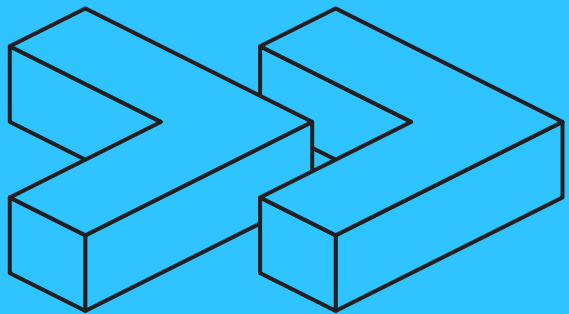




Whitepaper

Facility management and successful hybrid working



How to support flex-working and
keep facility management efficient

Foreword

The way we work has changed dramatically recent years. Offices have become increasingly empty, more employees are working from home, and collaboration processes have shifted. This growing acceptance of hybrid working has impacted all aspects of the workplace, but none more so than facility management.

Many facility managers and other stakeholders often wonder how they can effectively deal with concepts like hybrid and activity-based working? This whitepaper seeks to answer those questions

We will first explain why the office will remain indispensable in the coming decades and what the ultimate work experience looks like. Then we will focus on flexible workplace concepts that best suit hybrid working and activity-based working (ABW)—including what needs to be considered from a facilities perspective. Since hybrid work can reduce unnecessary office space, you will also discover how to use office occupancy planning to reduce overcrowding.

Lastly, we explain why data and analytics are key to optimizing the office, and why an office transformation can make your building healthier and more sustainable.

Smart office technology is a common thread within this whitepaper, and it is a concept that will guide your company in the coming years.

Enjoy your read.

Sander Schutte

CEO of Mapiq



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The office as a necessary framework

An organization relies on its facilities to efficiently support its people, locations, and processes. As people work remotely, buildings and offices have grown empty and communication methods have become more reliant on digital tools.

Younger employees view the 9-to-5 culture in an especially unfavorable light. Instead, they want a flexible workday, in which they can work wherever and whenever they want while being judged by the results of

their labor—and not by their time spent in the office. And now as recent health concerns have accelerated the home working revolution, there is an ever-increasing focus on perfecting a hybrid working model.










These recent changes to the way we work have transformed the professional lives of many. The physical office is also undergoing a complete makeover in terms of appearance, purpose, capacity.

Hub for collaboration and companionship





Until recently, work could only take place in the office because all technology was location-focused. Today, emerging information and telecom technologies have enabled many employees to work 100% remotely.

According to [Colliers](#), before COVID-19 a workplace in the Netherlands cost EUR 9,695 per employee. So why spend all that money on an office, when people can work in their own home? Simple: because the office is a necessary hub for collaboration.

After all, it's the place where we

-  Meet each other
-  Learn
-  Give guidance
-  Get inspired
-  Create the corporate culture
-  Make the best decisions
-  Foster innovation

A study by [McKinsey](#) found that many activities are more effective when conducted face-to-face than remotely. This can include

-  Mentoring
-  Building relationships with customers and colleagues
-  Negotiating
-  Making crucial decisions
-  All activities relating to innovation, problem solving and creativity

Although businesses are likely to reduce the scale of their spaces due to hybrid working, the office remains the engine of business growth.

The importance of the ultimate office experience

Whether at home, in a co-working space, or a hotel lobby, employees can work from anywhere. An overcrowded open floor plan with a watery coffee machine is no longer enough to draw people into the office. Your employees will not want to spend several days of the week in the office unless you offer them the ultimate workplace experience.

For example, the office must facilitate collaboration by making it easy to locate colleagues and book meeting rooms. There are no permanent workspaces anymore so you need to have the option to reserve shifts, desks, and meeting rooms at the office. Smart office

technology is necessary to realize these requirements.

Creating the ultimate office experience has several benefits: increased employee well-being, lower absenteeism, and reduced staff turnover. It is also a crucial step in improving collaboration and productivity, increasing employee engagement, and attracting talent.

