THE NEW OFFICE.

A PRACTICAL GUIDE TO HYBRID WORK SPACES FOR MANAGERS

WITH REAL CASE STUDIES & SUCESS STORIES

Learn how to use technology to build a modern workplace & unlock new opportunities for cost-savings and predictable growth.

PRESENTED BY:

OpenSensors

The way work is being done in 2023 has shifted so much from what we're used to, that we now need to think about work and the office in a completely new way.

"Hybrid work models are used by 63% of high-growth companies"

A new paradigm has been set – employees can choose whether to work from home, or the office, leaving companies with the need to adapt. Businesses need to change their office space to foster more flexible work environments and to guarantee employee safety if they want to stay competitive.

There's also an upside to all of this. The new changes bring benefits for both the employees and businesses. Flexible & remote-friendly companies can benefit from lower real-estate costs, reduced employee churn, and higher cost savings. To create the necessary changes, companies are adopting new tools, new technologies, and frameworks. These new technologies are what enable the evolution of the office, without them any change would be costly and complete guesswork.

In this book, we'll walk you through the essentials of what you need to know to successfully transform your business into a modern workplace that people would look forward to working in.

– The OpenSensors Team

SOME BASICS FIRST ⚠️

DATA

Understanding your offices' utilization rates, optimizing spaces, and reaping the benefits of cost savings reliably can only be done based on data. Data is the backbone of all things here, and having reliable sources of data is paramount to the success of any workplace transformation venture.

SENSORS

We now know for certain that factors like air humidity and air staleness greatly influence the ability of airborne viruses like COVID-19 and its versions to spread. Companies that invest in air sensing technology can actively prevent and reduce the risks and negative effects viruses have on their workforce.

COVID MEASURES

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HYBRID WORK TRANSITIONING - PAGE 5
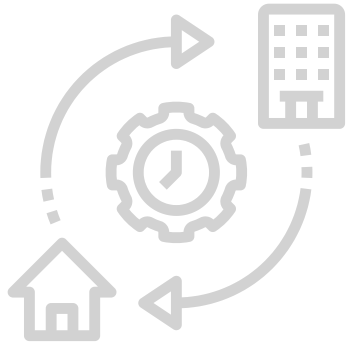
Transitioning to a hybrid work model is no easy task and requires a good amount of planning. Since hybrid work office spaces differ greatly from traditional workspaces, new spaces might need to be acquired and designed for hybrid work. In this chapter, we will explore what you need to transition, and how to ensure a smooth transition.

## SPACE OPTIMIZATION/FORCASTING - PAGE 8

Companies that have transitioned to hybrid work have different space needs than what they previously used. In this chapter we will help you understand how to determine the right amount of real estate to lease and how to understand your employees' new preferences so you can optimize the amount of space your office is using

VIRUS PREVENTION - PAGE 11

If you're using an outdated booking system and have no sensors installed in your office, determining how many employees actually book, and respectively use the spaces might be impossible. Discover ideas on how to remedy this issue in this chapter.

MAXIMIZING CAPACITY - PAGE 15
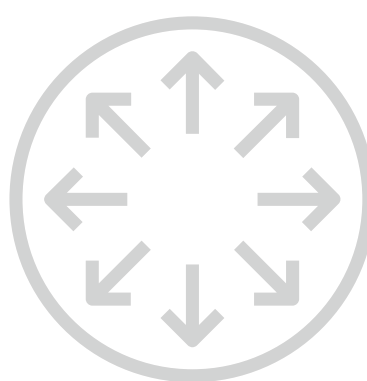
Not every company has the option to lease new spaces, so maximizing the capacity of existing ones is crucial for their success. Maximizing capacity can be done after a thorough analysis of the current space needs & how many more people it can handle.

BOOKING SYSTEMS & DATA - PAGE 18

Booking systems play a vital role in workplace occupancy analytics. Booking data is also used in occupancy analytics in understanding how employees use assets. Without booking data, we wouldn't know what types of desks employees prefer, and when they tend to use the office.
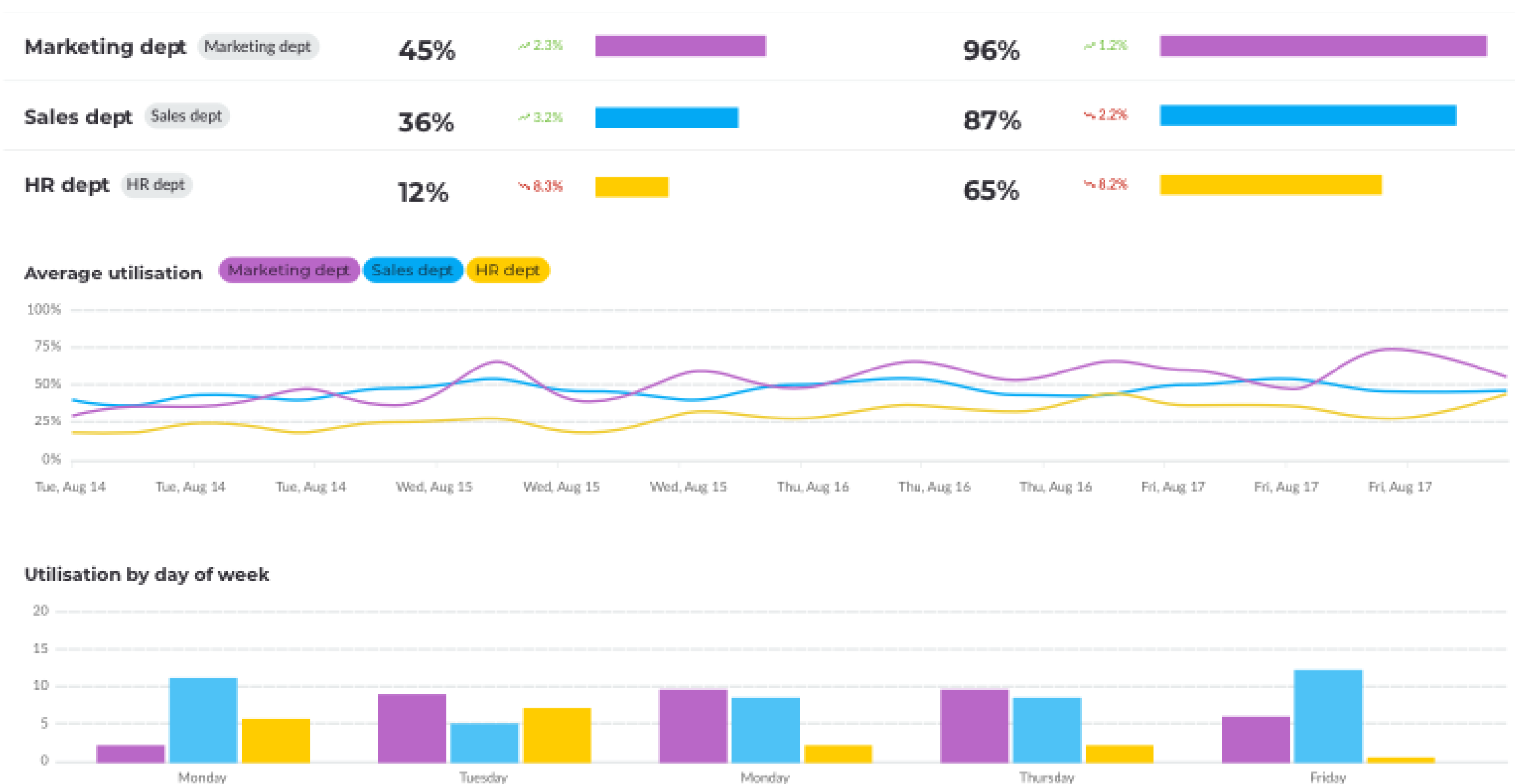
Hybrid Model Transitioning

