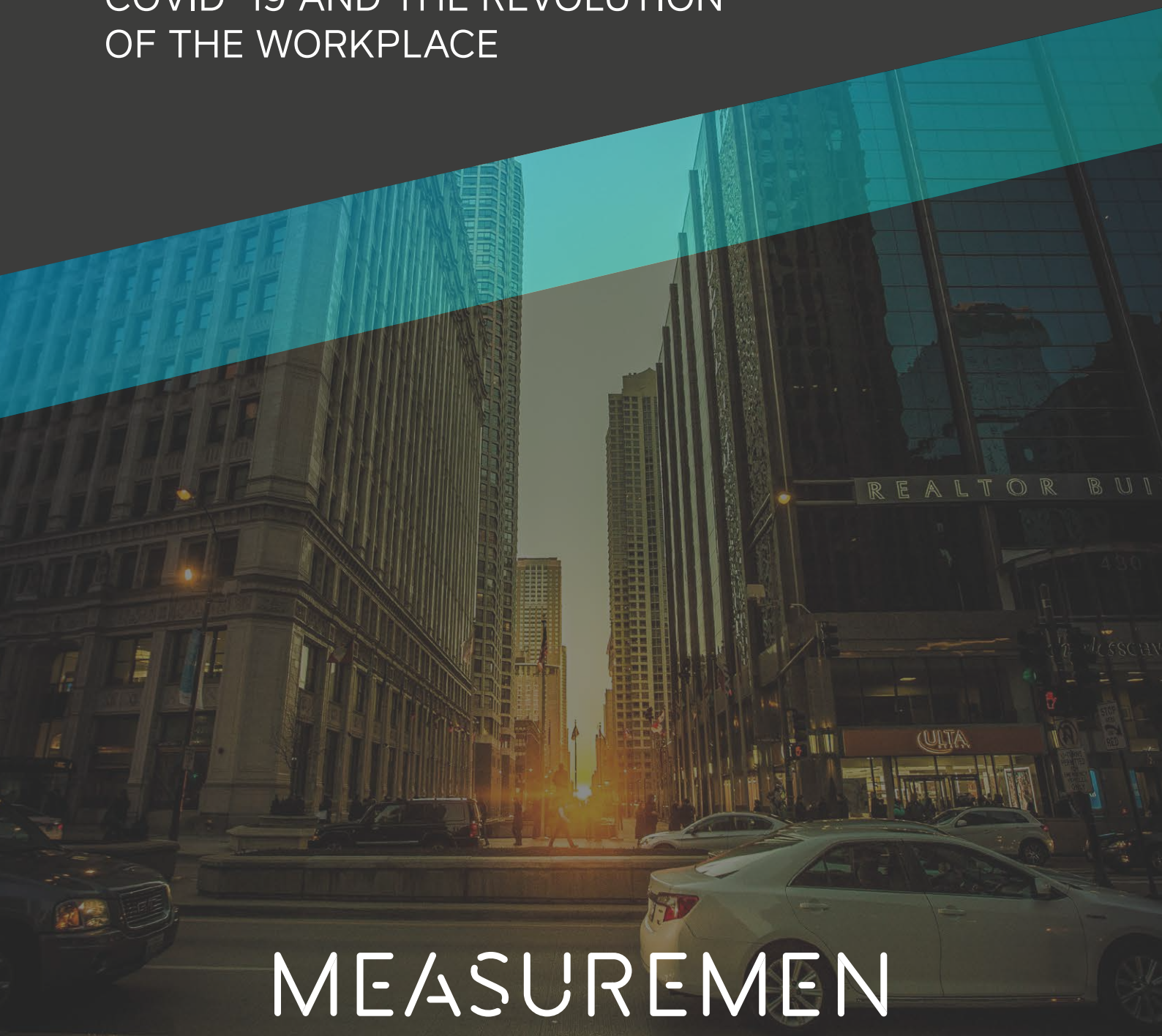


# 20/21

## ANNUAL WORKPLACE REPORT

COVID-19 AND THE REVOLUTION  
OF THE WORKPLACE



# MEASUREMENTS

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# GLOSSARY

## Activities

Individual low concentration work	Individual work alone, self-defined as requiring low concentration
Individual high concentration work	Individual work alone, self-defined as requiring high concentration
In-person meeting	Meeting with colleagues where all people are physically present
Hybrid meeting	Meeting with colleagues where some people are physically present and other people digitally (through phone or video)
Digital meeting	Meeting with colleagues where all people are digitally present (through phone or video)
Break	Relax moment during a workday
Other	Non-defined other activity

## Definitions

Office	The workspace owned or rented by the employer, functioning as headquarters of the organisation.
Remote working	Working from anywhere but the office.
Hybrid working	Hybrid working is when the workweek exists of a combination of working in the office and remote.
Education	Educational facilities with spaces like classrooms for students and teachers.

# FOREWORD

Every year, since 2015, we have published our Annual Workplace reports. Our data contains many insightful graphs and statistics about workplaces across the world, helping our customers to make better decisions and improve work life worldwide.



**Vincent le Noble**

CEO & Founder  
at Measurement

Over the last two years, some fascinating stuff has happened. The COVID-Pandemic caused the world's largest remote working experiment possible. And new innovative forms of collaboration have been developed and implemented. Our learning curve has never been so high.

Of course, there has also been a downside to the pandemic. The illness it has caused has put a great strain on public health and health care. The discomfort it has caused us all when lockdowns forced children to stay at home and shops, cafes, and restaurants were forced to close their doors.

Engagement between colleagues and team members and organising work in a different matter took a great toll on all things management-related. And now we face some new challenges because everybody wants to know how to adapt in a sustainable manner, making the best of our learnings, findings, and insights to support a future way of working.

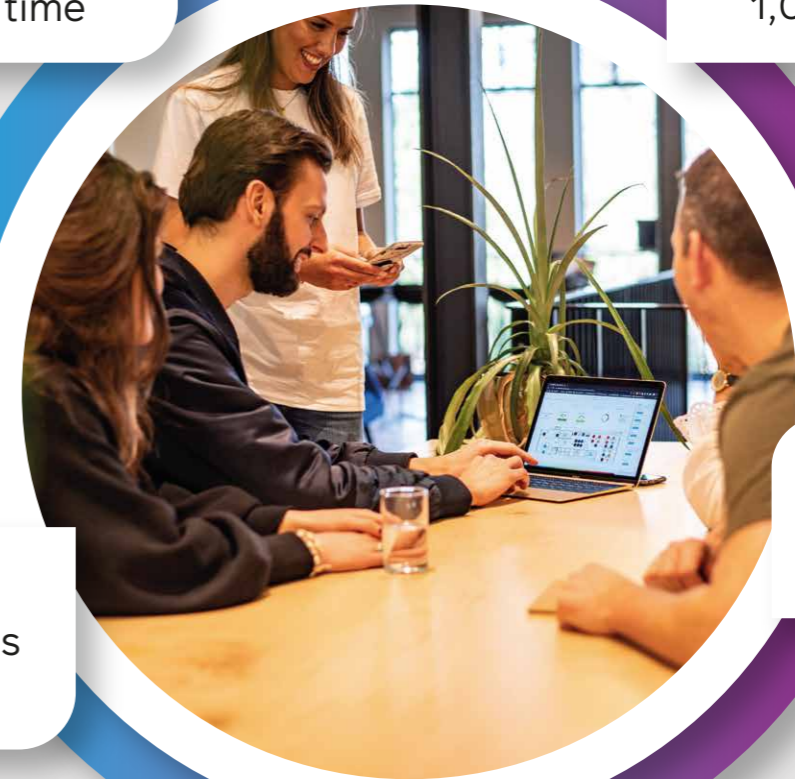
Heraclitus, a Greek philosopher, has been quoted as saying, "Change is the only constant in life.". I know it's a cliché but with permanent ways of measuring the change, we are able to adapt quickly and learn from previous behaviour.

Let change happen.

# IN THE YEAR 20/21 WE ...

Rated our workday with a 10/10, 12% of the time

Cleaned our desks 1,000 times



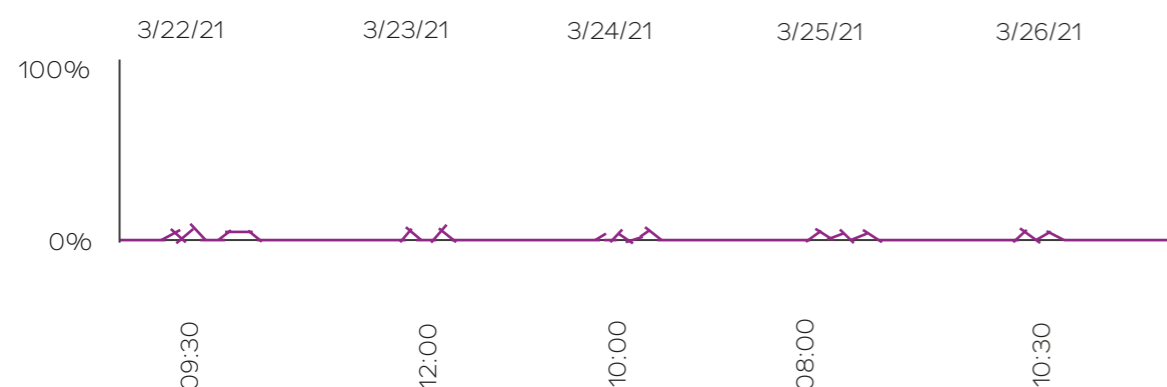
Washed our hands 10 times per day

Spend 22% of our time in digital meetings

Worked 58% of the time from home

# INTRODUCTION

Who has read our Annual Workplace Report of 2019, might remember how our closing sentence was: "Our Annual Workplace Report of next year will consist of even more data and more insights derived from our solutions, to support the human-centred vision we have developed over the last few years". But this was not the case, unfortunately. We couldn't even predict this to happen with all our data.



Visual 1: Example Occupancy sensor data workweek in 2021

Workplace observers didn't have to do their rounds anymore when the COVID-pandemic struck. However, our workplace sensors kept measuring occupancy rates close to 0.0%. The measurements in visual 1 show that working at the office almost vanished (only a few employees were present at times). Of course, we know that workspaces shifted to bedrooms, kitchen tables, and wherever people preferred. Work started to revolve more around humans, and the workspaces became more fluid. Just like we predicted in our vision for 2019, work has become more human-centred. So during the pandemic, we spent more time on developing Habital®: an easy platform for employees and employers to collect data and to understand work, well-being, and the use of the workplace, either at the office or remote. Through Habital® we managed to get deep insights into the relatively hidden remote workspaces of employees, and in the first chapter, we will share our findings of their experiences. But more than in other years, we were able to strengthen our findings with scientific data from other studies and our own resources.

