or handled by companies?

STANDARDISATION

The company plays a greater role in the design of the home workspace, which is more controlled.

SCENARIO #1

COMPACT FURNITURE

Development of solutions based on transformation.

SCENARIO #1

SCENARIO #3

SHARED SPACES

Suburban buildings and streets are provided with spaces dedicated to work and encouraging proximity.

SCENARIO #2

HOUSING AS A CAUSE OF INEQUALITY AT WORK

People do what they can according to their means and their accommodation, which adds to inequalities.

SCENARIO #3

IN ADDITION:

OFFICE BUILDING DESIGN

More standardisation of offices or greater individuality? Will there be a sustainable upturn in demand or a permanent decline in office space?

DESIGN OF THIRD PLACES

A public service of third places for workers or mainly a private-sector offer? Will third places supplement housing and offices, replace them, or become less common in view of redevelopment projects for offices and housing?

Scenario #1

Hybrid work

A look into the future

The combination of economic recovery and innovation has made it more difficult for companies to attract and retain the best talent, which in turn has led companies to align themselves with employee expectations in all respects. The ongoing discussion on working patterns within companies and in society has resulted in new and widespread rights for employees to work remotely; in particular, they have the choice of where to work.

■ A two-tier economy emerges…

On the one hand, there are "learning" companies that have been able to adapt and are growing by focusing more on value and power, and on the other hand, there are the companies that have missed the mark and are now facing great difficulties in recruitment and management.

■ …that results in a two-tier society

At one end of the spectrum, those who are working remotely benefit from a liberated form of leadership, an enviable economic situation and excellent social protection, while other non-remote working roles are left behind and experience injustice and frustration. Recruitment issues are rising to the point where robotisation is becoming profitable in more and more sectors.

There is a sense of complacency as the climate crisis intensifies. The adopted regulations are relatively lax and aren't commensurate with the stakes. The biggest advances in environmental issues come from within companies, driven by pressure from employees and stakeholders.
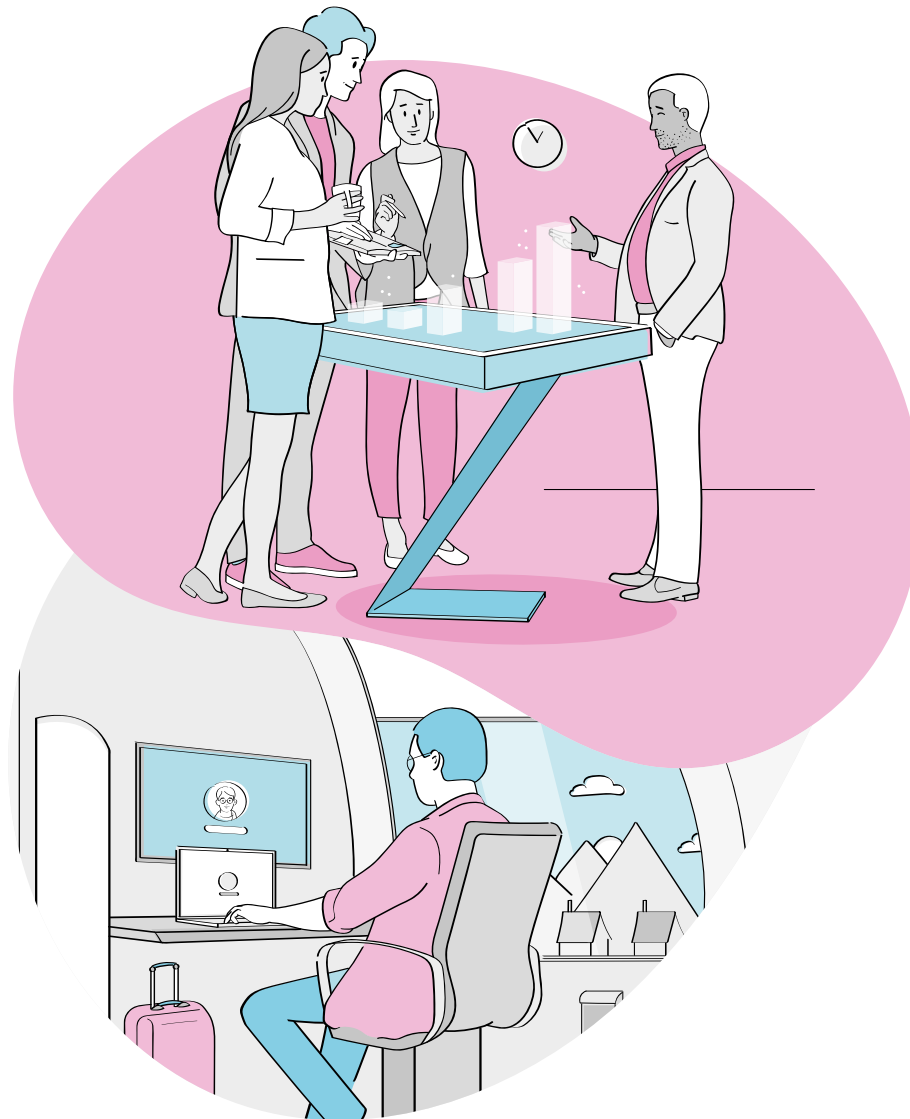
How we will work