Practice shows that companies in the post-covid era need less space in their offices and different desk types compared to pre-covid working conditions. The main reason for this is that employees have different preferences regarding when to be in the office and how much time they spend there.

Naturally, when given the option of flexible working schedules employees tend to pick times that are more attractive for them. The spaces & the desks they use are also different. Our experience shows that hybrid employees prefer temporary spaces for meetings, team gatherings & other collaboration activities instead of permanent desks. Some jobs and positions, however, still require employees to attend the office on a full-time basis.

With all this in mind, how do we understand what our employees prefer?

Creating A Usage Pattern Profile

A usage pattern profile is created from data. A usage profile is a snapshot of your office's utilization over a month. It categorizes assets based on how they are used. For example, mobile vs fixed spaces.

Marketing dept Marketing dept	45%	↗ 2.3%		96%	↗ 1.2%
Sales dept Sales dept	36%	↗ 3.2%		87%	↘ 2.2%
HR dept HR dept	12%	↘ 8.3%		65%	↘ 8.2%

Average utilisation Marketing dept Sales dept HR dept

An example monthly usage pattern snapshot

This metric is particularly important for the Hybrid Work Transitioning scenario, as it directly measures the utilization of the office based on the preferences of the employees using it.

We can also further breakdown the data per department/business unit and use that to create a person-to-desk ratio that is custom for each department

What's the exact number of spaces you would need?

That depends entirely on your workforce, their habits, and what the data shows.

David A, Lead Exper

Optimizing The Space

At the optimization stage, we'll take a look at the total available assets in each category. Depending on those numbers, our team can recommend an increase in the person-to-desk ratio for the mobile spaces, or issue department-based reports for the department Managers to create new, or more flexible spaces within each department.
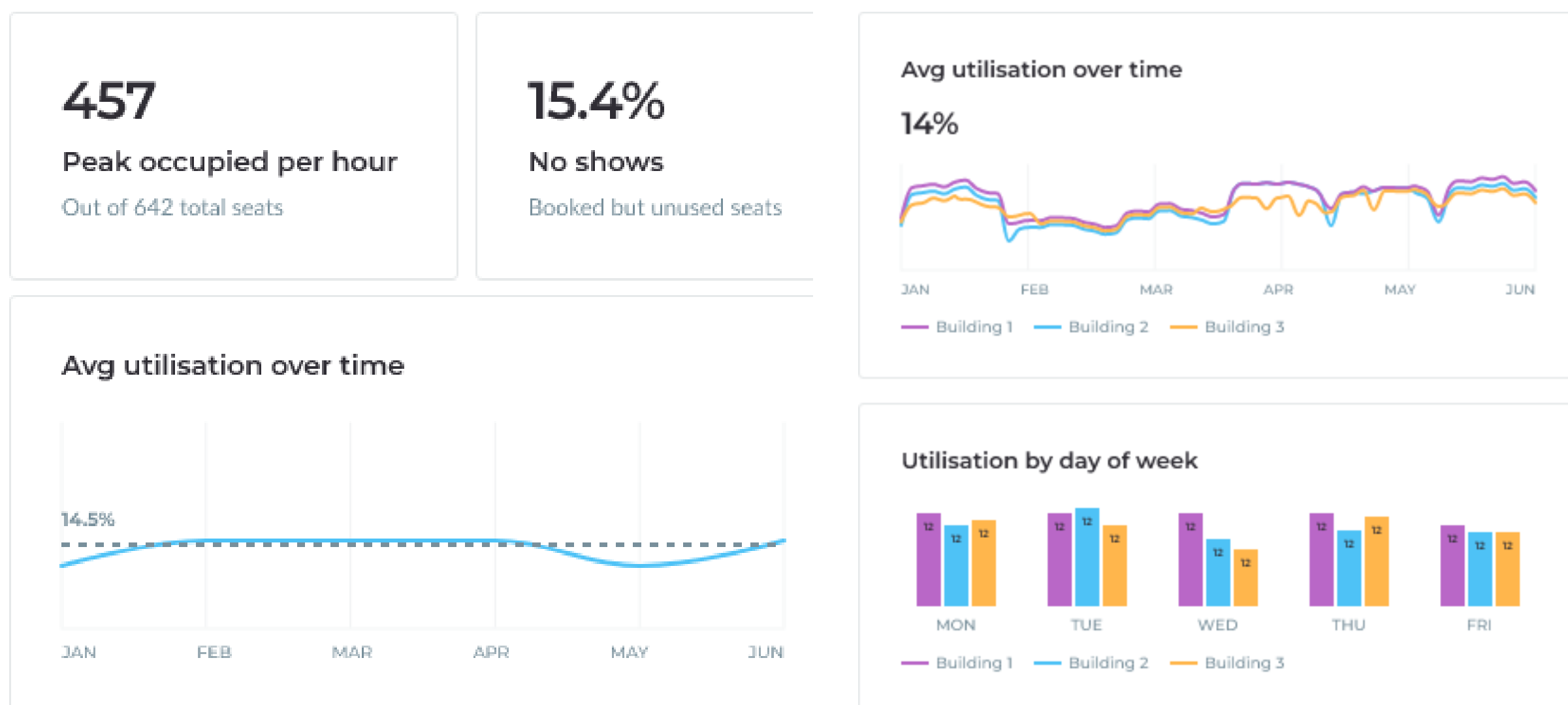
Example utilization charts across time & assets

Managing The Transition

Once the ratios for different departments have been determined, your management & our team can work with different department heads on how to transition from a traditional space to a hybrid one.