With the relatively positive experiences of remote working, and societies circulating between lock-downs, people started talking about hybrid working: combining work at the office with working remotely. In our second chapter, we dive into hybrid work. We will combine data from multiple sources to get a deep understanding of it; its risks and opportunities.

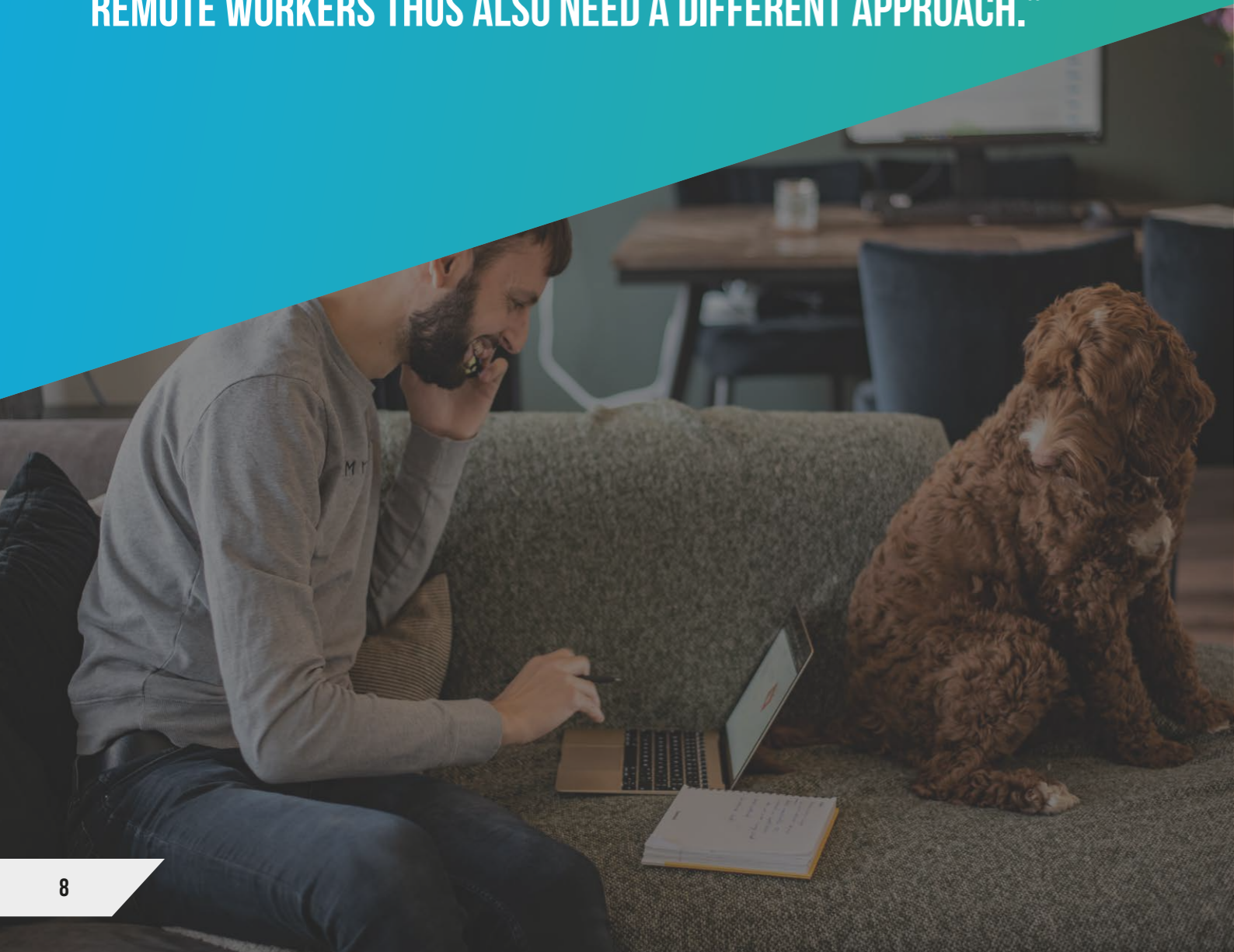
Although, or maybe because, people were working remotely, there was also a lot of talk about offices. Occupancy, booking systems, hygiene, and office ventilation became popular topics of discussion to ensure safe office use. These topics will be discussed in our chapter about offices. Furthermore, the pandemic had similar but different effects on the education sector. Students and teachers perceived a threat for its quality, and the use of spaces changed. We will therefore dedicate the fourth chapter to the education sector.

Lastly, probably the strongest discussion of the past year was the future of work. As with every Annual Workplace Report, we discuss the future of work through our data and the scientific literature. This year, we extended our expertise by sharing the visions of several experts in the field across the chapters. Together, we believe we've created an integrative report by looking back on the past with data and scientific literature, making us able to gaze relatively clearly into the future of work and the workplace. And in this future, we're continuing to improve workplaces and workplace experiences worldwide



# 1 REMOTE WORKING

**“WORKING REMOTELY SHAPES HOW THE EMPLOYEE WORKS: WHAT HE DOES, HOW HE COMMUNICATES, AND WHAT HE NEEDS. REMOTE WORKERS THUS ALSO NEED A DIFFERENT APPROACH.”**

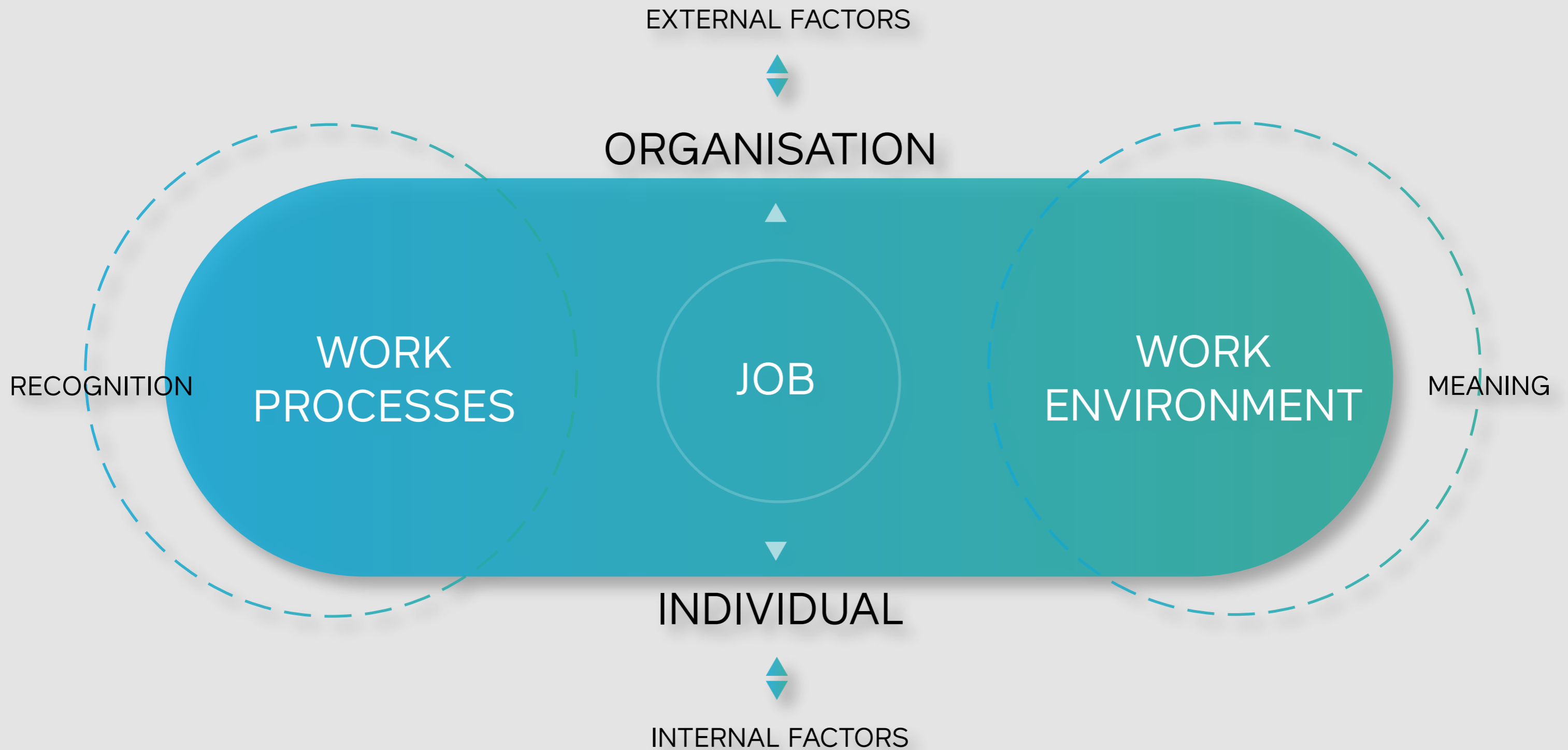


Employees dispersed to their remote workspaces as soon as they were advised to work from home (if possible). From tangible and visible at the office, now out of sight and hidden in their homes.

At the start of the lockdown questions arose about the effects of remote working, which we discussed in one of our blogs from April 2020: [“The science of remote working, what can we expect?”](#). We investigated scientific studies of people who already worked remotely before the lockdown. Several scientific reports discussing remote working showed positive results when it comes to performance, job satisfaction, and engagement. So expectations were high that remote working was here to stay, even though there were downsides regarding communication, strain, and loneliness for some people. Because of these reasons, we paid attention to relevant issues, such as [sustaining a proper work life balance while working from home](#), and a focus on [happiness and health when working from home](#).

A [study](#) by The Institute of Management Technology reveals that Human Resource managers have undergone a major role change. It has been shifted towards maximising essential aspects of employees, such as productivity engagement, collaboration, satisfaction level, and work life balance. Furthermore, [a study](#) from the Copenhagen Business School adds that remote working has led to greater employee autonomy Especially on how, when, and where employees work. Altogether, this has blurred the boundaries between personal and working lives. Remote working required change on many levels, like communication, hierarchy, support, and the use of space. Adaptation to these changes and finding a new way of working has proved to be a critical factor for both individuals and organisations. All in all, employees pivoted by getting more self-guidance with remote working while many organisations did their best to improve employee experience while working remotely.

