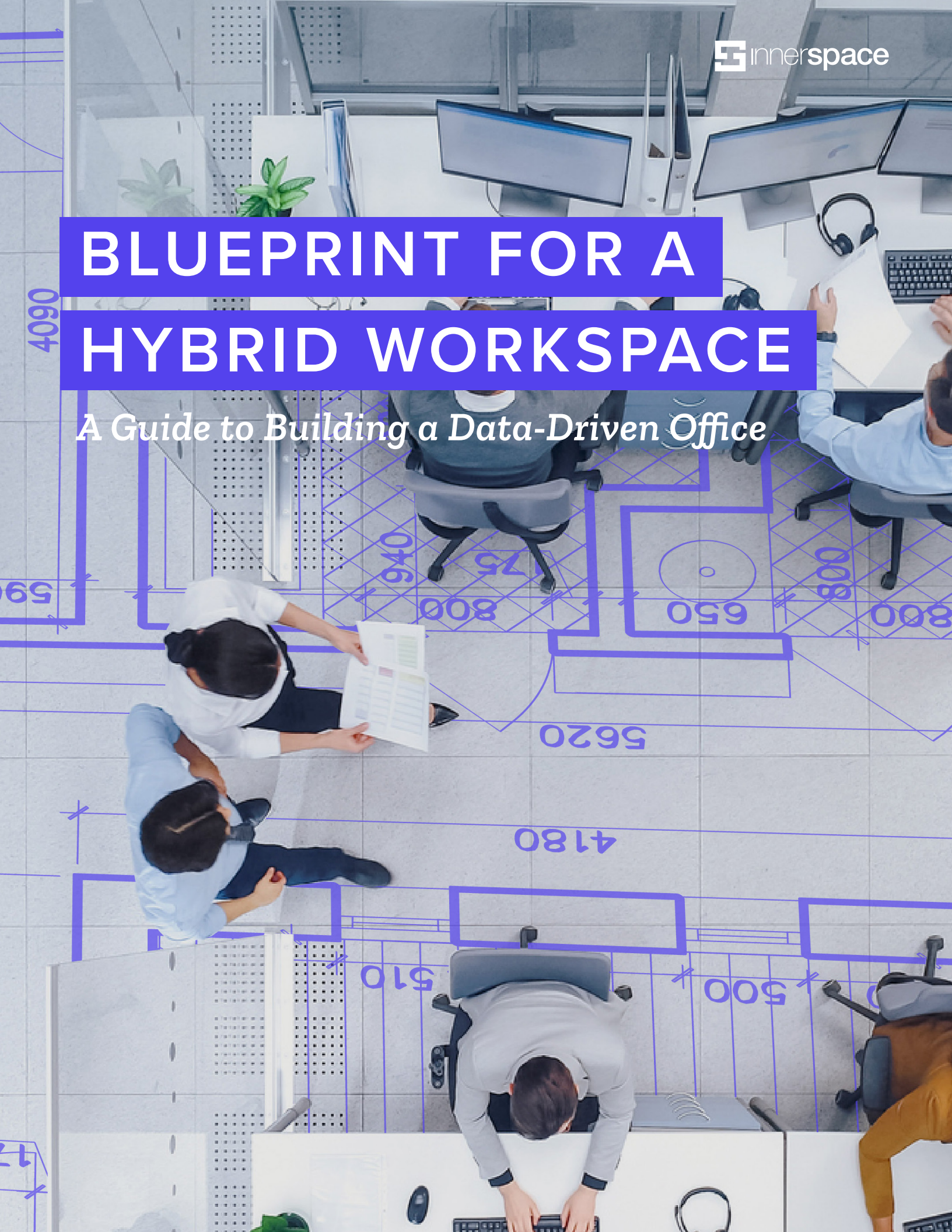
innerspace

BLUEPRINT FOR A HYBRID WORKSPACE

A Guide to Building a Data-Driven Office



Today's offices are defined by maximum flexibility. Inside hallways, rooms, zones and floors, it's time to think holistically about what your business – and its many different teams – need from the office footprint.

This guide provides a quick tour of a typical corporate office setup and how data from **indoor location** technology can inform how to build, manage and measure an efficient workspace.