When the changes have been implemented, employees will have the flexibility to choose when they want to come to the office & which space they want to use. Using a booking app, they can schedule spaces in advance, and come in to collaborate with others.

Pro Tip

We recommend large organizations take a phased approach to sensor deployments with an initial small-scale Proof Of Concept project to understand key metrics and analytics as a start, and then tackle either 1-2 floors or the areas with the highest amount of complaints in the next phase.

Space Optimization

One of the biggest benefits that Workspace Optimization offers for businesses is cost savings. Companies looking to optimize their office space can dive into how much employees are using their assets and re-adjust the footprint of their office to save on leasing costs.

Furthermore, these stats will help you plan any future expansions and new hires with more confidence as you will be able to use the data gathered to make accurate predictions.

"The challenge for Office Managers here is how to accurately predict how much can be downsized while making the entire process as smooth as possible."

A real-world example from our practice:

ACME, a life sciences company in Osaka, Japan has been considering closing one of the floors in their office because the employees who previously worked there have transitioned to the hybrid work model & were using the space infrequently.

Acme figured that particular floor could be repurposed while still maintaining employee productivity. To help them determine if this was feasible, the OpenSensors was commissioned to find out how many people were using each room on the said floor.

A typicall floor view chart we use to analyze area & asset utilization

Analyzing The Data

Over the next few months, the facility manager compared the schedules of rooms on another floor of the company with the one they considered closing.
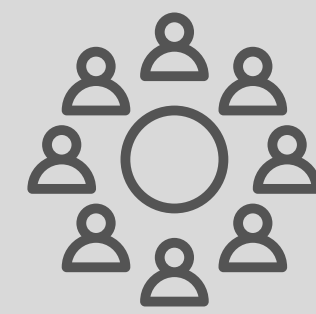
The Facility Manager discovered that:

✓	✓	✓
There were no scheduling conflicts between employees.	Rooms being used by 1 or 2 people could be moved without disruption.	Meetings could be accommodated on another floor without disruption.

The project was a success! ICON's management was able to safely close the underutilized floor and reduce their operational costs.

Another great example of how we can use technology to make safe & educated decisions.

Virus Transmission Prevention

Not every business can operate remotely. Some businesses have to have people in the same building in order to produce goods & operate machines. Without a safe environment to work in, productivity will go down, and so will the output of the business.

To facilitate a high-output in-person work environment, we need to ensure the safety of the employees. In this chapter we will dive into how technology can minimize the risks in pandemic events.

"Humans spend 90% of their time indoors. 90% of viral transmission occurs indoors"
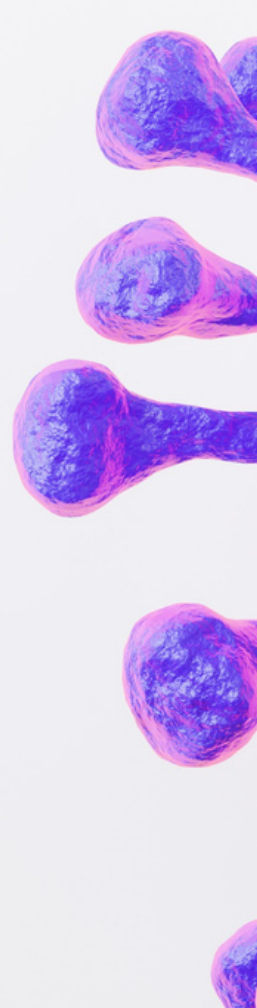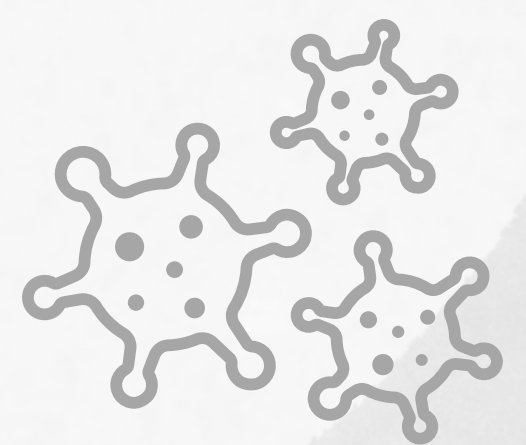
Introduction To Air Quality Sensing