In fact, many large organisations want to adopt a human-centric way of organising, putting a major focus on [employee experience](#) and well-being. We gathered multiple sources about it, in [the whitepaper](#) the bright side of the pandemic. For example, we presented an employee experience study of Willis Tower Watson, in which they surveyed a total of 1,550 employers representing 9,45 million employees. More than 9 in 10 employers (92%) indicated that enhancing the employee experience will be a priority over the next three years. According to the findings, this was only 52% before the pandemic. Based on this data and the scientific literature, we presented a model (pages 10-11) to improve the employee experience, through a balanced relationship between the employee (the individual) and the organisation.

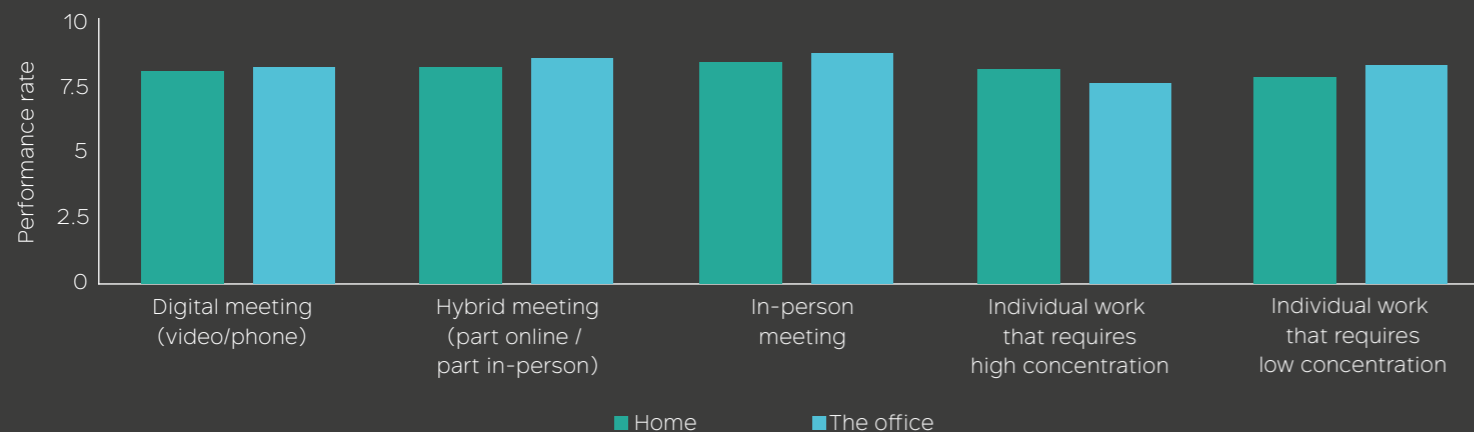


Visual 2. The looping process of work

## A PEEK INTO OUR DATASET

To uncover more about the relatively hidden world of remote working we decided to do a small study. We wanted to learn about the differences in people's needs and behaviours between remote offices. Also, we were curious about what type of people (personas) decide to work in the office or from home. So, we performed a case study with 164 Habital® users.

We asked people while working, questions related to their environment and performance such as: where they were, what they were doing, how they perceived their performance, and, if anything, what limited their work. When analysing the data, we found a clear difference between the type of activity and the level of performance. All meeting types (and low concentration work) were better performed in the office, and only high concentration work was better performed at home on average.



Visual 3: Level of performance during different activities across home and office

We already discussed the wide variety of experiences with remote working, thus, it might be interesting to look at individual employees. On page 14, we plotted each employee on the x-axis of visual 4. Then on the Y-axis, we plotted the difference between their home- and office performance. For example, when someone rates her performance at the office an 8 on average, and at home a 7, this results in a -1 score on the Y-axis, giving her a place on the left side of the graph, meaning she performs better at the office. From this graph, we can learn that about just as many people perform better at home as there are people performing better at the office (the left and right dent). But there is also a large proportion of employees who perform equally well (the horizontal line in the middle of the graph).

**“NOW EMPLOYEES HAVE AN ATTITUDE TO WORK WHERE AND WHEN THEY WANT. THEY PREFER TO WORK REMOTELY ON DAYS THAT FIT THEM AND WISH TO WORK AT THE OFFICE WHENEVER THEY PLEASE.”**



## Performance Home vs. The Office



Visual 4: Difference in home and office performance (y-axis) for individual users plotted on the x-axis



In the performance rating sample, we also asked what was limiting their potential. We categorised the factors that limited their potential in the following:



Workspace



Organisation

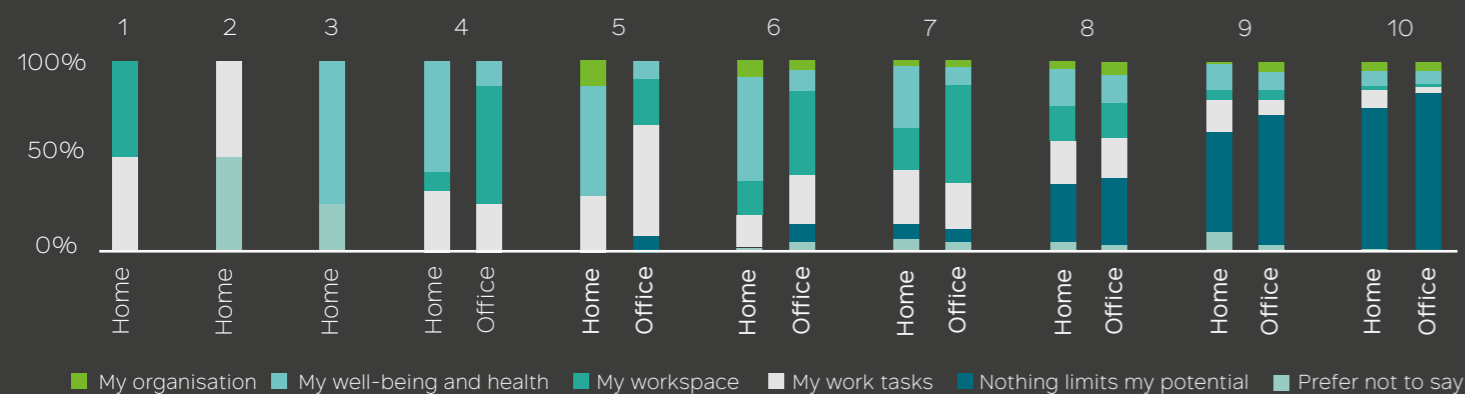


Well-being & health



Work processes

In the graph below you can see the performance rating (between 1 - 10), and what factor limited their potential (for each of the ratings), divided between home and the office.



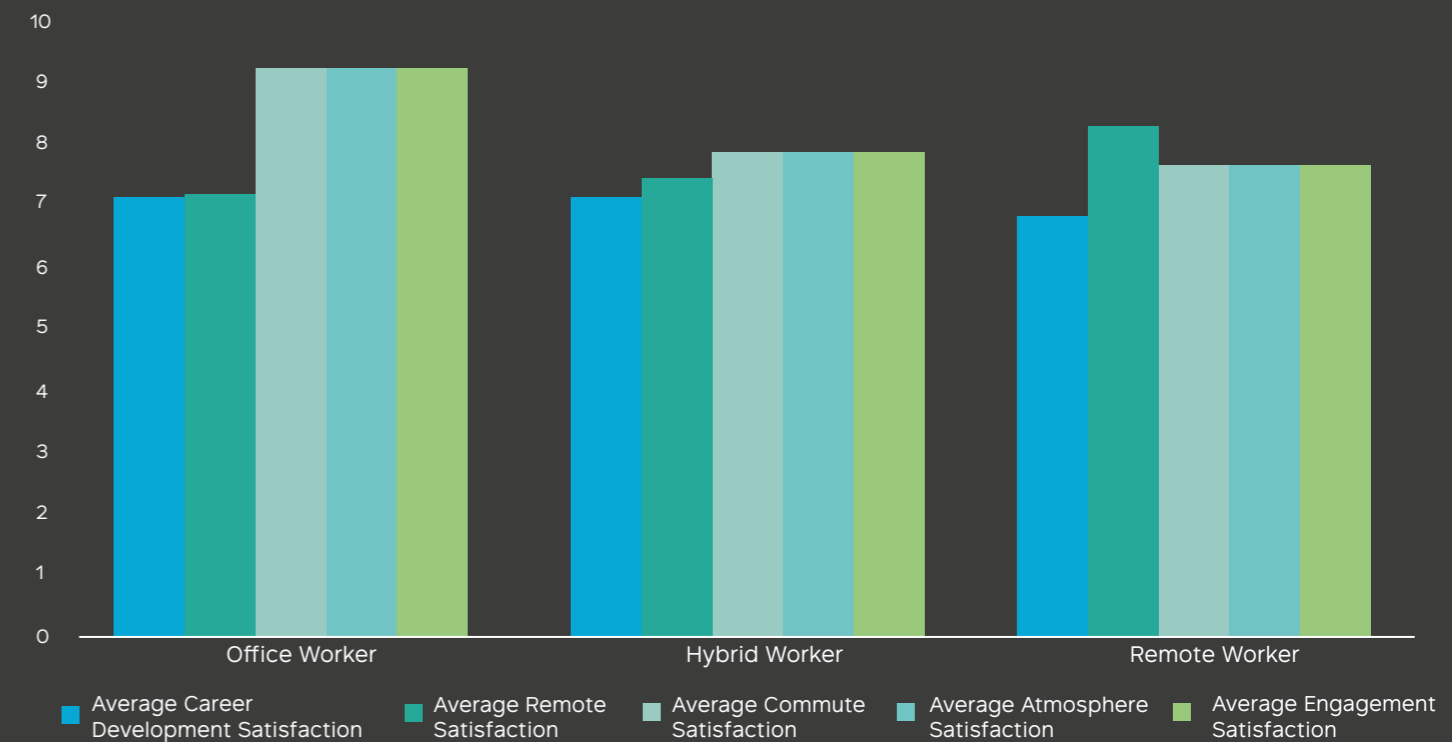
Visual 5: Performance and improvements across location

Looking at this graph, we can identify that:

1. People only rate their performance really low when they are working from home. (Since no one at the office rated their performance between 1-3).
2. There is a clear indication that people who work from home have more issues with their well-being and health. While people who work in the office have more issues with their workspace.
3. With higher performance, people more often answered “nothing is limiting my potential”, which is not very surprising.