The liberated, teal, holacratic company model has deeply influenced company reorganisations: employees are empowered and trusted.

The manager is now a facilitator and the notion of trust has gradually become the norm, with an increasingly flat organisation.

In this context, jobs that cannot be done remotely or automated are becoming less and less appealing, and therefore mean higher salaries as well as improved working conditions, but this does not compensate for the fact that these on-site roles are getting less desirable in major groups.

Some of these roles are particularly left out: those with largely automated information processing tasks; those that require skills that no longer match the needs of the job market; those that don't allow enough autonomy to organise working times independently.

Where we will work

Each individual organises their tasks from the location of their choice, while dealing with such issues as network quality, location characteristics, ergonomics of the various potential workplaces, hardware performance (battery), personal time schedule, etc.

Companies provide high quality offices, with ample space and amenities, located as close as possible to transport hubs for easy access, and offering a range of different spaces for concentration and/or phygital interaction.

It is also the company's policy to finance the home office set-up with ergonomically tested equipment for all those who wish to work from home. A multi-criteria system has been defined to finance the costs incurred by working remotely on a daily basis. Local third places are used as an additional option, usually found on the outskirts of major cities close to where the employees live.

Regional impact

City centres with transport connections are boosted by the demand for office spaces. Major cities and their suburbs are attractive to the population, which leads to both a densification of city centres and further urban sprawl around the metropolises.

Holiday homes in attractive areas (coastline, mountains) are in greater use: privileged people are increasingly living in two homes. However, office buildings in outlying areas are losing their appeal and are often abandoned. Various initiatives are being taken to find a new use for them, while the most prestigious offices in major cities are being snapped up at a premium price.

Travel demand is leading to a gradual growth in mobility, with a focus on public transport and soft mobility in metropolitan areas and the continued use of cars in the countryside. Isolated rural areas are struggling to attract people, with no real improvement in terms of connectivity, services or culture.

Scenario #2

# Greener work

A look into the future

Climate change is having a fundamental impact on lifestyles and general public awareness is leading to a demand for change on every level. Political authorities are actively regulating, setting up carbon credits, banning certain activities, imposing severe restrictions on goods transport, and so on.

There are limitations on travel, as well as digital equipment and data storage, due to a combination of their environmental impact and the difficult access to resources. Work needs to be reorganised to be less digital.

Local value chains are prioritised. New construction is now only authorised for collective housing, and the urban planning and development sector is undergoing a reorganisation accordingly.

Public-sector investments are focused on adaptation, resilience and emission control, with a distinction made between "essential" activities for resilience and the climate and "non-essential" activities.