We now know that airborne (meaning transmitted by air) viruses thrive better when the environment around them has the right factors in it. These factors include the humidity of the air and the amount of C02 in it. The discoveries have led to the development of new types of sensors that measure the quality of the air. Being able to analyze the contents of the air allows us to properly adjust the HVAC systems to maintain optimal air quality levels. These are:
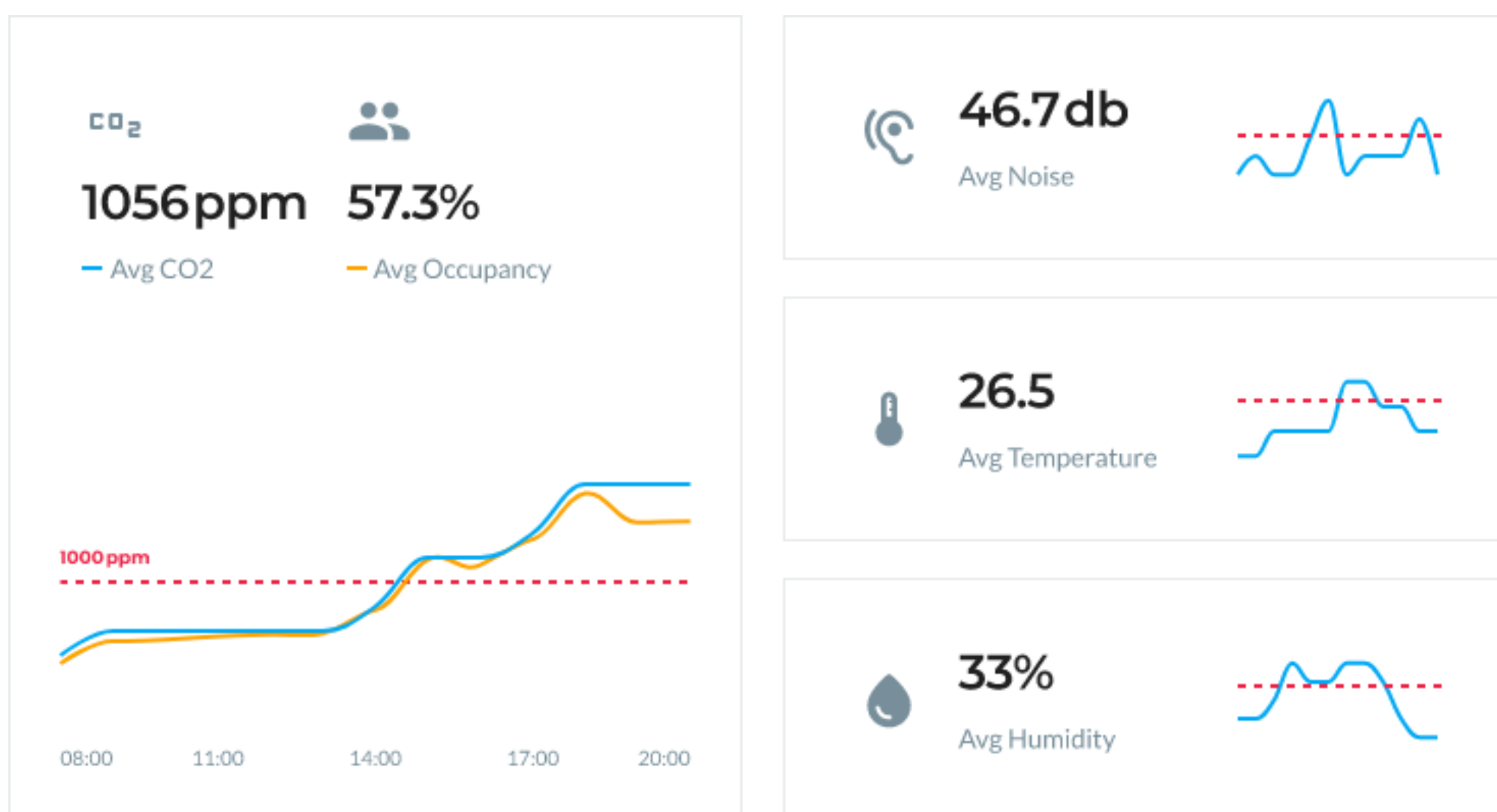
Optimal CO2 CO_2

300–500 ppm

The transport of virus laden aerosols is affected by the physicochemical properties of aerosols themselves and environmental factors, including temperature, relative humidity, ultraviolet radiation, airflow and ventilation.

Optimal Humidity

40–60%

Studies have found evidence that air quality within an office can have significant impacts on employees' cognitive function, including response times and ability to focus.

Air quality sensor sets are often combined with occupancy sensors as the quality of the air changes proportionally to the number of people there are in a room. HVAC systems have to be adjusted continuously to maintain these optimal air stats.

CO_2
1056 ppm   57.3%
— Avg CO2   — Avg Occupancy

1000 ppm

08:00   11:00   14:00   17:00   20:00

46.7 db
Avg Noise

26.5
Avg Temperature

33%
Avg Humidity

How a company reduced virus transmission & increased productivity

During the active peak of the pandemic, *ACME*, a Health Science Company noticed more and more employees were getting sick. The company was looking for ways to reduce the risk of illness amongst their employees so they could continue working uninterrupted and maintain optimal productivity. ACME hired OpenSensors to find out why so many of their employees were getting sick.
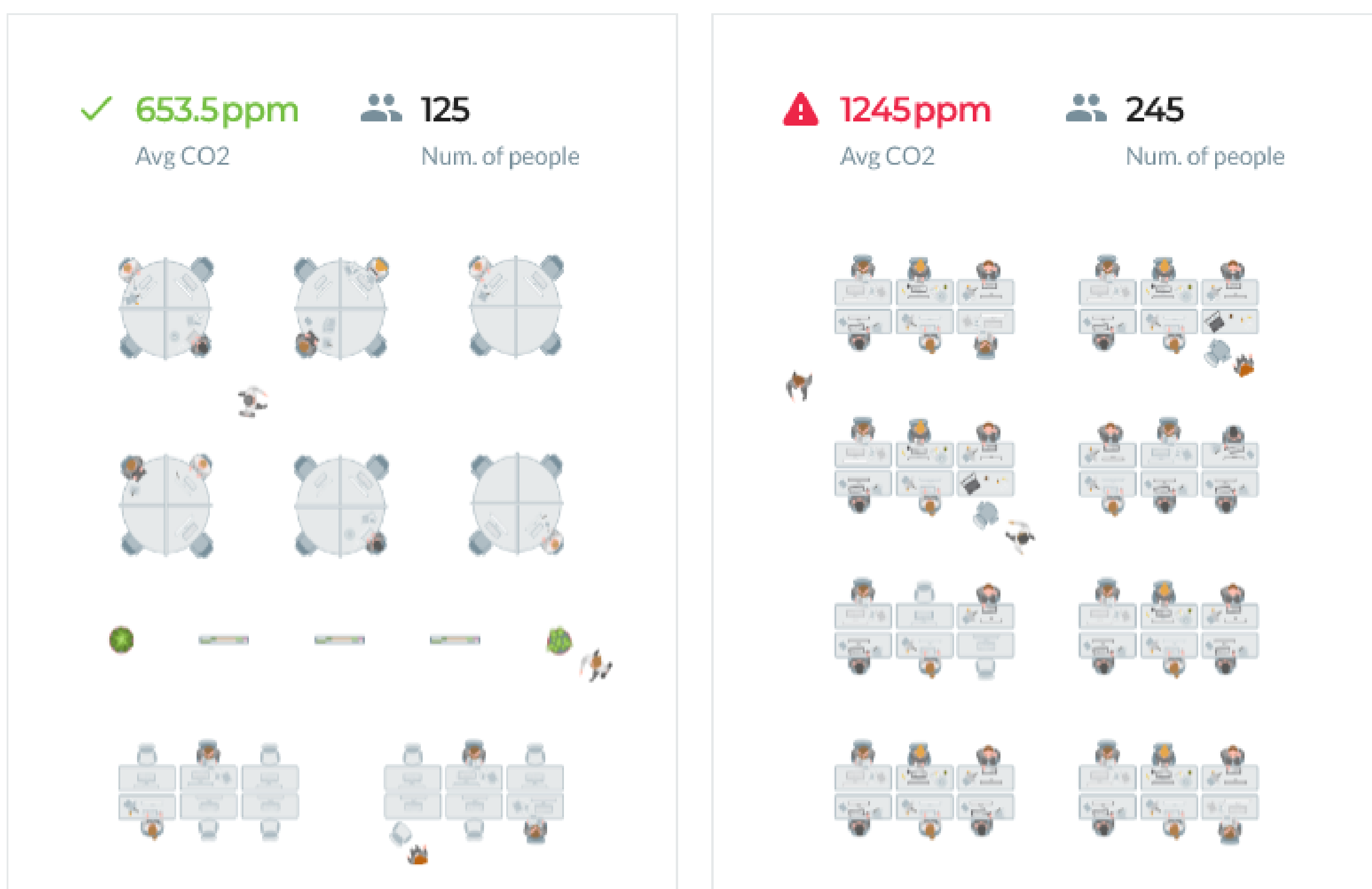
CO2, a contributing factor to virus transmission increases with workplace occupancy