Next, we wanted to understand the factors that make people choose to work from home, go to the office, or adapt a hybrid way of working. Across the research period, most of the time, people could make their own decisions when it comes to determining their workspace. Visual 6 shows some potential factors leading to these decisions. We plotted a few variables and displayed them across their mobility profile (remote-, office-, or hybrid worker).

Office workers are generally more satisfied with their career development, commuting, and the office atmosphere. They are also more engaged with the company. On the other hand, we see that remote workers are more satisfied with their remote workspace. The hybrid workers’ scores fall exactly between the remote workers’ and the office workers’ scores. We noticed that (not shown in this graph) office workers usually commute by car, in contrast to remote workers who travel mostly by public transport. Employees who often work at the office are from the older generation, belong to high management teams, and live with a partner and children. They most likely have worked for less than a year at the company. While people who work more remotely are between the ages of 25-45. These employees are typically of low-and-middle management, live only with a partner, and/or are people with more experience at the company.



Visual 6: Potential factors in choosing the workspace

**“THERE IS A CLEAR INDICATION THAT PEOPLE WHO WORK FROM HOME HAVE MORE ISSUES WITH THEIR WELL-BEING AND HEALTH. WHILE PEOPLE WHO WORK IN THE OFFICE HAVE MORE ISSUES WITH THEIR WORKSPACE.”**

## CONCLUSION

We see clear patterns emerging when it comes to activities at home or in the office, differences in complaints, and profiles of people. Different factors, like age, manager position, and living situation seem to cluster together, causing people to either work from the office or from home, with the accompanying specific needs. This shows that workplace choice is related to certain profiles and has an effect on the organisational culture through the separation between remote-, and office workers. And secondly, the split between needs and workspace choice requires different strategies to approach and facilitate these people. For example, in our data we saw well-being and health issues when working from home, requiring different actions than the workplace issues we saw when working at the office. Remote workers thus might do better by talking more often with HR managers while office workers might need more interaction with Facility managers.

Although we could see patterns emerging, the number of people in this sample was relatively small. The sample included four different organisations. Thus, it was not representative of a specific organisation or the general population. Something worth mentioning is that data like this is very organisational specific. Employees of your organisation might experience completely different issues and need different things.

## A WORKPLACE EXPERT

In my role as manager and former housing consultant, remote working has been the "normal" way of working for many years. My daily practice consists of managing a team of professionals who live all over the country. Therefore, our meetings are often digital and sometimes physical. In addition, we work for numerous clients throughout the country. Here, too, the meetings are sometimes physical and sometimes digital. Whether remote working is possible is often determined by the content of the conversation and the size of the group. Strategic sessions and workshops are preferably conducted physically while going through a quotation can easily be done digitally. Covid has not changed the content of my work because we were already working in this way.

During the pandemic, I did not experience any real inconvenience as a result of working from home. Precisely because we already had a hybrid working method. What I did miss was the social contact with colleagues. Getting together on Fridays to close the week is an example of this.

The challenge during the pandemic for me was to keep space on the agenda between appointments. Normally, this space and time to "clear the head" is always available in the form of travel time between appointments. During the pandemic, team consultations often followed each other throughout the day, which meant that actions could hardly be worked out, if at all. Also after the pandemic, keeping the balance is an important challenge for many people.

In the coming period, we will experience how remote working really works. Up to now, assumptions have been made that on average people go back to the office 50% of the time. We will see in the coming months what works in practice. In the beginning, many people will be hungry for social support because we haven't been able to meet each other normally for a long time. After that, I expect that a balance will develop in which it is important that people can make their own choices in line with the work that needs to be done.



**Eric de Wit**

Manager of the Housing and  
Workplace Team  
HEYDAY

## OFFICE WORKERS GENERALLY

- Are more satisfied with their career development (7.1\*)
- Are more satisfied with commuting (9.2\*)
- Travel by car
- Are more satisfied with the office atmosphere (8.3\*)
- Are more engaged with the company (8.1\*)
- Belong to older generations
- Exist of high management employees
- Live with their partner and children
- Work for less than a year at the company
- Have more issues with their workspace

\*1-10 scores surveyed with Habital®

## REMOTE WORKERS GENERALLY

- Are less satisfied with their career development (6.8\*)
- Are less satisfied with commuting (7.8\*)
- Travel by public transport
- Are less satisfied with office atmosphere (7.1\*)
- Are less engaged with the company (7.2\*)
- Are between the age of 25-45
- Are of low-and-middle management
- Live only with a partner
- Are people with more experience at the company
- Have more issues with well-being and health



# HYBRID WORKING

“THE ONE HYBRID WORKING STRATEGY IS NOT LIKE THE OTHER. FOR NOW, CHANGE SEEMS TO DETERMINE THE ROUTE.”

Because of the lockdowns and advice on working from home policies, many organisations have forcefully adopted a hybrid working strategy in 2021. People were working partly from home, partly from the office, and/or from other locations. The exact ratios for employees and strategies for organisations are still consolidating, but we do know that it changed the way employees work and how organisations are established.

**M** Measurement  
2,698 followers  
1yr • Edited •

It's been over a year since we all suddenly had to switch to working from home. The pandemic disrupted traditional work models. According to the [World Economic Forum](#), 34% of leaders are currently focused on creating a sense of community for employees working remotely, or in line with a hybrid working model.

Looking at the future of work and the office, we want to know your experience while adapting to a hybrid working model. Share what is important to you below! Feel free to comment with any additional answers.

#remoteoffice #hybridworking #employeeexperience

When would you like to come to the office in the future?

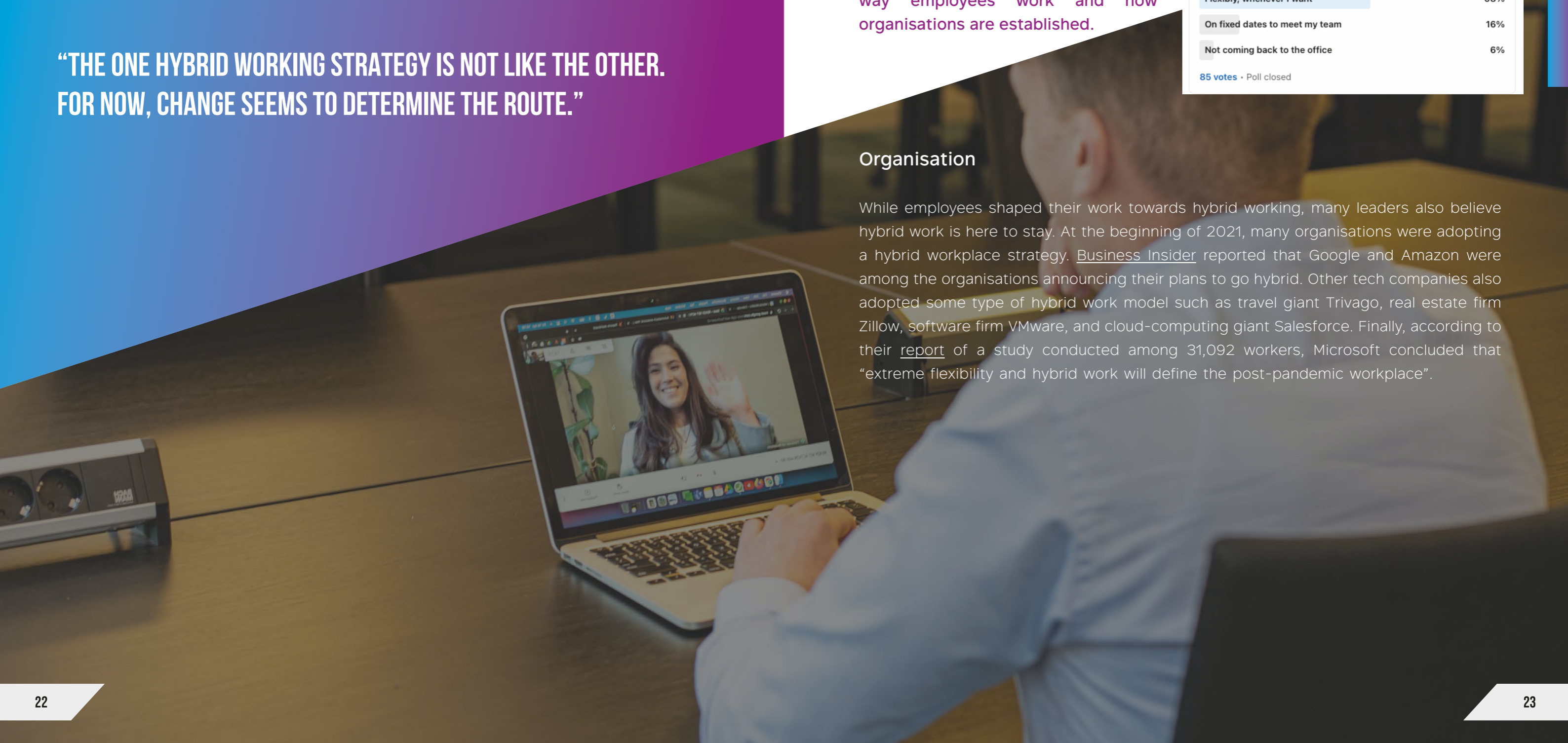
You can see how people vote. [Learn more](#)

Every day of the week	9%
Flexibly, whenever I want	68%
On fixed dates to meet my team	16%
Not coming back to the office	6%