Smart office: an introduction

A smart office is a flexible, high-tech working environment where technology supports employees to work smarter, better, and faster. This type of office consists of a series of technologies that connect users with the building and existing IT infrastructure.

In a smart office, areas that have traditionally been separated (such as parking, access management, facility management, Wi-Fi, lighting, and audio-video) work together flawlessly. Sensor technology can also be used to collect data and give users real-time feedback.

Smart office technology enables employees to reserve desks and meeting rooms that suit their activities, book office shifts to meet up with team members, and control the light and temperature of their environment





The role of the facility manager

As the role of the workplace changes, so does the position of facility manager. A facilities manager's responsibilities are likely to shift from the delivery of services to the creation of in-office experiences. Modern facility managers will be responsible for creating an attractive working environment that prioritizes the well-being of employees.

Modern facility manager



Creates experiences



Fosters an attractive working environment



Puts the well-being of employees first

Flexible working: hybrid and activity-based working

As recent health concerns disrupted the traditional office environment, they also produced a new dimension of flexible working.

Two closely interwoven trends will have an immense impact on workplace strategies in the coming years: activity-based working and

hybrid working. If managed properly, both trends can significantly reduce facility and real estate costs.



Hybrid working: the best of both worlds



Hybrid working combines the best of at-home and in-office working. At-home employees have the advantage of increased concentration and reduced travel time, while the office is the perfect place for collaboration and meeting with colleagues and business contacts.

According to a [study](#) by the International Facility Management Association (IFMA), 81% of SMEs expect more than a quarter of their employees to work remotely. Facebook has predicted that half its staff will be remote in the next decade.

If implemented well, hybrid working is the perfect opportunity to reduce unnecessary office space. But reducing space while increasing productivity can only be done through data-driven decisions. And for that, you need a smart office.

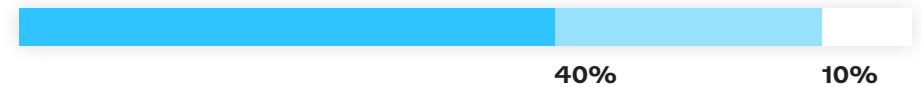
Saving space through ABW and hybrid working

Activity-based working (ABW) is a way to begin the transition to hybrid working. This concept is not new: it emerged in the '90s and has grown in popularity under the name The New Way of Working. The basic concept is that different activities such as focusing, collaborating, making calls, and socializing require different types of working spaces.

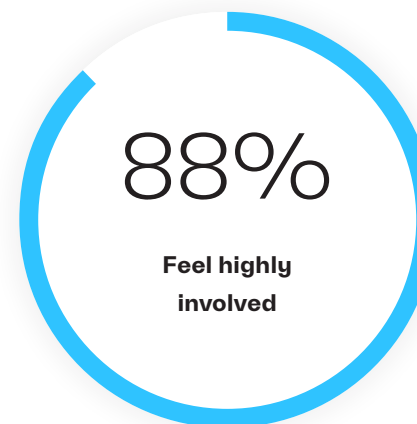
Within ABW, employees are given the freedom and flexibility to decide for themselves where to work. Brainstorming and collaboration can take place in meeting rooms, socializing in social areas, phone calls in call booths, and focusing at desks or in quiet rooms.

From a facility perspective, the most obvious advantage of ABW is that it saves space and money. When flexible workspaces are instituted, occupancy costs drop by 10 to 40%.

With flexible workspaces, the occupancy costs drop by 10 to 40%.



Another important advantage of ABW is that it increases productivity. Are your employees able to work at locations precisely tailored to their work? If so, then their motivation, creativity, concentration, commitment, and cooperation will all improve. Employees working in flexible workplaces see their productivity increase by 59%.



Another impressive figure: 88% of all 'highly involved' employees work in an ABW office.

It's no wonder that a [CBRE study](#) found that 70% of offices in the future will have little to no permanent workspaces.