Our team decided to deploy environmental sensors as a first step in order to monitor CO2, temperature, and humidity within priority zones. These included:

- High occupancy workspaces.
- Frequently used meeting rooms with little to no ventilation.
- Communal spaces such as the kitchen or lunch room.
- Other places where virus transmission was highly likely.

Analyzing The Data

Using the newly available data & our analytics platform, our the team's Building Manager was able to:

- Successfully identify exactly which areas are at higher risk for viruses.

- Review how their office's occupancy levels correlate with air quality.

- Adjust HVAC systems to push fresh air at the right rate to keep CO_2 levels between 300–500ppm.

The company's employees were now able to work in a safe & healthy work environment, all while being prepared for any future pandemic events.
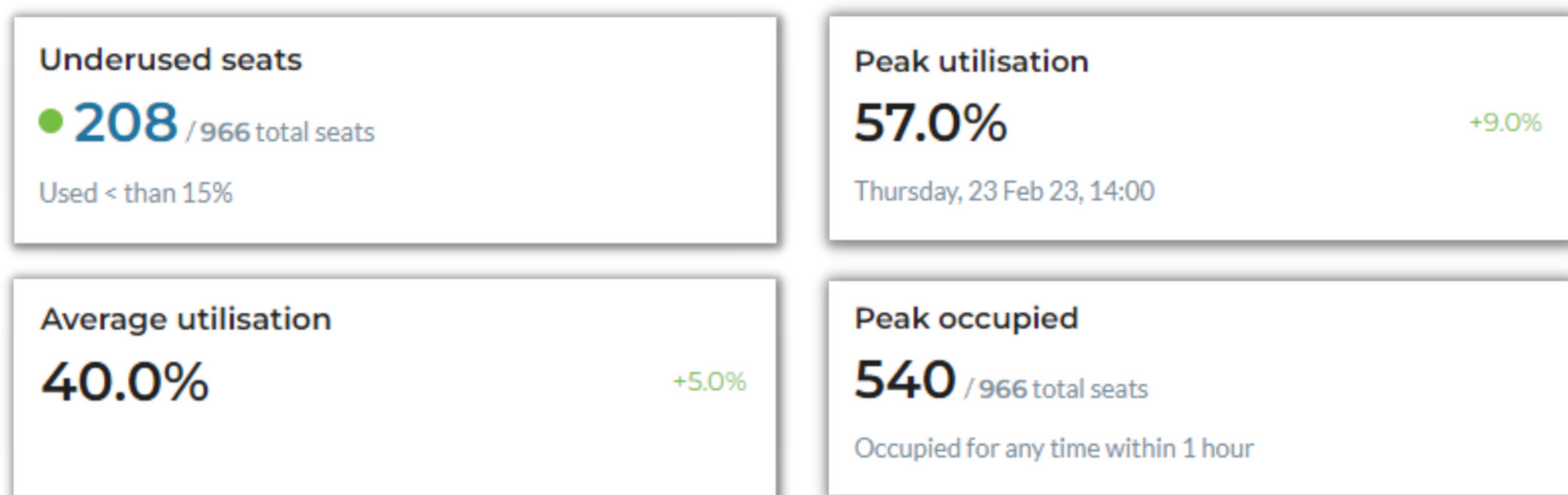
Maximizing Capacity

This scenario is somewhat different than the Space Optimization one, in particular, because here we are not trying to downsize office space, but rather to accommodate more people in the same space.

Measuring desk & seat utilization will help us understand when they're not being used, and how to adjust schedules to accomodate more people.
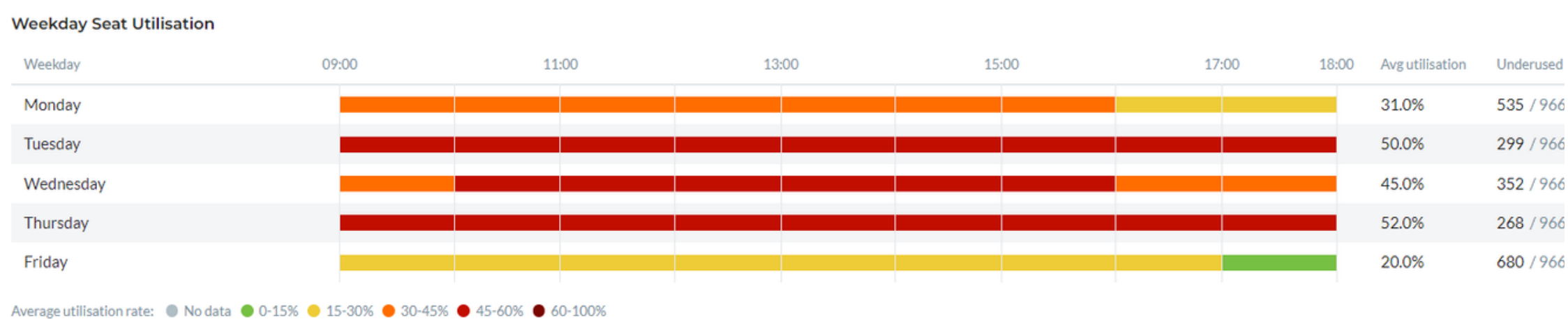
Available vs Used Assets Utilization

When looking to increase the capacity of the space we would be taking a look at several factors:

Underused seats	Peak utilisation
● **208** / 966 total seats	**57.0%** +9.0%
Used < than 15%	Thursday, 23 Feb 23, 14:00

Average utilisation	Peak occupied
40.0% +5.0%	**540** / 966 total seats
	Occupied for any time within 1 hour

- When are the desks and conference rooms used, and when not?