We will answer the **top five questions to consider right now**, including:

1. How can you grow within your existing real estate portfolio?
2. How could your existing office space in fact serve more people?
3. How can you plan for the next five to ten years?
4. How can you make the greatest and most cost effective impact to your workplaces?
5. How can your real estate best serve the employee experience, helping teams be productive whether working together or apart?

UNDERSTANDING HOW PEOPLE USE A SPACE IS ESSENTIAL

The good news is the infrastructure to strategize efficiency and empower growth is already available using WiFi-powered indoor location technology.

Insights such as visit frequency, new and returning visitors, and the levels of interactivity between employees provide a rich tapestry to design the office, assign resources, inform policies, and, if needed, rationalize the overall portfolio.

Learn what is possible right now for specific rooms and elements of a typical corporate office or large campus equipped with indoor location technology. At each stop, we highlight some of the pain points that undermine typical work environments, and then reimagine the space as one outfitted with the InnerSpace platform.

May data lead the way...


STEP FORWARD
INTO A NEW
HYBRID WORKPLACE

MEETING ROOMS

In hybrid offices, collaborative space will be the end all and be all. Collaboration, in fact, will be the key reason *why* employees come to the office. Video conferencing is no substitute for face-to-face collaboration, team building, and organic interactions.

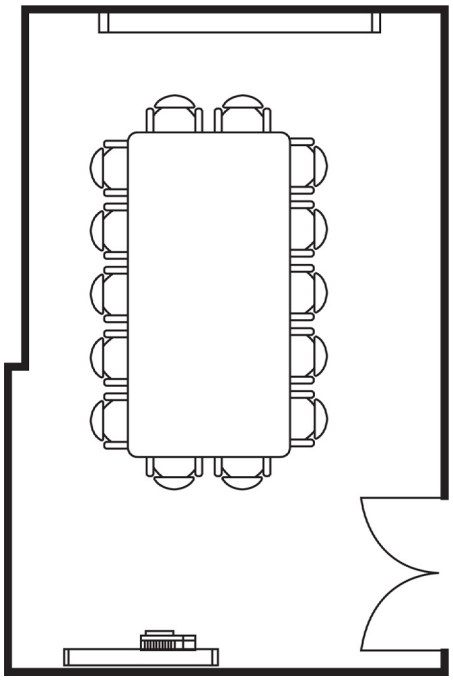
If offices are the engine to facilitate collaboration, transforming into hubs to work together, there is one common feature to target in a hybrid transition.

Meeting spaces, from small breakout rooms to large boardrooms, must evolve to support collaboration, socialization and creativity. Redesign with versatility in mind, knowing that you'll need sufficient locations for one-on-ones, team meetings, department meetings, virtual meetings, and any form of collaboration unique to the company.

Meeting Rooms Yesterday...

INFLEXIBLE
Difficult to revamp due to furniture choices. Employees outfit rooms to suit, creating clutter and changing the room's intended purpose.

INEFFICIENT
Rooms don't match the needs of evolving teams. Meeting space unequally allocated by team and inequitably outfitted by location.



UNCERTAIN
Early reservation systems prohibit clear understanding of room bookings, creating confusion when meetings occur spontaneously or get cancelled at the last minute.

LIMITED TECH
Not every room is equally outfitted with advanced tech; teleconferencing is a new concept that not everyone understands; tech support is often required to help meetings run smoothly for participants onsite and those conferencing in.

INCONSISTENT USAGE
Too busy on some days and unused on other days.

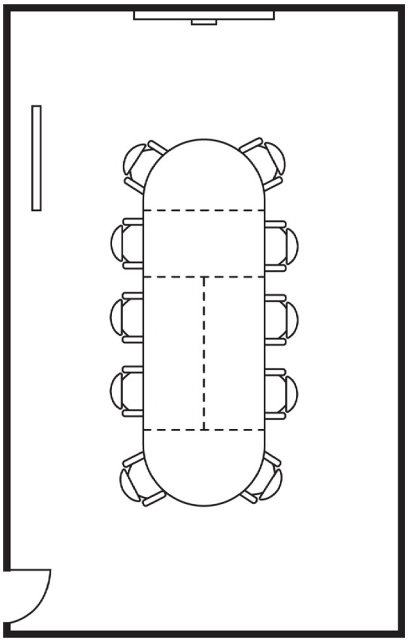
Meeting Rooms Now...