Deloitte's The Edge: a model of space saving

A good example of space-saving through ABW is Deloitte's The Edge building. Since there are twice as many employees as workspaces, workers must be able to easily book meeting rooms, find free workspaces, check room availability, and view occupancy rates.

Deloitte asked Mapiq to develop a smart office platform that would support the activity-based way of working, and through which all data is centrally collected. Mapiq connects building systems with 23,000 sensors and iBeacons, and the interactive floor plan provides the input for [Deloitte's Mapiq platform](#).

This smart office platform allows employees to easily navigate the building, locate colleagues, find available workspaces, and book

work areas such as meeting and conversation rooms. They can also use the Mapiq app to control AV equipment and smart lockers.

As a result, 2,850 employees can easily work in a building with 1,080 desks. The Edge, one of the most innovative buildings in the world, has also seen a 400% increase in the number of job applications, a 40% reduction in absenteeism, and the highest BREEAM score ever (at the time): 98.3%.



2,850

Employees



1,080

Desks



400%

Increase job applications



40%

Reduction in absenteeism



98.3%

Highest BREEAM score ever (at the time)

A smart office to facilitate hybrid working

Technology is what makes ABW as effective as it is, and technology is also needed to properly manage this more flexible way of working. After all, if there are fewer workspaces than employees, there is a serious risk of overcrowding. In that case, finding a workspace can turn into a time-consuming game of musical chairs.

Smart office technology is essential for an efficient ABW office. Thanks to sensors and real-time occupancy data, employees can easily book activity-specific workspaces and share facilities with colleagues via a smart office app.

Instead of becoming frustrated by finding a place to work, employees feel in control of their working environment.

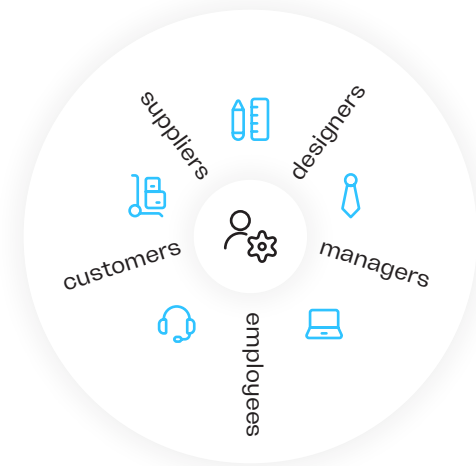


The office
is no longer the
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The hybrid office of the future

What does the ideal hybrid office look like? It is important to remember that the office is no longer the place where you have to be, but the place where you want to be. ABW requires that there are different types of workplaces, but in-office community and collaboration should always be at the forefront. In the office, the emphasis is on face-to-face meetings and team-building; more day-to-day, focus-based tasks can be done elsewhere.

To create a great office, use your knowledge and experience in facility management to work with:



Facility managers play a major role in creating this new type of office. By coordinating the services and hospitality of the workplace, you ensure that employees can easily meet each other, effectively work together, and have the ideal place to receive business contacts. The new requirements of hybrid working mean that facility services must be considered during any office redesign process. How is space used? And what activities are possible in each space? Facility managers are vital to answering these types of questions.

There are many areas in which facility managers can do more than simply comply with traditional employee requests. This starts as early as the design stage: you can use your knowledge and experience in facility management to work with the designers to create an office concept with an innovative facility dimension. You can also work with managers, employees, customers, and suppliers to set up the most effective and efficient hybrid working infrastructure.

Dynamic planning of your flexible office occupancy



How do you deal with office occupancy when there are fewer workspaces than employees? How do you prevent everyone from coming to the office on Thursday and working from home on Monday? These are pressing questions for companies moving towards hybrid working.

Before COVID-19, most companies had a reactive rather than a proactive approach to office occupancy. Decisions on workspace changes were usually based on the number of employees expected to be present.