These complex challenges divide society and lead to serious friction at various levels (general strikes, infrastructure blockades, violent protests, terrorist incidents, etc.). Political discourse, the media and opinions become more polarised than ever.
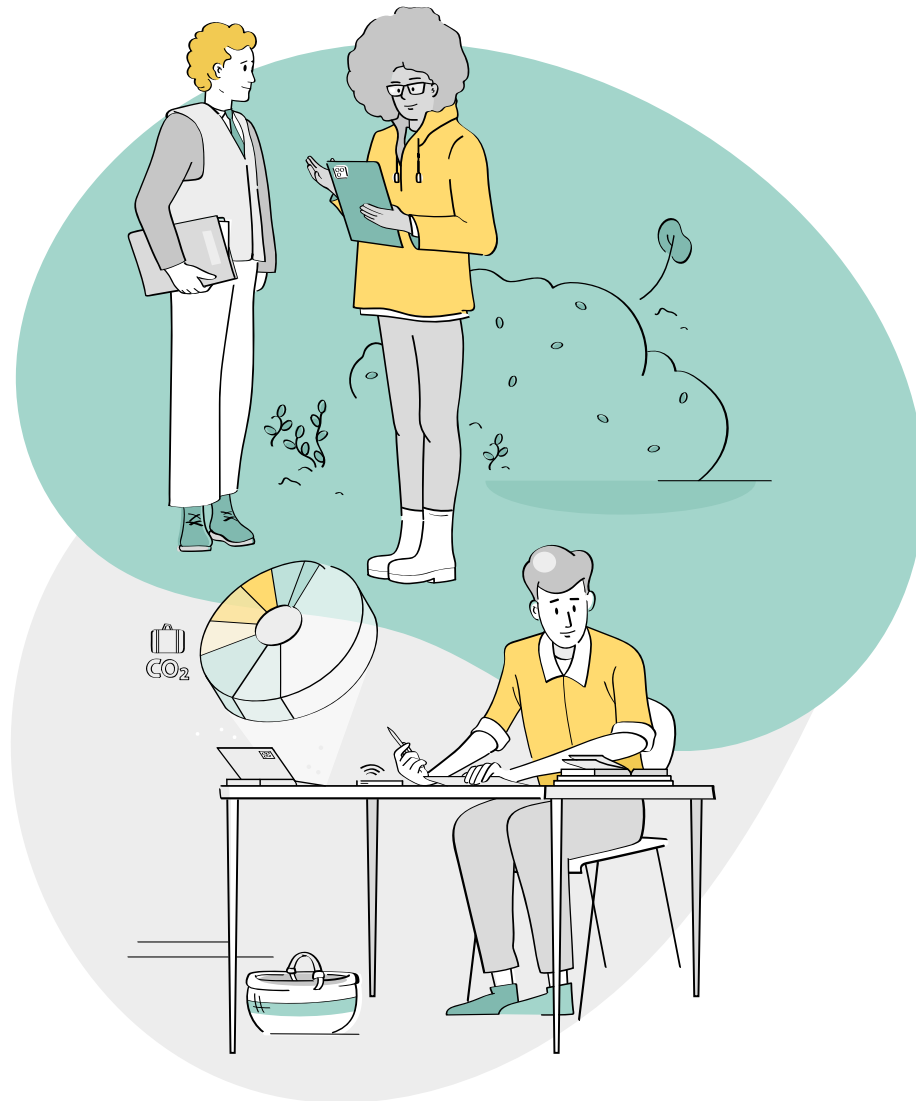
How we will work

Companies are radically transformed by environmental regulations and forced to operate within limited geographical areas (long-haul flights are banned). Large international groups break up into autonomous local entities.

Companies are encouraged to recruit within a very limited perimeter around their workplaces to encourage soft daily mobility (walking, cycling, etc.).

Business trips are forbidden and replaced by long-distance communication. Long-distance freight transport is greatly reduced and limited to rail freight.

Digital sobriety also means limiting the use of networks (especially video streams) as well as the storage of "cloud" information in data centres. It encourages face-to-face meetings and low-tech digital tools that consume less data. Big data approaches are prohibited.

Where we will work

Along with improved energy efficiency, companies must limit their surface areas to the strict minimum in order to reduce their energy consumption, and must therefore optimise their physical presence.

New office buildings are no longer permitted as long as vacant space can be rented in existing buildings.

Companies are increasingly moving towards shared office buildings, coworking solutions and shared facilities, all of which are encouraged by carbon accounting.

Residents are encouraged to move into vacant housing, and new construction is severely restricted, as is the use of holiday homes; places with more than 30 m²/person are more heavily taxed.

Daily transport by personal vehicle is severely limited, which requires people to bring their homes, workplaces and everyday services closer together.