VERSATILE

Highly flexible rooms, equipped with moveable furniture and walls, can physically adjust to serve different needs. They can be configured for various seating layouts (lecture/ classroom/rounds/etc) – before or even during a meeting.

SMART RESERVATIONS

Indoor location technology can detect an empty room or a meeting that wasn't held, and release that room back into the system after 10 minutes if nobody shows up. Automated booking and releasing in real time ensures their best use.



KNOW WHO USES IT

Who is using which rooms the most? Measure new and returning participants, how long certain teams tend to meet, and what layout they prefer. Find out if one team is better off with a dedicated room arranged a particular way.

KNOW HOW A ROOM IS USED

That same technology can show over time if a room is being used to its ability. Data shows the typical number of people per meeting, how it is most commonly configured, how the tech is being used, and other patterns of use that will help you tweak them for what your teams want most.

DEPLOY COLLABORATIVE TECH

These rooms can now be built to engage in-person and remote workers in more equal fashion. People are familiar with meeting technology and the technology is easier to use. Consider digital interactive whiteboards and smart cameras/mics that highlight presenters, follow the presenter around the room, and even feed a real-time transcript of what's being said.

Pro tip:

FIVE KEY TRAITS OF A STRONG INDOOR LOCATION PLATFORM

In this guide, we demonstrate how indoor location platforms can be used to envision, build, measure and manage any workspace. Yet not all platforms are equal.

Sometimes the choice is between platforms capable of scaling fast but with limited accuracy and others that require an office to be blanketed in sensors in order to achieve that accuracy. The former is not reliable, because the data can't be trusted. The latter brings massive implementation and management costs.

The key is to look for a platform that is straightforward to implement, is still scalable, and brings novel insights that are themselves valuable and capable of demonstrating the way forward. Here is a quick list of the specific elements to look for in this emerging market of indoor location technology:

Always on, always accurate: The lowest bar here is accuracy. For that to be the case, it must be highly predictable and consistent – ideally, always on, connected to the infrastructure, and available 24/7. This removes doubt, eliminates gaps, and provides a comprehensive dataset.

Scalable without breaking the bank: Tech must be able to scale. The road to growth is to tap existing infrastructure – like WiFi networks – that these platforms can use to measure patterns of movement. It isn't necessary to buy and install a fleet of battery-powered beacons or desk sensors throughout an office.

Passive: Key to capturing high-quality data that generate important insights is being able not to have to rely on people to download and use an app.

Anonymous: Data privacy is critical. A provider must be GDPR compliant and store no personally identifiable information.

Accessible on the go: Indoor location data should be available on both web and mobile platforms. That way the story it tells is useful, purposeful and always available to everyone at the company.

There is one additional and imperative trait – and that's not to settle for simply 'people counting.' We'll explore this one in greater detail after we visit the desks in a hybrid office space...

About the InnerSpace platform
At the heart of the InnerSpace platform is a cloud-based location and metrics calculation engine (InnerSpace Location Intelligence Engine) that receives raw and anonymized data from a set of supported sensors, including WiFi access points. The occupancy and utilization data generated by the Location Intelligence Engine powers a suite of out-of-the-box user facing solutions to ensure customers derive value from the data across a variety of use cases on day one. These customer-facing solutions include our comprehensive web-based analytics portal, inTELLO, and a collection of customizable content to power on-premise digital signage. Additionally, InnerSpace offers a REST-ful API that enables easy integration with existing back-office systems such as smart building systems, room or desk reservation platforms, employee apps and more.

DESK AREAS

Hybrid offices call for the majority of space, up to 75 percent, to be non-dedicated. Companies must abandon 1:1 desk ratios that consume a lot of real estate.

Desks are an ideal spot to make small, cost-effective and obvious changes in support of a hybrid model. If 70 percent of your staff aren't returning for more than three days a week, a broad dedicated desk strategy is no longer suitable.

Assigned seating is giving way to a greater emphasis on hot-desking, hoteling, and neighborhood arrangements. Such strategies also call for a frictionless ability for employees to find and reserve a desk when they need it.

70%

of your staff may not returning to the office for ***more than three days a week***

The drawbacks of seat and occupancy sensors for desk reservations

Seat sensors (on a chair, under a desk), coupled with a digital booking system, are an option for companies to deploy when trying out a desk reservation system. If the sensor doesn't detect a person, then the desk becomes open to reserve. But there are clear drawbacks here, as there are many reasons why an employee may not be at their desk at any given moment. False data can both hurt the employee experience and the integrity of the booking system.