Embracing hybrid working and scaling down office space requires dynamic office occupancy planning. In other words, you must be able to anticipate business growth and flexible office use. You must not only prevent employees from being unable to find available workplaces but also avoid inefficient use of the office space itself. Poor planning can lead to unnecessarily high property, facility, energy, and catering costs.

Optimum office utilization with hybrid working

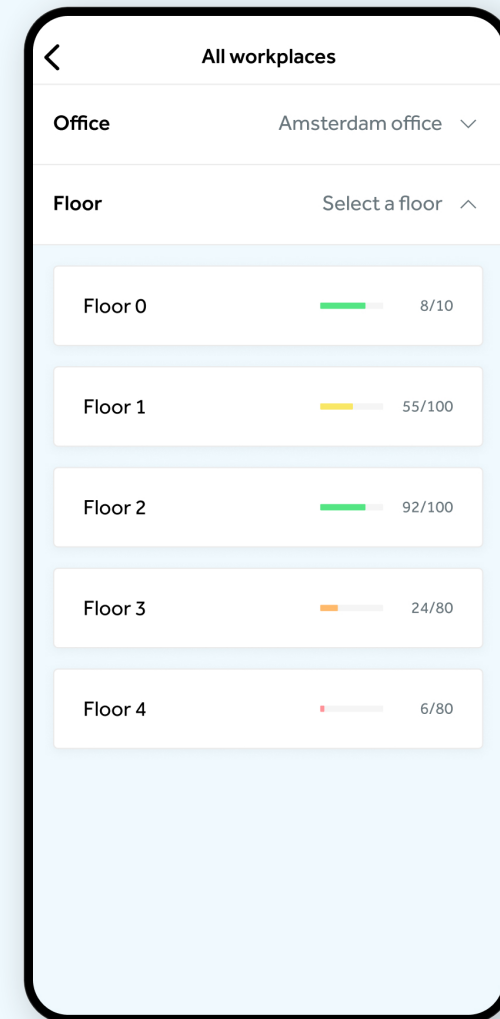
Finding the balance between using as little office space as possible and still providing employees with the best office experience is the biggest challenge of hybrid working. So how can that perfect balance be achieved?

One thing is certain: drawing up daily attendance lists is a highly ineffective method of controlling office capacity. Last-minute cancellations are an all-too-common disruption, and such attendance lists negatively influence employee autonomy and flexibility.

And as the threshold for coming to the office increases, there are fewer opportunities for spontaneous encounters.

Smart office tools can solve these types of problems by redistributing the office workload throughout the week.




Keep an eye on office occupancy






Workplace concept: hoteling versus hot desking

Before beginning the process of dynamic office occupancy planning, you must first think about the different hybrid workplace concepts. There are two widely used versions to choose from: desk hoteling and hot desking

Desk hoteling

	Reserve ahead
	Fixed location for the day
	Certainty

Hot desking

	First-come, first-served
	No fixed desks, tables, chairs
	Flexibility

With desk hoteling, you reserve a specific desk in advance on your preferred day, located in the room best suited for your activities. Just like with a hotel, this hinges on reserving a location for the full day. Desk hoteling provides certainty that you will have a spot to work but offers less flexibility and spontaneity.

Hot desking, on the other hand, involves implementing an ad hoc check-in and check-out system. You only schedule the day you will be in the office and do not select a specific desk. Hot desking integrates dynamic office occupancy planning by limiting the number of spaces available each day.

Thanks to the numerous smart office implementations Mapiq has already carried out, we know that a combination of both desk concepts works best. For example, a concept that includes 70% desk hoteling allows team members to pick their favorite place, while the remaining 30% of hot desk reservations leave room for spontaneity

Another option is to allow individual departments to flex work. For example, the marketing team might switch to flex working, but IT may keep a set location.

Whether you choose desk hoteling, hot-desking, or a combination, a seamless booking system is essential. This is because if employees cannot find a suitable workspace straight away, they will stop coming to the office and may develop a negative impression of flex working.