Publicly subsidised third places are multiplying in some areas that have invested in their development.

Regional impact

Local areas are having to organise their autonomy: short distribution channels, local economic diversification, etc.

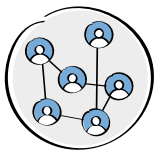Limiting access to motor vehicles creates social tensions locally.

Some rural areas see an influx of new residents. In some cases, they are welcomed enthusiastically, but in others, on the contrary, they are rejected.

Large cities are very much in question because of how they depend on the whole of the territory to operate.

Scenario #3

Remote work

A look into the future

The public health and economic crisis as well as the emergence of new disruptive players have pushed established companies to the brink. In an effort to reduce costs, companies have cut back on their payroll and reduced their real estate to zero. Reductions in payroll costs will help them refocus on their core added value, in a changing economic and environmental context.

The growth of platforms was driven by both supply (new freelancers and self-employed people, many ex-employees who have retrained or young people entering the labour market) and demand (increased outsourcing by companies).

Outsourcing labour is becoming more common in various professions, especially for tasks that can be done remotely. Those who are unable to put their skills to good use face major economic difficulties, resulting in an increase in social inequalities.

Despite major efforts to reduce greenhouse gas emissions, the consequences of climate change are increasingly being experienced. Certain measures have led to strong protests. Radical techno-solutionist visions are increasingly being echoed, particularly in the field of geo-engineering (space parasols, etc.). Some people see this as an opportunity to give the population a break while the ecological transformation continues.
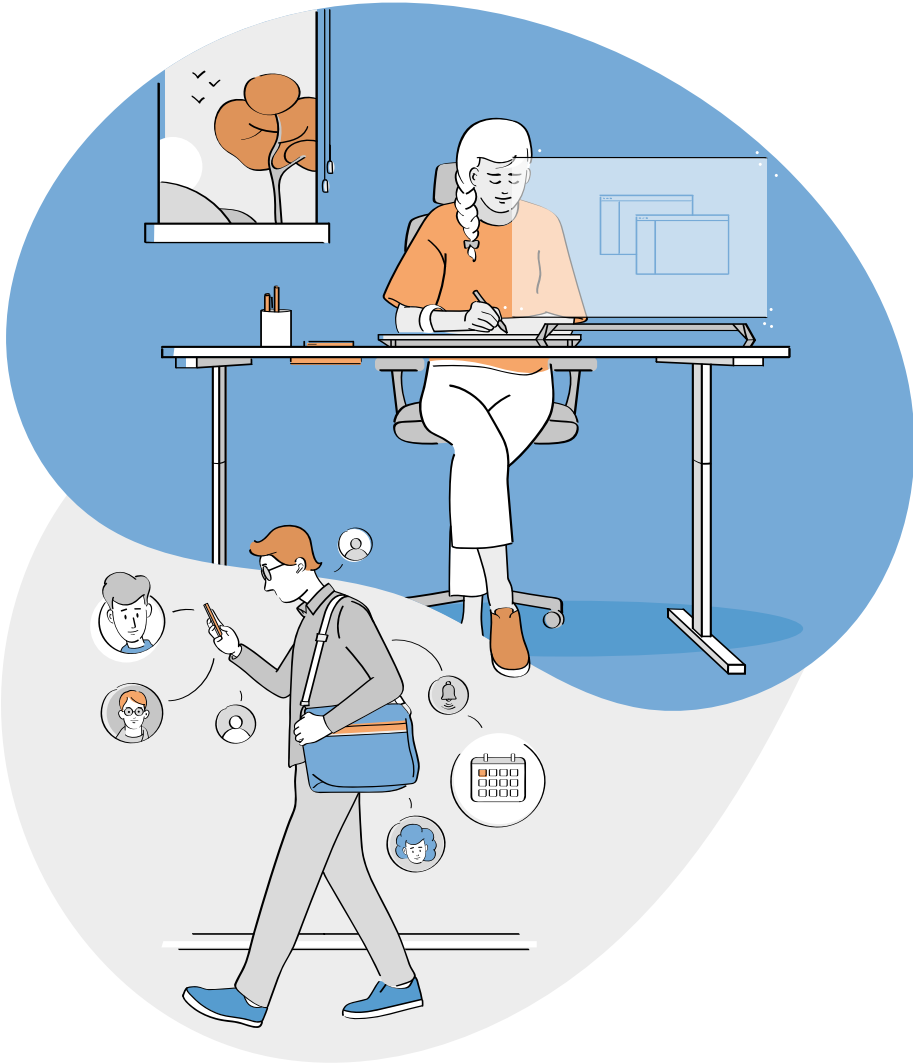
How we will work

Project teams mainly consist of groups of freelancers brought together for the occasion, and subsequently disbanded at the end of the project, like the cast of a film.