85 votes • Poll closed

## Organisation

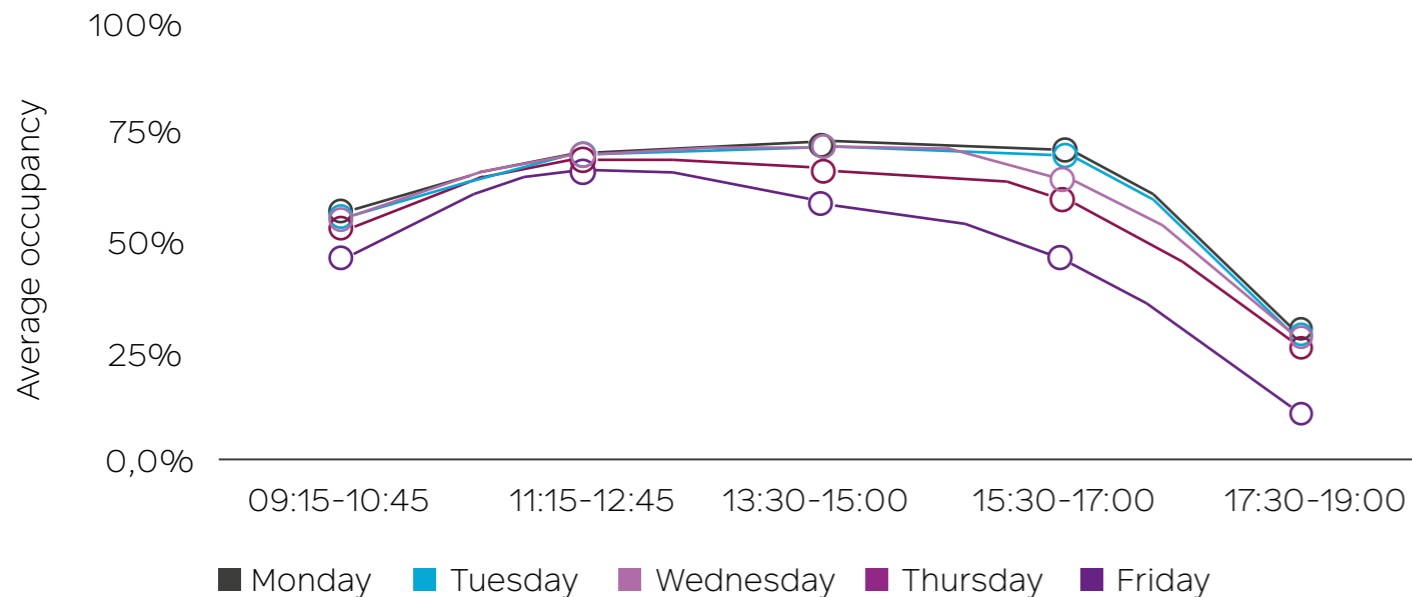
While employees shaped their work towards hybrid working, many leaders also believe hybrid work is here to stay. At the beginning of 2021, many organisations were adopting a hybrid workplace strategy. [Business Insider](#) reported that Google and Amazon were among the organisations announcing their plans to go hybrid. Other tech companies also adopted some type of hybrid work model such as travel giant Trivago, real estate firm Zillow, software firm VMware, and cloud-computing giant Salesforce. Finally, according to their [report](#) of a study conducted among 31,092 workers, Microsoft concluded that “extreme flexibility and hybrid work will define the post-pandemic workplace”.



## Employees

McKinsey showed that people enjoy remote working; they see a future of hybrid working. McKinsey surveyed around 5,000 employees as part of their reimagining work survey and found that in a post-pandemic world, 52% prefer hybrid working, 37% fully at the office, and 11% fully remote. Many employees see hybrid working as a path to a better work life balance. In the blog guiding workplace occupancy during the pandemic, we discussed how the pandemic gave employees a new attitude. Now employees have an attitude to work where and when they want. They prefer to work remotely on days that fit them and wish to work at the office whenever they please (source).

The differences in experiences of remote working between people directly impact office occupancy as well, since this contributes to an increased variation in overcrowded offices and empty offices. In the graph below we can see the mentioned effect in the occupancy variation. The data is from a project performed in 2021 when limited regulations were in place. Back then we started seeing stronger peak days of workplace occupancy at the beginning of the week, and almost empty offices on Fridays.



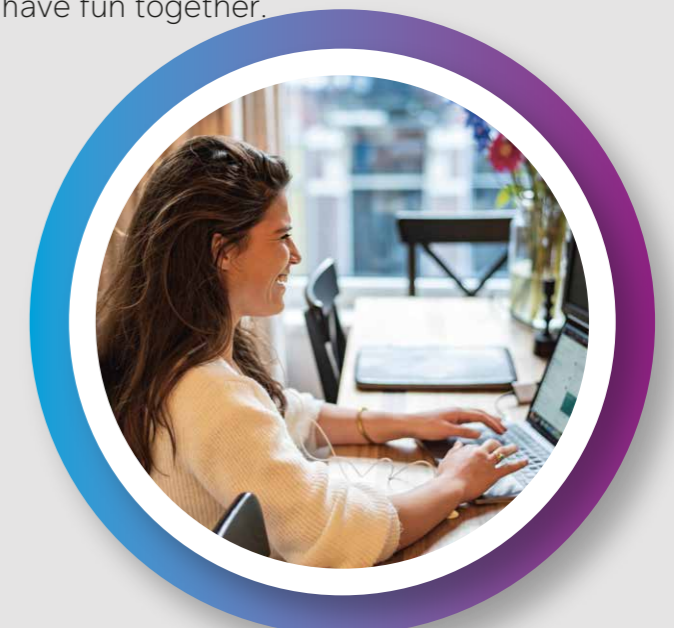
Visual 7. Office workplace occupancy (source: Measuremen Portal)

## Hybrid workplace strategy

Across 2021, we've seen a constant change in COVID rules. From lockdowns, to fully open, to lockdown again in only a few months. We saw a majority of organisations complying with these regulations, while there were also organisations unable, or unwilling to adopt new workplace strategies. It was rather a year of responding to changes.

Although some organisations were able to set a path for the future. In our whitepaper about preparing the workspace for hybrid working, we tried to support this challenge. We discussed the continuous high expectations in the dynamics of workspace occupancy, which requires a flexible and adaptive approach to handle occupancy. We discuss more details, but we want to highlight one of our favourite strategies. A radical new workplace strategy which “instead of approaching hybrid work on a weekly basis (e.g. 3 days office, 2 days remote)”, you could approach it on a monthly or quarterly basis. The organisation could arrange a team/department for three weeks of remote working, followed by one week (or a few days) of on-site interaction.

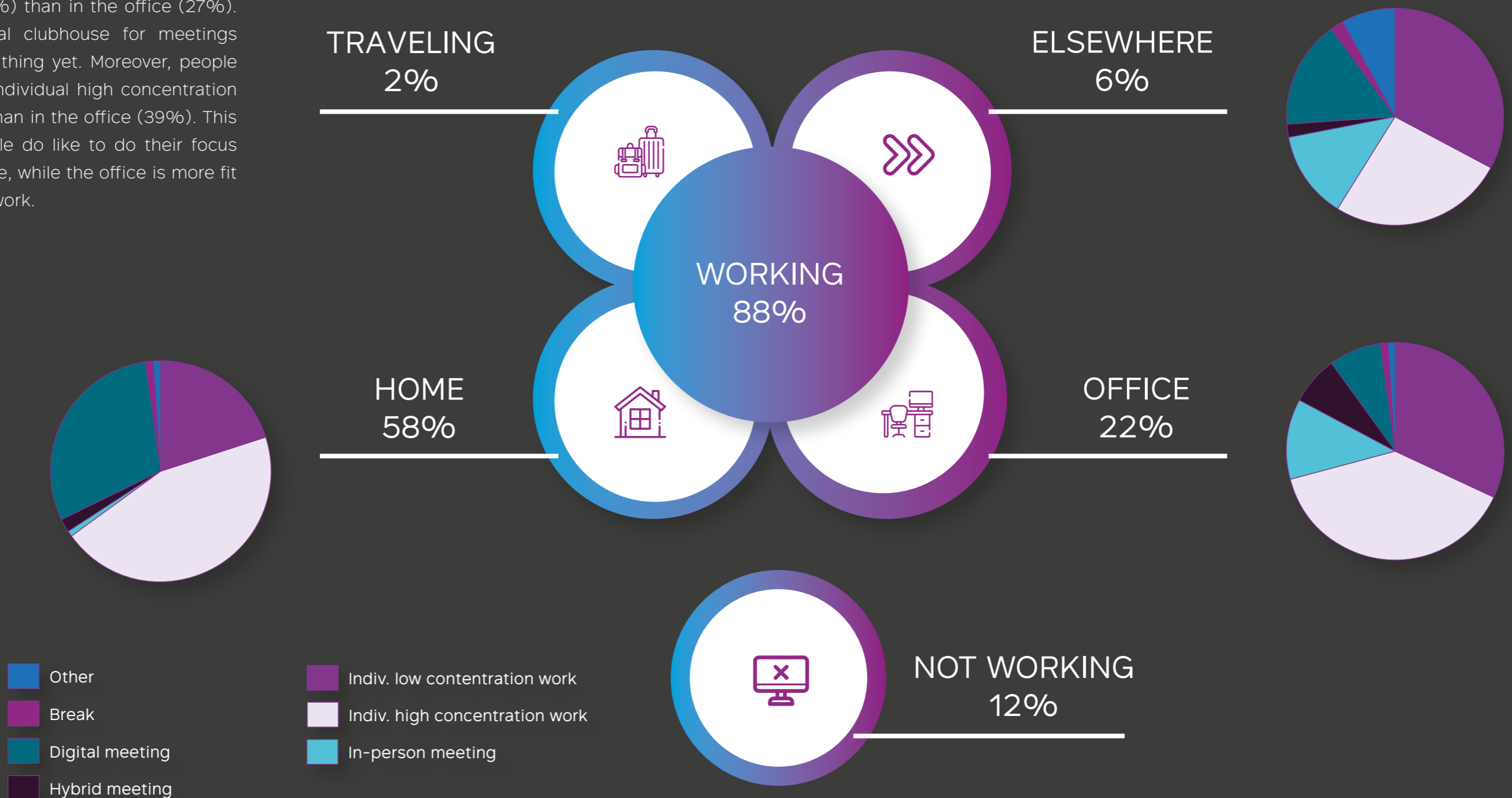
These days of physical presence could then be organised as a conference/summer camp kind of event in a nice location with strategy sessions, team building activities, and outlining of the work schedule for the following (remote) weeks, until the next get-together. This 1-week on-site rhythm can be planned in such a way that the need for on-site space is distributed well and heavy peaks are avoided. The costs of organising such events can be compensated by the reduction of office space. We believe most employees would be excited to attend these weekly events since they will deepen their connection with their colleagues and have fun together.