Tools to shape your hybrid workspace

Once you have decided to implement a new workplace concept, you need to integrate tools that ensure office occupancy is evenly dispersed throughout the week. These include the following functionalities:



Booking desks and shifts at the office

If employees can easily reserve desks and shifts at the office, that allows you to make efficient use of space. This allows you to minimize the impact of no-shows and maximize the availability of workspaces.



Finding the best meeting rooms

Employees should be able to find and book available meeting rooms quickly and easily. Such a smart office tool provides a real-time overview of available meeting rooms and encourages the organization of ad hoc meetings.



Social functionalities

A platform with social functionalities allows employees to coordinate better and always know who is coming to the office, when, and where they have booked a workspace. By synchronizing bookings to those of team members, time together can be spent more effectively.



Live localization of colleagues

This tool prevents the problem of colleagues being in the same building but not being able to find each other. With this feature, employees can always easily find their team members.



Occupancy data insights

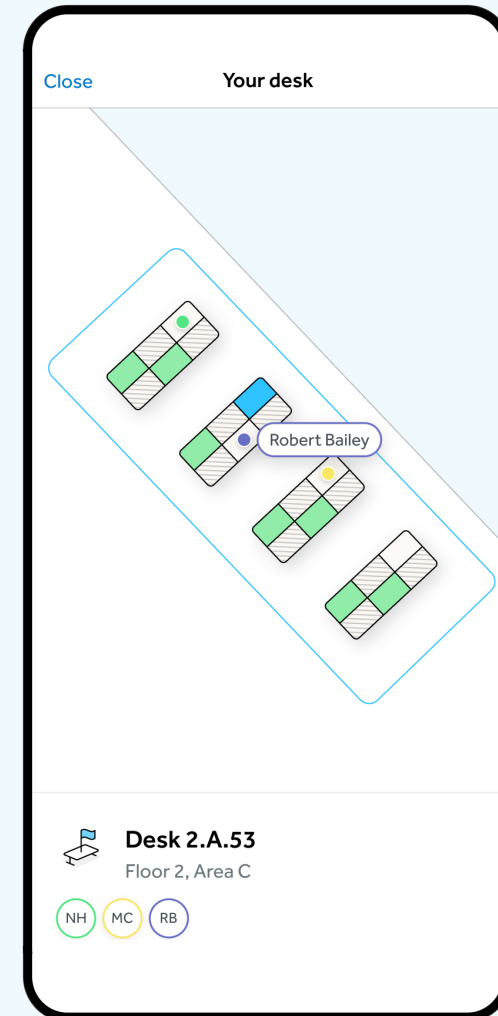
A smart office platform will provide detailed insights into your occupancy. For example, desk sensors can provide real-time data on desk occupancy. By harnessing occupancy data, you can make changes that improve productivity or save space.



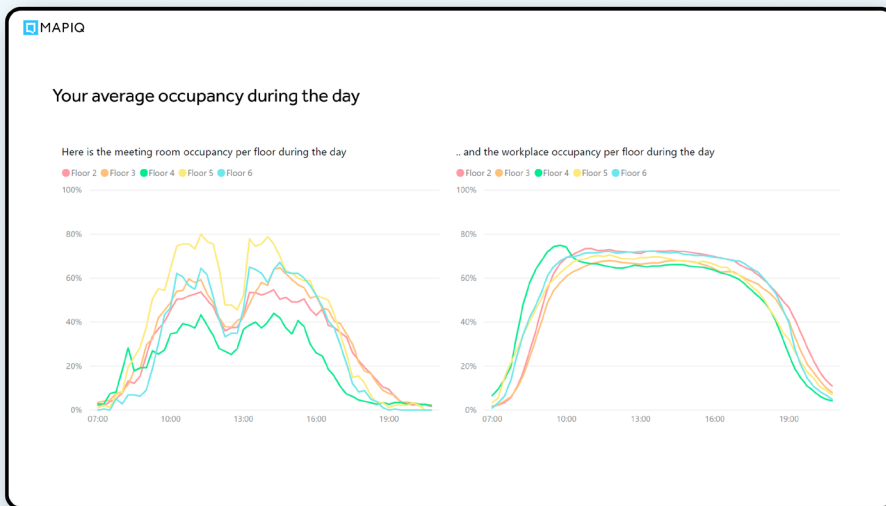
Office heatmaps

What are the busiest areas in the office and where is the best place for employees to work? Heatmaps of the office can help you quickly find a quiet place to work..