Service platforms are dominating, and merge with communication and remote hosting solutions.

Self-employed and freelance local networks are tight-knit and innovative. They are both complements and alternatives to platforms, social, work and mutual support systems. They sometimes operate in dedicated premises.

People who have issues to be organised on their own are struggling, while independent, structured, creative and entrepreneurial minds are successful.

Where we will work

Improved connections, working on battery operated devices and charging stations, make it possible to work anywhere.

Not having a permanent office does not mean that there are no shared work areas: the use of third places, seminars, project-based team travel in exotic locations is increasing. Companies are using subscriptions or short-term rentals to provide workstations in shared offices, depending on what their needs at that time may be. New types of places are appearing, with a combination of different economic models (subscriptions, exchanges, one-off services, licences, clubs, sponsored free uses, subsidised spaces, etc.). Third places are becoming pillars of social life for many freelancers and self-employed people, creating new social and economical links.

To meet the need for work spaces at home, but without increasing the overall size of the home, space-saving and convertible furniture solutions have become widely available.

Regional impact

Major city streets are gradually emptying and big buildings need to be put to new uses.

As working remotely, in its various forms, has become more widespread, there has been a significant urban exodus to attractive and well-connected areas, driven by the residential economy. Urban expansion is actively pursued in these attractive territories, bypassing the rules linked to the target of zero net artificialisation. As for the people struggling, victims of relocated or automated employment, they are moving to less attractive regions, often to existing housing, and developing subsistence agriculture to live.

The need for mobility depends on being present for key face-to-face events and meetings. These trips are spread across the region, often with poor access by public transport. Self-driving cars, which make it possible to work while on the move, are a great success, despite spectacular accidents and an ongoing public debate. This craze is producing a large amount of valuable mobility data. In abandoned buildings, low-tech innovation is taking hold, while the most sought-after professionals live in a nomadic digital sphere.

Acknowledgements

Thanks to speakers at workshops and interviewees

- **Anne Plunket,** Paris-Saclay University / RITM
- **Camille Rabineau,** Comme on travaille
- **Catherine Sabbah,** IDHEAL
- **Christine Bocéréan,** University of Lorraine
- **Flore Pradère,** JLL
- **Jean-Christophe Pitié,** Microsoft
- **Malo Mofakhami,** CNAM
- **Nawal Abboub,** Rising-Up / ENS
- **Samuel Durand,** Freelance
- **Xavier de Mazenod,** Ze Village
- **Philippe Chiambaretta,** PCA/STREAM
- **Marie Puybaraud,** JLL
- **Guénaëlle Gault,** l'ObSoCo

Thanks to all the participants at strategic foresight workshops

- **Alexandra Simaiova,** Sciences Po Paris
- **Amandine Brugière,** ANACT
- **Antoine Geoffroy,** Gecina
- **Aurélie Deudon,** Icade
- **Béatrice Clicq,** Force Ouvrière
- **Bénédicte Moutin,** CFDT
- **Benoît Napoly,** Capgemini
- **Catherine Paquet,** Capgemini
- **Cécile Bianconi,** Elior
- **Christelle Bastard,** CBRE
- **Christine Giry,** Renault
- **Cyril Robert,** Savills
- **David-Henri Bismuth,** PWC
- **Diane Despois,** SCET
- **Frédéric Petitbon,** PWC
- **Gilles Allard,** ENGIE, ADI
- **Guy Masmonteil,** GDRF
- **Jean-Charles Ponelle,** Véolia
- **Jean-Christophe Visier,** CSTB
- **Jean-Yves Hever,** Invest in Reims
- **Karine Babule,** ANACT
- **Maïté Laal,** AREP
- **Marc Malenfer,** INRS
- **Matthieu Trubert,** Microsoft
- **Nadine Yahchouchi,** Microsoft
- **Nicolas Torchin,** Bien-être à la carte
- **Pascal Dreyer,** Leroy Merlin Source
- **Philippe Boyer,** Covivio