- Which desks are preferred, and which ones are not?

- How does preference usage vary depending on each department?

- What schedule and shift policies do employees follow?

Weekday Seat Utilisation

Weekday	09:00	11:00	13:00	15:00	17:00	18:00	Avg utilisation	Underused
Monday							31.0%	535 / 966
Tuesday							50.0%	299 / 966
Wednesday							45.0%	352 / 966
Thursday							52.0%	268 / 966
Friday							20.0%	680 / 966

Average utilisation rate: ● No data ● 0-15% ● 15-30% ● 30-45% ● 45-60% ● 60-100%

Based on these data points we can then calculate how many of the desks and seats are actively being used and how many of them are not utilized.

New shifts, schedules, and work policies can be made to accommodate new employees in the spaces and times that are available, while the total available assets will serve as an indication of how many new employees we can accommodate.
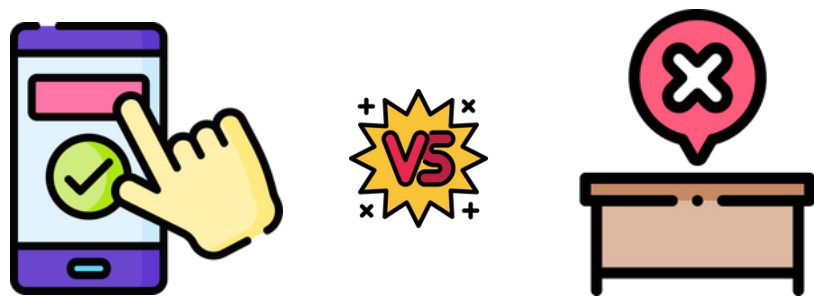
Booking Systems

Booking systems help employees navigate their day in the office while enabling businesses to understand how employees are using spaces. However, measuring occupancy rates can be a bottleneck for some companies using booking systems that are not sensor enabled.

"Our experience shows that employees use booking apps infrequently and inconsistently which leads to skewed occupancy data"

The Booked VS *No Show Problem*

Outdated booking systems that don't have automatic check-ins and check-outs do not release spaces when employees book but don't show up. This leads to the bookings being wasted, and an artificial lack of available spaces for the other employees.

Having a well-designed booking app that's integrated with your occupancy analytics software is essential for a 360-degree occupancy big-picture view. |

In case you're using an outdated booking system, and you're experiencing issues with inconsistent data or other problems, consider upgrading.

Learn more about the OpenSensor Booking app. Automatic check-in and out, Search rooms by capacity, department, or floor & more!

Types of Sensors

Desk and phone booth sensors

These sensors are passive infrared sensors (PIR) which are triggered by both motion and heat. They provide data on whether someone is present at a desk or phone booth. Their accuracy is measured by the field of focus which for desk sensors is 1m x 0,5m, or around 3.30ft x 1.6ft. They are discretely placed under desks, out of sight, and not disruptive to employees.

Counter sensors

These sensors are triggered by object recognition to provide insights into how often workspaces are used and by how many people. They capture data on the number of people going in any direction by measuring a field of focus while covering wide areas.

Indoor air quality sensors

These sensors gather Temperature, CO2, Humidity, and Noise levels data and enable you to optimize HVAC systems to keep the optimal air quality levels for productivity and virus transmission negation.

Connectivity

■ *Security & Connectivity*

Like all sensors, the data transmitted tracks assets, not people, and no personal information of an individual is captured. The data illustrates the overall utilization of an asset and is GDPR / CCPA compliant. The collected data is transmitted over gateways that forward it to a central server. It is then aggregated in a database and analyzed.

■ *Data Collection & Sensors*

These sensors are triggered by object recognition to provide insights into how often workspaces are used and by how many people. They capture data on the number of people going in any direction by measuring a field of focus while covering wide areas.

The OpenSensors' Analytics Platform

Our proprietary analytics platform can give you a 360 view of your occupancy, and utilization rates. It is designed to help you make better decisions when optimizing work rotations, equipment utilization, social distancing rules, and negating virus transmission.

OCCUPANCY DATA YOU CAN TRUST

Our proprietary analytics platform can give you a 360 view of your occupancy, and utilization rates. It is designed to help you make better decisions when optimizing work rotations, equipment utilization, social distancing rules, and negating virus transmission.

REAL-ESTATE SPACE ANALYTICS

How much office space do you really need? How many people can we hire? Find out which spaces and areas of your building are utlizied the most and the least.

REAL-ESTATE SPACE ANALYTICS

Discover how many seats and desks your employees are using and when. Deep dive into asset usage for each department and space. Be on top of your hiring and asset growth goals.