Connect with favorite colleagues



Optimize your office through data



Smart office technology helps you understand how employees use the office.



In your personal Mapiq dashboard, you can monitor KPIs like occupancy peaks and the demand for workspaces and meeting rooms.

For example, sensors can register how frequently a workplace is used, how many people are present in a room, and how many no-shows there are for a booked meeting room. Responsive building

technology ensures that office and facility managers always understand how a space is being used and how it can be optimized.

Data-driven decisions

With access to insightful data, facility managers will be able to anticipate changing employee needs and make data-driven decisions. By understanding how your office is used you will be able to increase occupancy rates, reduce operational and facility costs, share facilities, save energy, and increase security.



Data also allows you to identify unnecessary expenses, calculate your workplace ROI, and discover good practices that you can apply throughout your organization.

Looking to combine data with employee feedback? Then you can adapt workspaces to the needs of employees in near real-time and create smarter cost-saving strategies.

What does that process look like? Because your insights are only as good as your data, it is important to collect high-quality raw data. Based on the data collected, you can analyze how the workspace is performing and draw up KPIs. Making a comprehensive analysis is crucial. You then use these insights to make decisions that can have a major impact on your facility's performance and business results.

Reducing your office costs

In the pre-COVID era, an occupancy rate of 45% was common. A 100% occupancy rate is, of course, an illusion, but it does show that for many companies there is the possibility of huge cost savings if they reduce their office space.

The insights from smart office data can help you make informed portfolio decisions, understand how space is being used, and adapt the workspace to fit your needs.

For example, you can see the most and least popular areas that employees work in. On this basis, you can eliminate the right amount of square meters, i.e., those with the lowest occupancy rate. This

allows you to save on facility and property costs and make better use of the space you have left.

Furthermore, by looking closely at the utilization of space, you can minimize energy consumption. Because you base your assessment on the actual use of the office, you can take all these measures without affecting the work experience of your employees.

Considerations when scaling down office space

“Many companies are planning to scale down office space because of hybrid working. But there are two factors to consider.

First of all, the costs. Reducing office space can bring short-term cost savings. However, you must ensure that your employees have the best possible place to work. This means you have to think about the hidden costs before cutting all office expenses. For example, you need to spend more money on supporting the mental health of the people who are working at home and on providing employees with furniture for their home offices.

The second factor is innovation. “One of the reasons to go to the office is to see colleagues face to face. Brilliant ideas and innovative solutions normally surface through personal interaction. Cutting all office costs can therefore hamper your long-term innovation efforts. For example, when teams brainstorm in the same room and you can bring in customers to discuss ideas and projects; those are irreplaceable work experiences that are never as effective online.”



Gideon van der Burg

Managing Director Benelux at Leesman

Danone: a sustainable, future-proof, and healthy office

Danone chose Mapiq to be a smart office partner for their new flagship office in Amsterdam. This building not only had to be sustainable and future-proof but also support employee well-being at an optimum level.

The result was that although Danone's workforce increased by implementing activity-based working and allowing employees to share workspaces and facilities, the new building did not need to be any bigger.

Thanks to ABW, Danone was able to meet three goals with the new office:

- 1 Provide enough workspaces for a growing headcount.
- 2 Allow employees to choose their own workspaces and control their working environment.
- 3 Adapt to a new agile way of working through the collection of workplace analytics.