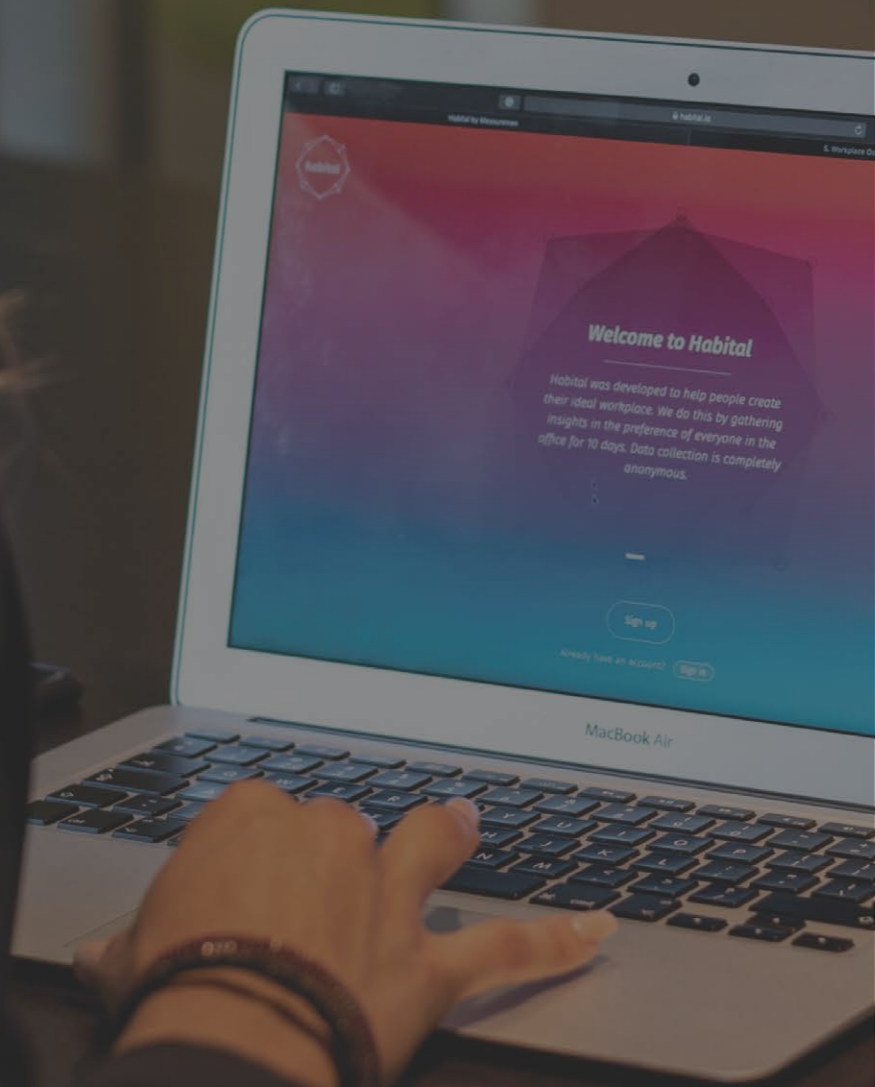
## Where do people do what?

In the graph below you can see the differences in activities across different spaces using our Habital® data. 88% of the time people responded to be working in the timeframe they received their notification.

At the time that people were working, the majority worked from home (58%), and 22% from the office. Interestingly, when adding all the meeting types together we see that at home, people spend more time on meetings (33%) than in the office (27%). The office as a social clubhouse for meetings doesn't seem to be a thing yet. Moreover, people spend more time on individual high concentration work at home (45%) than in the office (39%). This could mean that people do like to do their focus work at home and alone, while the office is more fit for low-concentration work.



**“MY EXPECTATION IS THAT THE THEORY OF THE 'PROGRESSION OF ECONOMIC VALUE' WILL BECOME INCREASINGLY VISIBLE IN THE WORK ENVIRONMENT.” - NICK LETTINK**



## A WORKPLACE EXPERT

I am Nick Lettink and I am a Partner and Advisor at YNNO. YNNO is a consultancy firm for new ways of working. We advise and guide organisations in new ways of working. This in the areas of Digital Working, Housing & Workplace, and Behaviour & Change. So, every day, I'm busy getting organisations work in new ways. These issues vary from working more efficiently to realising ambitions as an attractive employer and recently, of course, many implementations of 'Hybrid Work' in various concepts.



**Nick Lettink**

Partner and Advisor  
at YNNO

It is striking that the work during the pandemic actually continued for the most part. Before the pandemic, this was mostly remote and in digital sessions, and for the important moments physically on location. Because we also work a lot with the physical environment, being present on a regular basis is a requirement. This proved to be indispensable during the pandemic. Sometimes it was strange to walk around on your own in buildings where normally 1,000 or 2,000 people are present.

The pandemic initiated a major change that would last forever. Whereas before the pandemic we were overdoing it in being almost always present in the office. During the pandemic, it was the same situation for working at home. Finding a new balance where the performance of the individual, but above all as a team and an organisation, being central becomes the biggest challenge. The developments that took place before the pandemic still apply today. Think of the busy roads (traffic jams have already returned), full trains in the rush hour, increasingly complex questions we need to solve, and the digitalisation and flexibilisation of work. Just a few of the issues that have been around for years. These developments have an impact on the way we work and the environment must be adapted to them. Great questions that will also occupy us in the years to come!

My expectation is that the theory of the 'progression of economic value' will become increasingly visible in the work environment. This should really be a place where you want to go because it makes a difference: in your functioning, in your experience, and in achieving the best results together. Environments must increasingly match the wishes that we as users have, and they must convince us to come to that specific place. This may be because the facilities are so good, we have specific wishes or simply because we would like to work with a colleague. Travel distance' also remains an important factor. I increasingly hear employees say: the work or the office is not the problem, the journey to the office is'. This should make organisations think and will hopefully force them to come up with new models for the use of our office environments.

# 3

## THE OFFICE

“THE TOKEN OF YOUR COMPANY. THE HEADQUARTERS OF YOUR COMMAND. THE CLUBHOUSE OF YOUR SOCIETY. THE OFFICE, A MEMORABLE PLACE.”



Although the office took a less prominent role in the lives of most employees in 2021, there was a lot of talk about its (safe) use and function. Occupancy was drastically reduced often because of governmental or/and managerial advice to work from home. In the offices, employees needed to work according to the safety regulations. As a consequence, booking software became more popular, while hygiene and ventilation also became big topics. We will discuss them separately.

### Occupancy

The lockdowns caused drastic reductions in occupancy. At Measurement, we're fond of expressing our thoughts through data but unfortunately, there wasn't that much to measure during these periods. Nevertheless, some organisations were interested in their occupancy during periods where it was allowed to work in the office safely. During these measurements, we saw a huge decrease in occupancy nonetheless. On average we measured an average occupancy of 18.6%.

This is in stark contrast with the average 50.1% occupancy measured in 2019. One organisation measured both in 2019 and in 2021, which confirmed the large differences. In 2019 this organisation had a peak occupancy of 58.3%, and an average of 45.4%, while in 2021 we measured a peak occupancy of 34.8% and an average of 20.6%. That is a difference of more than 20%. Of course, we already had a gut feeling that occupancy would be lower this year, but in the periods where people were allowed to work, it was still lower indeed.





## Booking and reservations

With the pandemic, booking systems became a useful necessity for organisations. Facility managers needed to know how many people were using their building. Although many managers trusted these numbers, the reality was often different. In [our blog](#) “Guiding workplace occupancy in turbulent times of lockdowns” we discussed that many of our past studies showed that people often don’t adhere to their booking behaviour. These types can be separated into two types of people: “No shows” (book but don’t show up) and “Ghost shows” (don’t book but use a space anyway). In the pandemic, these people are messing up the effective- and safe use of workspaces.

In one study we performed this year, we combined the booking system and walk-arounds (when there were limited regulations). The No shows contributed to a whopping 28% of the occupancy. While the Ghost shows contributed to 19% of the occupancy in some buildings (see visual 8). In another study we performed, the reservation data showed an occupancy of 39.% while the actual occupancy turned out to be 14.1%, which is less than half. Maybe this isn’t a real surprise. The pandemic disrupted many schedules with sudden quarantines and lockdowns. Nonetheless, many people did not cancel their bookings or didn’t book their spaces.



Visual 8. Reservation data across multiple rooms in one building

## Hygiene

To limit the spread of the Coronavirus, office hygiene also became a big topic. Through several routes, managers tried to facilitate a safe workspace for their employees. In our [comprehensive action plan](#), we discussed three routes to use buildings safely. The first one is managing the ventilation in the building, secondly managing the people, and thirdly by managing assets. The broadness of this action plan showed there are many things a manager can do to facilitate a safe workplace. [One study](#) showed that hand sanitiser stations (with 58%) were the most popular desire of American employees to see at the office when returning to it, followed by increased cleaning (58%) and hands-free restroom fixtures (48%).

## Ventilation

The Coronavirus can also spread through the air by aerosols (droplets in the air). But the aerosol transmission is a lot more difficult to deal with. While wearing masks help in preventing the spread of droplets when one talks, breathes, or sneezes, the risk of transmission still exists in an enclosed office space. Hence, monitoring and managing air quality in the workplace is the only true solution. Because there is no method of measuring airborne Coronavirus particles, keeping track of carbon dioxide (CO2) levels is the next best thing. As CO2 is expelled by each and everyone one of us, during the pandemic, each exhale is potentially virus-laden ([source](#)). Monitoring the CO2 in the air is mostly done using sensors. Many factors contribute to high CO2 levels, such as the number of people present, the ventilation system, and the opening of windows. This complex mix of interacting factors increases or decreases the aerosols in the air at specific moments across the day and in specific places in the office with the accompanying risk of the spread of the Coronavirus. In our comprehensive action plan, we showed how to prevent the spread through a wide variety of actions.

## A WORKPLACE EXPERT

As an associate professor at Eindhoven University of Technology, I teach and do research about improving alignment between employees and their workplace. For sure, the pandemic was a gamechanger and one big social experiment that I had to dive into. Regarding education, I had to teach from my own home instead of on-campus and was forced to embrace all kinds of digital tools and teaching methods. Regarding research, I had to change the focus of my research to a completely different context.

Before Covid-19, my research focused on how people use and experience their workplace and which workplace characteristics determine their behaviour, workplace experience, and individual and group outcomes while in the office. But without people present in offices across the globe, all my ongoing research had to be paused. Instead, this freed up time to expand my research scope to working from home and the hybrid work modes that are envisioned for the near future. So, I started applying the same types of research methods and tools to identify behaviour, experience, and particularly well-being and communication while working from home.

Across the pandemic, large office organisations worldwide forced their employees to work from home, as advised by most governments. It was a rather abrupt process, where offices were 'cleaned literally, by letting people take chairs, monitors, and other necessary tools and equipment to their home workspace. Many studies showed that most employees felt very productive while working from home, although in many cases face to face contact with colleagues was missed as well.