LEARN MORE »
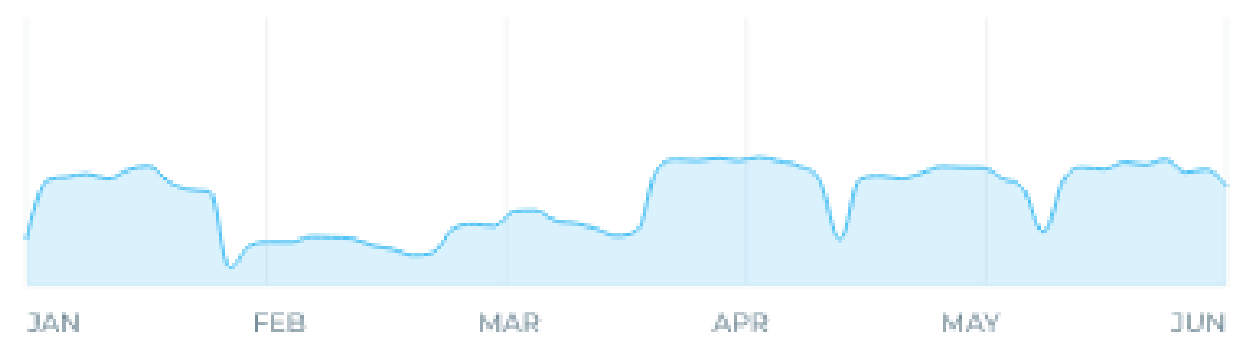

Peak occupied
457
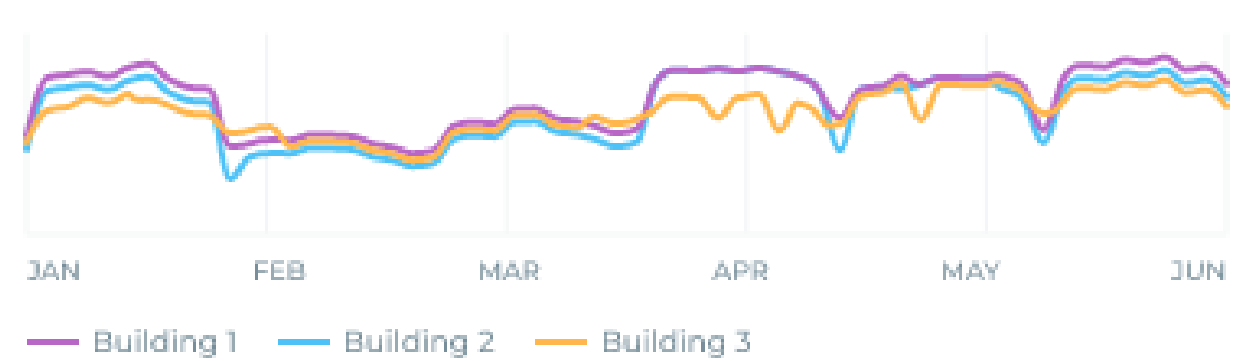
Out of 642 total seats

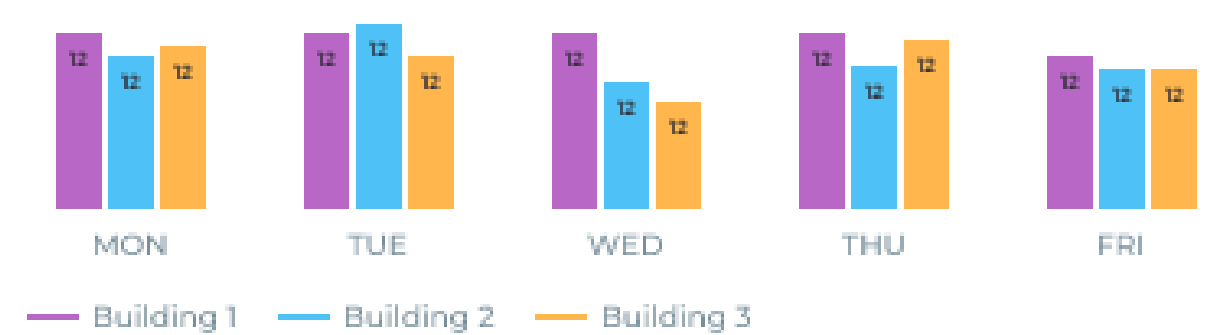No shows
15.4%

Booked but unused seats

Avg utilisation over time
14%

JAN   FEB   MAR   APR   MAY   JUN

Avg utilisation over time
14%

JAN   FEB   MAR   APR   MAY   JUN

— Building 1   — Building 2   — Building 3

Utilisation by day of week

MON   TUE   WED   THU   FRI
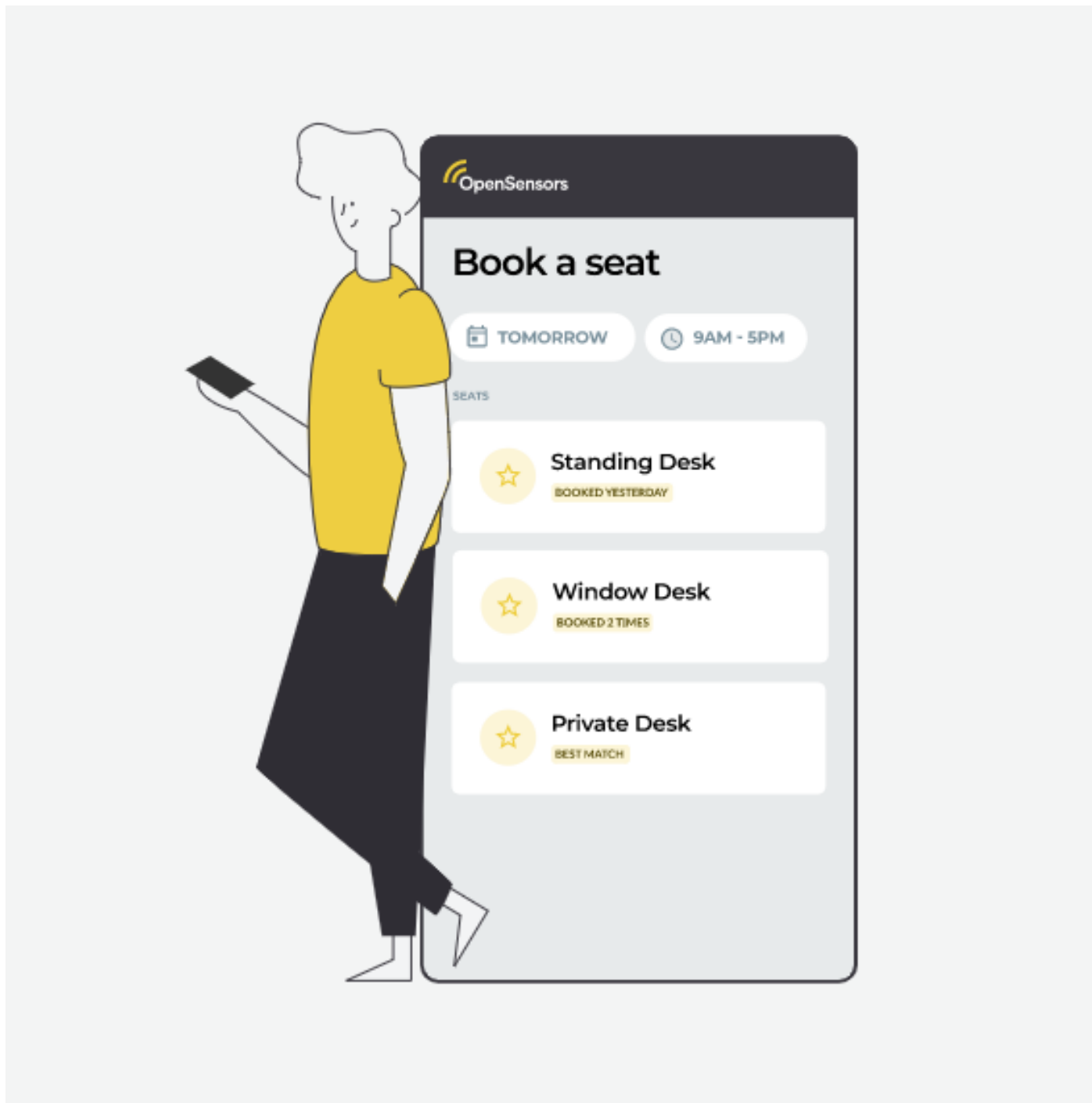
— Building 1   — Building 2   — Building 3