Via Mapiq, Danone's employees have the office at their fingertips. They can book office shifts, workspaces, rooms, and smart lockers all on their mobile devices. Danone also had desk and room sensors installed to collect data on occupancy rates. Management was able to analyze the impact of their workplace strategy in the Mapiq Analytics Portal. From that, underutilized office space was reduced, and investments were made into the areas used the most.

This enabled Danone to continually anticipate changing needs and pursue a future-proof workplace strategy.

As a result, productivity, efficiency, and employee satisfaction increased. Workers now spend less time finding available workspaces and meeting rooms. The smart office environment fully matches Danone's corporate culture and offers the possibility to manage capacity responsibly.

Creating a healthy, sustainable, and efficient office



Improving the productivity and work-life quality of an organization is one of the core tasks of a facility manager. Looking to rearrange the office because you will be working hybrid from now on? Then it's also the perfect opportunity to make the office healthier and more sustainable.

A healthy and sustainable building that integrates smart office technology can benefit your business results by presenting a positive image to future employees and customers. With a more health-conscious building, employees feel happier, more productive, more in control, and are

less likely to suffer from the so-called sick building syndrome. Finally, by opting for a sustainable building you can preemptively respond to increasing environmental regulations and social pressure. As a bonus: a sustainable building can make a dramatic difference to your energy costs.

Healthy employees

According to the organization behind the [WELL healthy buildings certificate](#), our physical environment has more impact on our health than lifestyle, medical care, and genetics. WELL aims to improve the health and wellbeing of buildings through architecture and interior design.

This can be done by way of operational protocols, design interventions, and a commitment to achieving a culture of health and wellbeing.

As a facility manager, the WELL framework provides you with a tool for measuring and evaluating the impact of your building on people.

WELL oversees seven categories:



Air



Water



Food



Light



Fitness



Comfort



Mental well-being.

There are many reasons for businesses to obtain a WELL certificate. The main reason? When offices meet the WELL Building standards, there is significantly less employee absenteeism.

Smart office technology helps you to improve the health and well-being of employees by:

- Ensuring that employees are not stressed when finding and reserving workplaces and meeting rooms.
- Giving employees the ability to control the temperature themselves.
- Setting lights to match circadian rhythms, which helps employees sleep better.
- Monitoring air quality (including CO2 levels and humidity).

Light control can be achieved by automating shadow and dimming control. Occupancy sensors can be used to automatically dim or switch off lights when an area is not in use, as well as illuminate areas where people are present.

Thermal comfort is important for employee well-being and productivity. Both too-high and too-low temperatures can make it difficult to concentrate. For example, a [study](#) found that if an environment is too cold, people are less productive and more likely to make mistakes. A smart building system can monitor the temperature and automatically heat or ventilate rooms based on the desired conditions.

A sustainable office

Sustainable buildings are not only good for the environment and your wallet, but they also create a healthier work atmosphere.

Sustainability has been one of the most important topics in facility management for some time now. Obtaining a BREEAM or LEED certificate is high on the list of priorities of many organizations or facility managers.

BREEAM, the Building Research Establishment Environmental Assessment Method, is a certificate for sustainably built environments

used in more than 80 countries worldwide. The certificate provides insight into the actual sustainability performance of your project—not only in the area of energy but across the board. LEED is the certificate of the U.S. Green Building Council and claims to be the 'leading program for green buildings and communities worldwide.'

Measures you can take to make your building more sustainable:



A flexible office design, so that the office can easily be adapted to future needs.



Solar panels.



Lights with motion sensors.



Water regulators.



Natural ventilation or mechanical ventilation at a lower power setting when nobody is present.



Rainwater for flushing toilets.



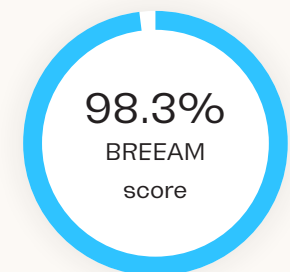
Copiers and coffee machines that automatically switch off when no one is there.

Based on sensor or user data, smart systems can adapt the lighting, heating, and ventilation to the use and occupancy of your building.