Nonetheless, very few people did not experience health issues, either physically from poorer ergonomics or mentally from feeling isolated. And I wonder whether productivity should be as focused on the individual end-products that we deliver behind the computer, while ignoring the creative and joint processes that have prepared us for delivering such output. Surprisingly, a substantial percentage of employees (generally 10-20%) now indicates that they do not want to go back to the office at all. This makes me wonder whether this is because their offices are so poor; most likely noisy and crowded as the main dissatisfiers seen in office research from the past decades. But is the homeworkplace really the ideal space to work for anybody?

Management literature has proven over and over, that face-to-face contact is essential for certain types of creativity, knowledge sharing, and mentoring process. Similarly, being in the office helps to experience feelings of belongingness – a very important human need – and company culture, where the common iceberg analogy shows that most of culture is not tangible but hidden in the way people behave. Therefore, I think it is extremely important that everybody will work in the office again when regulations are lifted, albeit not necessarily all of the time. Embracing hybrid working can probably provide benefits in many areas, such as sustainability, commuting time, and work-life balance.



**Rianne Appel-Meulenbroek**

Associate Professor in  
corporate RE and workplace  
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# 4 EDUCATION

“IF THE CONFIGURATION OF ROOM, CHAIRS, AND TABLES FACILITATE DIFFERENT TEACHINGS, THE BUILDINGS SHAPEÁ THE STUDENTS.”



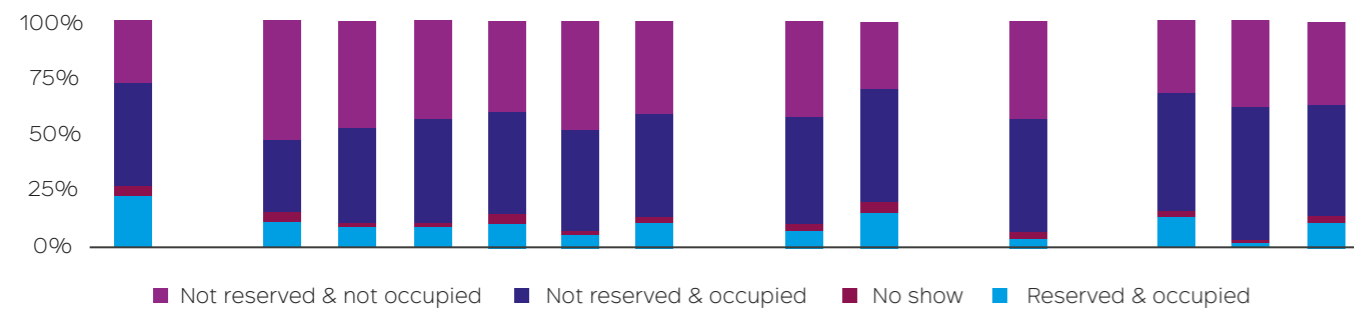
For higher education, 2021 has also been a dynamic year. Because of the lack of face-to-face interaction, the quality of higher education has suffered tremendously according to the management chair of the University of Amsterdam. Not only does the quality of the classes worsen, but also the student life experience, self-study, and collaboration work has taken a downturn. Many students live with a limited budget in a single room apartment and lack facilities like a proper desk, proper chair, Wifi connection, and/or computer.

Because of this, students are dying to get out of their houses and study at the university. In our [Measuremen College Tour](#), several building managers from different universities joined the discussion and stressed the importance of physical interaction in education. Nevertheless, the university buildings had a limited capacity to accommodate that need, sometimes as low as 30% of their normal capacity. With their input, we wrote a [whitepaper](#) about sustaining the quality of education during the pandemic with effective space management and gave practical suggestions.

Moreover, in 2021, we performed several studies at universities where students were on-site. In a [case study](#) that we discuss on our website, we see an actual use of 30%. But we also see a huge deviation between the occupancy of booked classrooms and the actual use of it. 30% of the time the classrooms were booked, but 9% of these times the classrooms were empty (no shows), which is almost one-third of the bookings. On the other hand, 8% of the time these classrooms were not booked but used nonetheless. One interesting conclusion for this specific client, was that often when rooms were not booked but in use, there was usually one person studying in it.



Although this is an inefficient use of space, it shows a clear need for individual study spaces for the students of this university. In another university, we saw very different numbers (see visual 9). Rooms across the buildings of this university were often only booked and used for about 10% of the time, while for 32-60% of the time, rooms were in use but not booked. Students at this university did not seem to feel the urge to book the rooms and just used them without booking. This is quite surprising since the actual occupancy is quite high in most rooms.

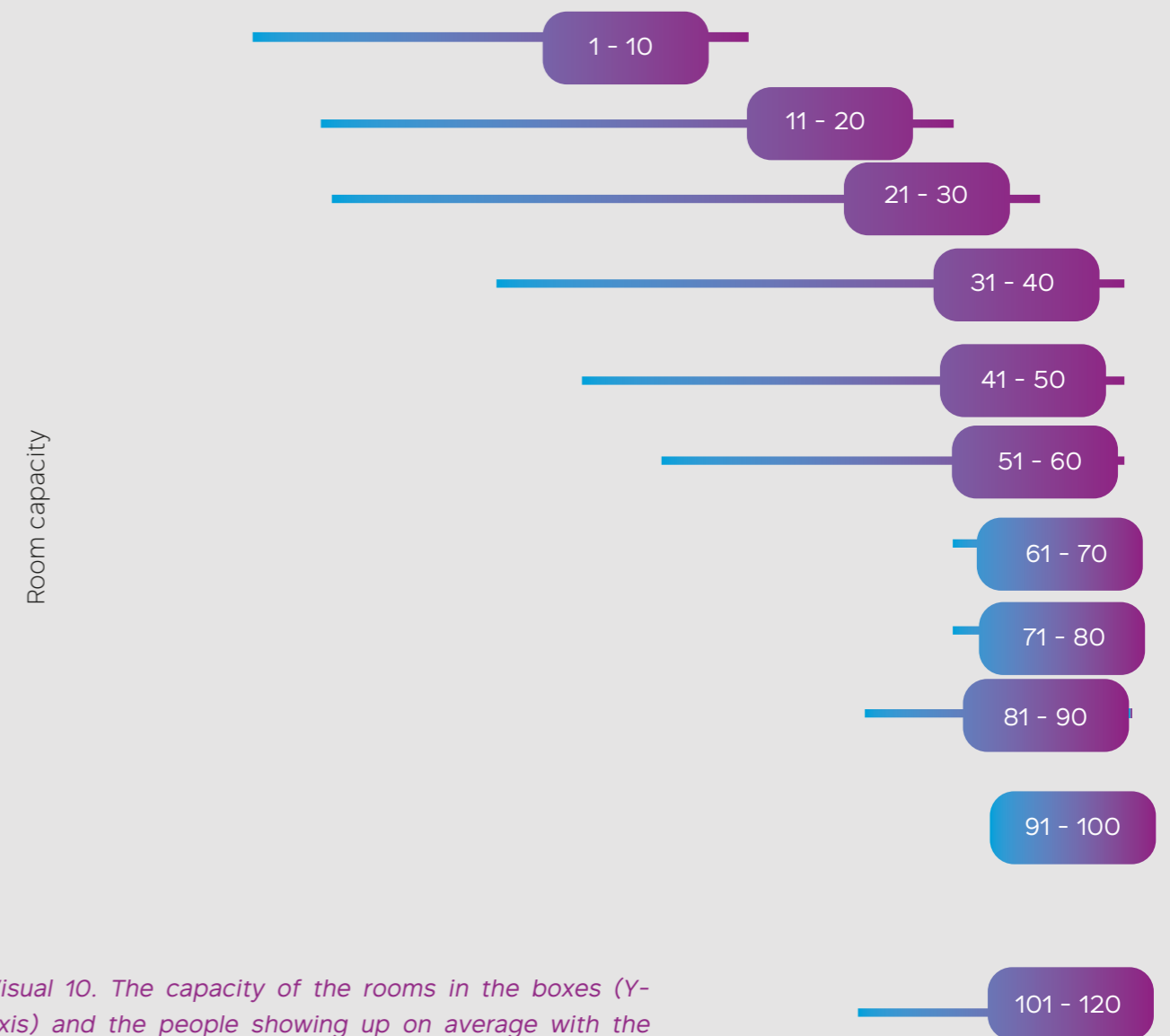


Visual 9. Booking and use across different buildings within one university .

In a different Dutch study, performed in the first semester of this year, we focused on the capacity of the classrooms and the actual people showing up. Visual 11 shows a clear trend of capacity and people showing up. The higher the capacity, the fewer students actually use the room. From rooms with a capacity of more than 50 students, there are almost always more than 30 empty seats. On the other hand, for small rooms, with a capacity of 1-5 seats, the actual occupancy often matches the capacity of the room. However, in these small rooms, it is also more common that the number of people in the room exceeds its capacity

Altogether, we saw quite some differences within universities when it comes to occupancy, booking, and the actual use of the spaces. Between buildings, there were differences but also across different periods within this year. Nevertheless, in general, we saw high deviations between bookings and actual uses. Cultural differences but also differences in the strictness of Covid-regulations across the year might contribute to these variations in the use of space for the educational institutions. Furthermore, most of the educational institutions we measured in 2021 were located in The Netherlands, making global comparisons unrealistic.

More people than expected						Exact match	Less people than expected					
< 30	21 - 30	16 - 20	11 - 15	6 - 10	1 - 5		1 - 5	6 - 10	11 - 15	16 - 20	21 - 30	> 30



Visual 10. The capacity of the rooms in the boxes (Y-axis) and the people showing up on average with the variation (X-axis)

Visual 10 shows classrooms categorised with different capacities across the Y-axis. On the X-axis, the number of people using these rooms is displayed and compared with the capacity. The X-axes range from (more than) 30 people more than expected, to an exact match between capacity and utilisation, to 30 people less than expected (or more). The box shows the most common utilisation of the room, while the line presents the variation. For example, rooms with a capacity of 1-5 people (the first box), have often a match, but are sometimes over-utilized and sometimes underutilised. While rooms with a capacity of 50 people or more are continuously underutilised.

**“THE HIGHER THE CAPACITY, THE FEWER STUDENTS ACTUALLY USE THE ROOM. FROM ROOMS WITH A CAPACITY OF MORE THAN 50 STUDENTS, THERE ARE ALMOST ALWAYS MORE THAN 30 EMPTY SEATS.”**

## **AN EDUCATIONAL EXPERT**

I am an advisor and partner at PTG advies. PTG Advies is an independent and market-oriented consultancy firm.