Overview

Ground floor

Filter workspaces
> By area
> By department
> By type

Integrated Booking App

Tailored to user seating preferences, automated to remind and cancel

We understand that employees have many things to focus on, that's why we made desk and room booking easier to use than ever.

Our automatic check-in and check-out allow everyone to go about their days in the office without any extra effort while occupancy data is being collected in an instant.

EMPLOYEES LOVE THESE FEATURES:

- Automatic office check-in & check-out

- Easily book rooms, seats, or desks from your phone!

- Search rooms by capacity, and filter by department, or floor.

- Get personalized seating recommendations.

& YOUR TEAM WILL BE ABLE TO

- Measure actual workspace utilization vs booking data.

- Understand the usage of booked spaces & adjust work rotations.

- Plan future real-estate needs with accuracy.
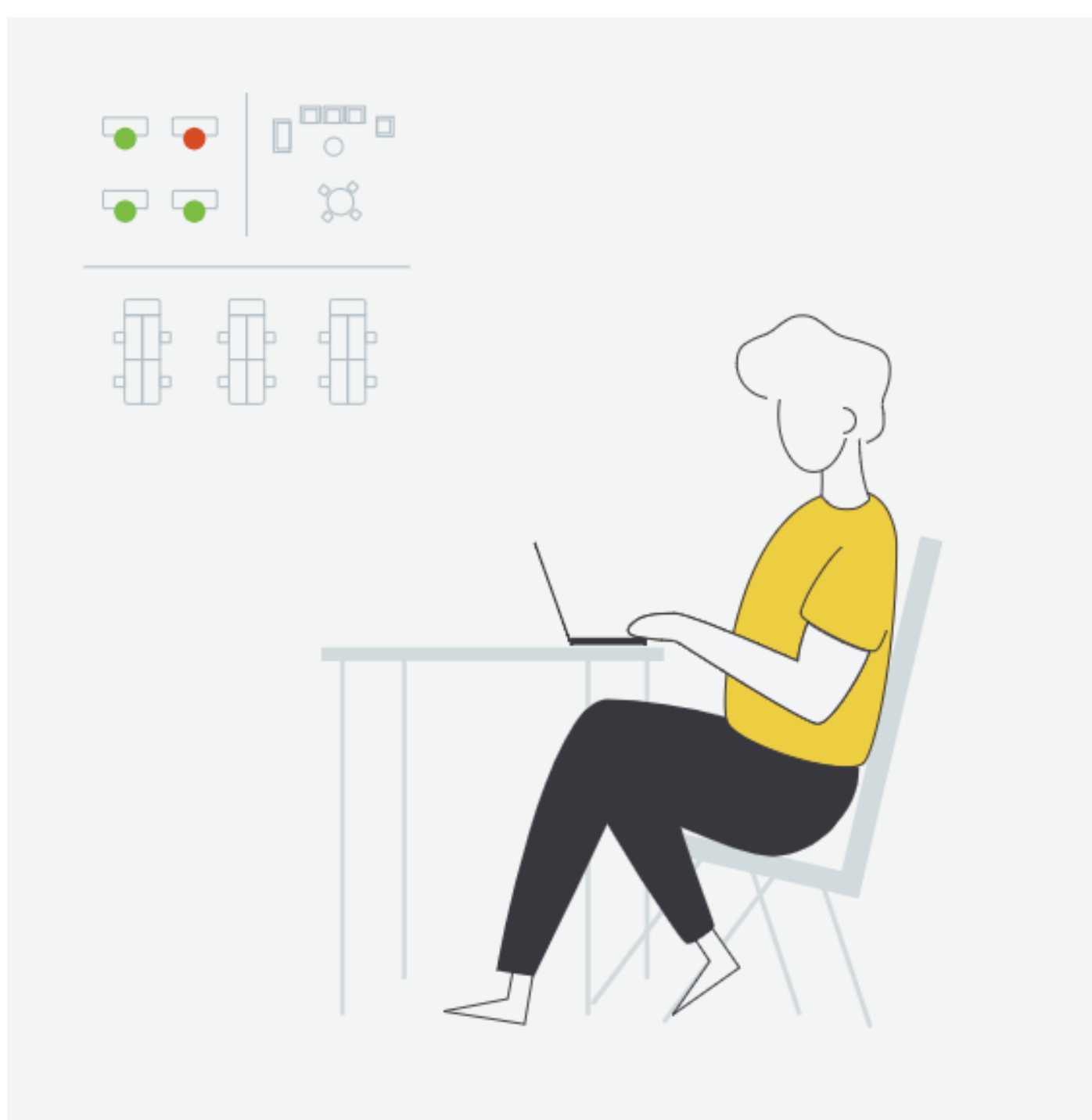
LEARN MORE ≫

About Us

We provide the foundation for long term success

We're a technology company that provides advanced evidence-based solutions for workplace optimization. We support all stakeholders from Employees, HR, Facility Management, Corporate Real Estate, IT, and Finance, by solving the most immediate issues quickly while also providing strategic core competencies for their long-term success.

Our customers

We support all stakeholders from Employees, HR, Facility Management, Corporate Real Estate, IT and Finance, by solving the most immediate issues quickly while also providing strategic core competencies for their long term success.

We are always looking ahead and creating products for our customers' future needs.

Thank You For Reading!