The Edge: highest BREEAM score ever

Mapiq developed a smart office platform for The Edge, Deloitte's office complex in Amsterdam, which received the highest ever BREEAM score at its opening in 2015: 98.3%.

In The Edge, 28,000 sensors constantly collect information about the use of the building, which serves as the basis for which lights are turned off or what rooms can be locked.



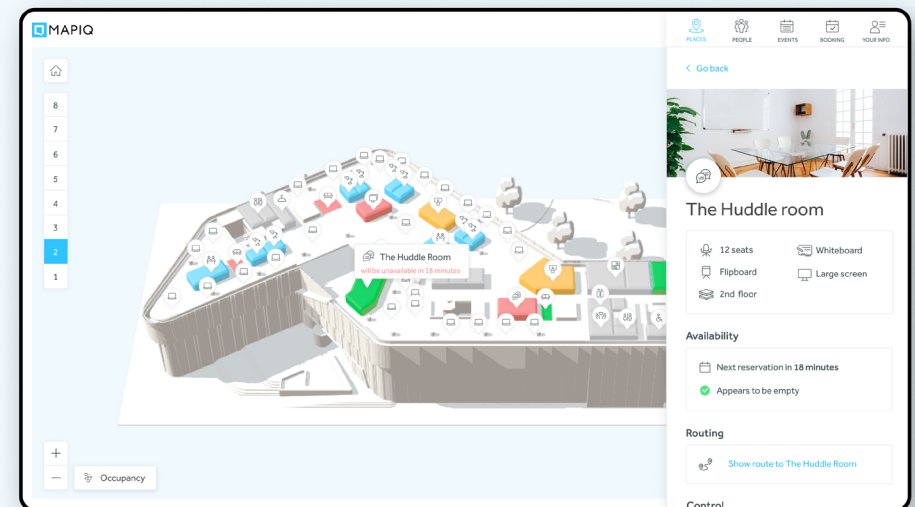
Creating impact with smart office technology

Buildings such as Deloitte's The Edge and Bloomberg's £1 billion headquarters in London feature technologies like façades that adapt to outdoor conditions and air ventilation that attunes to building occupancy and CO₂ levels. These state-of-the-art innovations enable companies to reach the pinnacle of sustainability and health.

However, such cutting-edge technologies are not necessary to create a great deal of impact with smart office technology. The most important thing you can integrate into your building is data collection. If data from all systems are






intelligently applied and analyzed, huge efficiency gains can be achieved. Efficiency improvements also increase the wellbeing of your employees and environment.

Mapiq smart office suite



Simple, smart, social: these are the three pillars of Mapiq's smart office platform, which enables you to get the most out of your office.

A smart office management tool can be key to improving your business. It enables employees and managers have access to functionalities including:

-  Setting a maximum office capacity
-  Booking your day in the office in advance.
-  Seeing where there is space available to work
-  Instant reservation of meeting rooms and desks
-  Seeing which meeting rooms match your activity
-  Seeing when colleagues plan to work in the office
-  Seeing where colleagues are located
-  Finding available facilities
-  Learning what the busy and quiet places in the office are
-  Controlling individual room settings

Booking system technology allows you to monitor real-time occupancy data in your analytics dashboard and make data-based decisions, anticipating employee needs.

Mapiq can be integrated with numerous building management systems, devices, applications, and sensors. Because Mapiq is Software-as-a-Service (SaaS), updates are carried out automatically and you do not need to worry about any local servers.

Our platform is used by such well-known businesses as [Deloitte](#), [Danone](#), [Unilever](#) and [ENGIE](#).

Mapiq automizes your office, optimizes your weekly occupancy, and boosts employee wellbeing. In other words: Mapiq makes hybrid working work.



Mapiq helped Unilever HQ in New Jersey create one of the most sustainable and technologically advanced workplaces on the US East Coast

Get in touch

Find out how you can build the smart office of the future with Mapiq's simple, smart, and social tools.

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