- **Pierre-Jean Harlaux,** Elior
- **Rabita Hamane,** Pôle Emploi
- **Sabine Sakthikumar,** Elior
- **Sandrine Chauveron,** Bouygues Telecom
- **Silvia Perez de Eulate,** Microsoft
- **Véronique Velez,** USH
- **Vincent Dubois,** Capgemini

Thanks to Group colleagues who have been involved in this work

- **Aliénor de Villepin,** LinkCity
- **Alix Rabiti,** Bouygues Construction
- **Anne-Sophie Caillon,** Bouygues Bâtiment Nord-Est
- **Anne-Tiphaine Valo,** Bouygues Energies & Services
- **Annick Naranjo-Sanchez,** Bouygues Construction
- **Antoine Ribaud,** Bouygues Asia
- **Astrid Berger,** LinkCity
- **Bertrand Cahen,** Bouygues Bâtiment France Europe
- **Cécile Michaud,** Bouygues Construction
- **Cécile Sannino,** Bouygues Construction
- **Cecilia Unglik,** Elan
- **Charles de Scorraille,** Bouygues Energies & Services
- **Charles Oriot,** Bouygues Construction
- **Charles Petit,** LinkCity
- **Charles-Antoine Mortegoutte,** LinkCity
- **Christophe Mayen,** Bouygues Energies et Services
- **Denis Szkobel,** Bouygues Energies et Services
- **Emmanuel Chalufour,** Bouygues Construction IT
- **Fabrice Poline,** Bouygues Construction
- **François Patrier,** Bouygues Energies & Services
- **Guillaume Tiberghien,** LinkCity
- **Hedi Calabrese,** Winnovation
- **Jean-Christophe Fleury,** Bouygues Construction
- **Julien Bourcerie,** Bouygues Construction
- **Laurent Warnier,** LinkCity
- **Marc-Henri Boucher,** Bouygues Construction
- **Matthieu le Mener,** Bouygues Bâtiment Nord-Est
- **Maxence Ducroquet,** LinkCity
- **Morgane Jossic,** Bouygues Construction
- **Nayanne Jani-Vienot,** Bouygues Bâtiment Île-de-France
- **Nicolas Nectoux,** LinkCity
- **Noëlie Lopes,** Bouygues Bâtiment Nord-Est
- **Océane Agisson,** LinkCity
- **Olivier Miret,** Bouygues Travaux Publics
- **Olivier Sonneville,** Bouygues Construction
- **Pierre Mustière,** Bouygues Asia
- **Stéphanie Ayusawa,** Bouygues Asia
- **Stéphanie Ducher,** Elan

- **Valérie Ferrand,** Bouygues Bâtiment France Europe
- **Vanessa Chicheportiche,** Bouygues Bâtiment International
- **Viviane André,** Winnovation
- **Xavier Bertrand,** Bouygues Bâtiment Île-de-France

Facilitators of strategic foresight workshops

- **Christophe Teissier,** Astrées
- **Sabine Le Goff,** Astrées
- **Virginie Alonzi,** Bouygues Construction
- **Nicolas Bouby,** Bouygues Construction
- **Alice Plessis,** Bouygues Construction
- **Alexandre Jaillon,** Bouygues Construction
- **Léonie Yang,** Bouygues Construction
- **Joséphine Ehret,** Bouygues Construction
- **Philippe Archias,** Chronos
- **Jennifer Ferrero,** Chronos
- **Pauline Flambard,** Auxilia
- **Alice de la Vayssière,** Auxilia

Credits

Trend books

#1 Leisure and urban dynamics
#2 Move towards mutualisation in social housing
#3 Digital cities, human design
#4 Ageing well at home
#5 New campus models for a learning society
#6 Housing in the future
#7 Cities and Mobility, reinventing proximity
#8 Creating environments conducive to health and well-being
#9 Transitioning cities
#10 Resilience, the future of sustainable territories
#11 The future of work: in & out of the office

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