We focus on housing issues in the health care and education sectors and are primarily concerned with the interaction between housing and business operations. We focus our attention on three groups of themes: programming organisations, directing and managing projects, and developing real estate for healthcare and education organisations.

The great thing about our profession as consultants is that I have been working in a hybrid way for years. Sometimes at home, sometimes at the office and usually with my clients. Working at home has increased in recent years, but with the right conditions and 'stuff', it's very doable.

Due to COVID, a great awareness for hybrid working within universities arose. After two years of COVID, people their needs have changed. For example, people have experienced that hybrid meetings are an option and have gained more confidence in online education. Online education will not disappear completely, and other sources have also shown that working from home will continue to exist. Since people have experienced working from home in a positive way and because it has also proven to be effective, not everyone will return to campus for 100% of their time.

Hybrid working has become a necessity in both education and supporting departments. Many higher education institutions already have experience with it; sometimes very good and sometimes less so. While the first steps have already been taken in the "office-based" organisations 20 years ago, other sectors are now following suit, which - and this is a very good thing - can learn from the office organisations. Because in that world, besides very bad solutions, there are also examples that answer the organisational needs.



**Kees Rezelman**  
Partner and Advisor  
at PTG advies

# 5 FUTURE OF OFFICE AND WORKPLACE

“ THE FUTURE OF WORK AND SPACE IS VERY UNCERTAIN. BUT WE CAN BE QUITE CERTAIN THERE WILL BE WORK AND THERE WILL BE SPACE. ”



The COVID-pandemic has taught us a new way of working. We've learned to work remotely from our homes while communicating through our phones and webcams. Over this year, the headlines changed from “returning to the office” to “transitioning to a hybrid working model”. It seems that COVID will stay with us and that many employees also enjoy working remotely. Hybrid working will become a feasible new normal.

With our data, we showed that the office currently already attracts specific profiles while others continue to work remotely. If no manager intervenes in this development, one potential consequence could be that employees who often come to the office, might be the ones who are more invested with the company acting in the center of it, while remote workers become the people who are rather invested in their family and personal hobbies and work on the outskirts. There is already quite some data showing that working at the office increases the chances of promotions and reduces the chances of getting laid off (source). Altogether, this might have big effects on organisations and their culture.

Currently, these developments of who's working where and how many days a week, evolves rather naturally. Adopting hybrid working does not say anything about the ratio of office/remote working nor does it say anything about the synchrony between employees. While these components will determine how an organisation develops. Some organisations might develop to become purely functional and decomposed, driven mostly by remote workers focused and meeting up when necessary. While other organisations rather become an office-based social ecosystem with a strong engagement that brings the employees together for 4 days a week and 1 remote. The office/remote ratio will then also determine the size of the future office and its composition. In our whitepaper preparing the workplace for hybrid working, we discussed the effects of hybrid working on the workplace. Among other effects, we expect that the future of office occupancy might be much more dynamic, requiring greater flexibility and understanding of the use of your workplace through booking systems and/or workplace observation studies.

## A shift towards autonomous working and well-being

With working from home over the past year, employees have gotten stronger autonomy over deciding to work where and when ([source](#)). Also in our data, we showed that remote working has caused a large variety in the needs of employees, where millennials rather need a proper workspace, and older generations rather need flexibility in their schedule. In our whitepaper “The bright side of the pandemic” we discussed the trend that many organisations are shifting towards people-centred strategies. There is no central workplace anymore, so there don’t seem to be other options. Work will revolve around the people through addressing the individual needs of employees while balancing these with organisational needs.

With this direction, a strong link is made with the trend of employee well-being. In the whitepaper, we grouped several statistics from various research such as that 92% of organisations prioritise employee experience enhancements over the next three years, and 68% of senior HR leaders rated employee well-being and mental health as a top priority. With working from home continuing, this implies that well-being needs to be approached holistically, meaning that personal needs (such as taking care of children) more often become the topic of discussion with managers. The third trend in this direction relates to the decentralised way of organising and autonomous employees. A trend towards less hierarchical structures was already developing, but it seems that the loss of the office is pushing this development. Decentralised Autonomous organisations ([DAOs](#)) have gained popularity with the use of blockchain, and providing more autonomy for their workers. Together, these trends indicate a future where employees work more autonomously and craft their own work while discussing their personal (well-being) needs with their managers. Once or twice a week people will come together, synchronise, and define their next steps.

## Effects on the workplace

Altogether, we expect that the office becomes rather a tool to support employees in their current needs, enhancing their well-being and engagement, instead of the automatic place where you work. Offices and/or satellite workspaces should outperform home offices in fostering effective collaboration, concentration, or just being a vibrant place to work- and have fun together. When employees start to feel the fear of missing out because there are nice people, spaces, and activities at the office, they will come and get together. But on the other side, decomposing your organisation to mostly remote work provides the opportunity to lose space and save real estate costs. Your employees’ needs and the desires of the management will together determine the hybrid home/office ratio, and thus in which direction organisations will evolve. Moreover, the more autonomous employees become in deciding their working schedule, the more dynamic the occupancy of the office will be.

**“WHEN EMPLOYEES START TO FEEL THE FEAR OF MISSING OUT BECAUSE THERE ARE NICE PEOPLE, SPACES, AND ACTIVITIES AT THE OFFICE, THEY WILL COME AND GET TOGETHER.”**



# A WORKPLACE EXPERT

## An uncertain workplace

Having spent most of my career working in an office whether it was at JLL, Disney or the BBC, adjusting to a world without an office took a bit of effort. Looking back at my transition to a portfolio life, the impact of not having to go to an office was not as great as I had expected. I wonder if people are feeling a similar way given their unexpected experience of having to do without their office due to the 2020 lockdown.

During this most unusual of times, I published my first book “Where Is My Office?” in October 2020 and I had big misgivings about how I might promote it. But the widespread acceptance of webinars came to my rescue. I believe my experience echoes those of many office workers who found that they could work differently. Such an awakening of new possibilities will be seen as one of the big changes in how we work and use the workplace. Now that Covid is in retreat and we are anticipating a return to normal, it is interesting to observe how the workplace sector is coping with this big shift in how we do things. Having advocated over the years for a greater focus on People and Place and for operating across a range of work settings, it is interesting to see the various narratives doing the rounds. In my view, forecasting what things will look like is fraught with difficulty, as we are living in the most uncertain of times made even more complicated by recent events in Ukraine.

## The tectonic plates have shifted

To support my contention about the depth and scale of the change, we are seeing play out right in front of our eyes, the shifting tectonic plates metaphor is useful. Whilst many of us hanker after a return to normal, the laws of physics state that once the plates start moving, they cannot be stopped. Typically, tectonic plates shift slowly but Covid has brought about a huge upheaval. We need to pay attention to this and accept that not only is the game-changing but the stadium itself has changed. This is especially relevant to the workplace sector; we are part of the wider commercial real estate industry which is notoriously introspective and slow to change. We need to ask ourselves if we are prepared to deal with these unprecedented paradigm shifts.

## The explosion of uncertainty

Coping with Covid forced us to consider options and scenarios which are complex, complicated and novel. They pose real dilemmas of a type we never had to face before. As workplace practitioners, we naturally focus on the future of the office and the arrival of hybrid. We need to sit up and smell the coffee that debates about these issues are a mere sideshow to a much wider, more complex debate concerning how we live, learn, work and play. We are now seeing leaders realise that the ‘one size fits all’ model is no longer reliable and we need to innovate. The amount of uncertainty brought about by the pandemic and exacerbated by the dreadful events unfolding in Ukraine is a completely new dimension for all of us to contend with - in my view we are living in a period of uncertain uncertain.

## A view to the future?

It seems to me that the overall direction of travel is looking something like the following:

- Hybrid arrangements (of various sorts) will be the mainstream.
- There is an increasing focus on designing the resource to be “healthy” and environmentally sustainable.
- Enterprise will have portfolios of places -some owned, some rented, some used informally, some use ‘just-in-time’, some used by subscription.
- An espoused interest to serve the needs and interests of the workforce.
- Although many models are put forth, there is a consensus that there is no ‘right’ answer, the old ‘one size fits all’ way of thinking is fast disappearing.
- There is a growing awareness of the connections that exist on multiple levels and that strategies must be forged within the context of the enterprise, which is itself part of a larger economic and societal context.
- Agility and resilience trump particular designs.

As we obsess on what is next, it is clear to me that the greatest emphasis will fall on reconvening the workforce in some form of hybrid model. But will this suffice? This type of solution is constrained by a narrow frame of reference and fails to take account of emerging options. The time has come to consider a move away from our fixation on the physical to encompass a wider range of options, especially now with the onset of cyber working. New models in the work landscape are now shifting from fixed to fluid, ones that call for a different organisational response and innovative practices.



**Chris Kane**

Author, Advisor, Advocate,  
Co-Founder at Six Ideas,  
Non Executive Director,  
Principal at Omnirama



# 6 OVERALL CONCLUSION

“WHERE PEOPLE, SPACE, AND VISIONS COME TOGETHER,  
WORK STARTS TO EMERGE.”

In 2021, we were all challenged by the COVID-pandemic. The data showed how each employee deals differently with all changes in the way we do our work, and when we do it. We needed to be flexible and resilient, adaptive to the changing circumstances. This unstable situation affected the use of our remote workspaces and the offices. Different behaviours and needs emerged that interestingly aligned with specific types of people. Such factors have an impact on the way we work and how resilient and effective organisations evolve along with the pandemic.

As HR managers, you can facilitate the needs of people and respond to low performance whether they are working remotely or from the office. As facility managers, you can facilitate people by maintaining healthy offices and reducing the spread of COVID by managing occupancy, having good ventilation, facilitating proper regulations, and using booking systems. Although facilitating effective remote workspaces might be the next step for facility managers.

As we are entering the age of hybrid working, HR and FM might merge more and more together since the way we use workplaces becomes strongly related to the people. We start to deal with people who shift from their homes to offices, cafés, or to satellite workspaces. While we also showed that human performance becomes increasingly connected to the (variety of) spaces people are using. We showed that with hybrid working, many organisations are shifting towards a more people-centric approach. With more autonomy and flexibility and a focus on well-being. While we also noticed how important the roles of facilities are in doing our work effectively and finding our hybrid work home/office ratio. People and spaces are strongly entangled together. We at Measuremen are also underlining this, updating our mission from “**improving workplaces worldwide**” to “**improving work life worldwide**”.

Looking for data about your workplace or your people? Contact one of our workplace experts to further discuss opportunities to improve the work life and workspaces of your organisation and your people.

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