Occupancy sensors are another approach to desk reservation systems. These line-of-sight sensors are usually placed above desks or groups of desks. Yet this type of sensor likewise has key drawbacks to be aware of. For instance, employees may book a desk for a half or full day, huddle in a conference room a few times, attend a client meeting – and as a result, leave that group of desks for a while, but still need to return.

Another drawback is the number of sensors required for this type of approach. Blanketing an office with seat and/or occupancy sensors can be costly to install, and often requires ongoing management and sensor replacement.

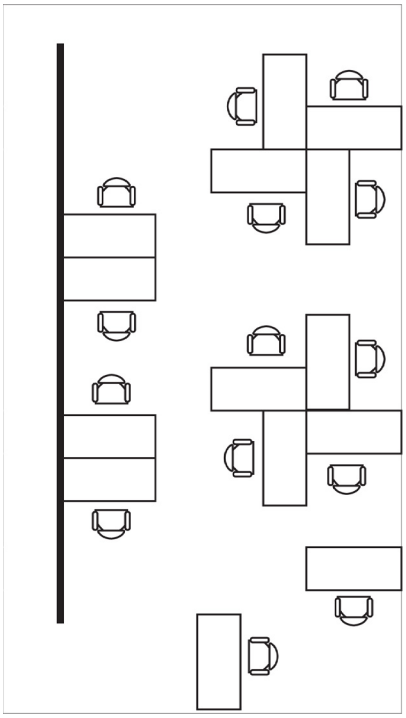
Desks Yesterday...

HIERARCHY-BASED SEATING

Office plans support status rather than purpose. Layout is not customized to the patterns of specific teams. Executives sit with other executives rather than near their direct reports.

INEFFICIENT USE OF SPACE

Seating plans don't account for changing workstyles or the realities of a hybrid work environment, with employees requiring different resources depending on how and when they're working.



POOR COLLABORATION

Collaborative space design is nascent; cube walls are lowered, and open concept areas are introduced, executive offices and other inflexible spaces are only starting to be repurposed.

DIFFICULT FOR VISITORS TO FIND A SPOT

Seating plans make every desk appear "taken" even if an employee is absent. Visitors resort to booking any available boardroom just for a place to park between meetings, or they are placed inappropriately – for example, easily able to overhear or see sensitive internal-only information.

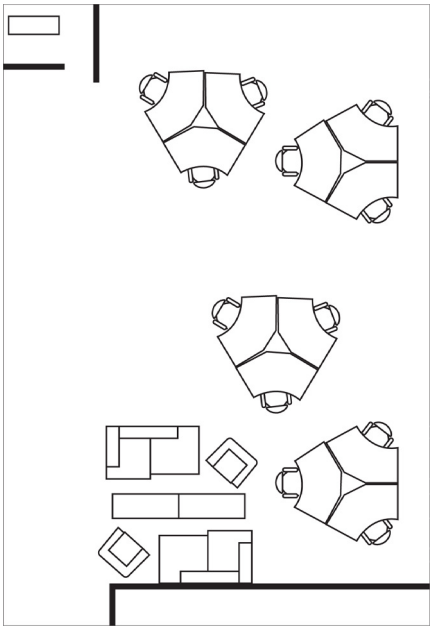
Desks Now...

NO DEDICATED SEATING

Departments that have complementary workstyles may be coupled together as needed, while teams that are mostly out of the office may be aligned with teams that are generally present three to four days a week.

INCREASED COLLABORATION

Every department has its own characteristics, as do the employees within each one. If companies redesign offices with customized traits in mind, they can seize opportunities to fit more employees into the same amount of space, promote collaboration, and sacrifice nothing in the process.



EASILY ASSESS AND ALLOCATE RESOURCES

Use indoor location tech to know if each teams' resources is located in the right spots, and adjust on the fly based on evolving employee needs.

EMPOWER EMPLOYEES

When heading to the office it is very valuable to be able to figure out where to work in advance, make informed decisions, and make the most of the time in-office, face-to-face with colleagues.

Desk reservations: 2.0 edition

So if seat or occupancy sensors aren't the answer when it comes to configuring a desk reservation system, what is? The answer: InnerSpace's WiFi-based platform.

Unlike a typical system where an employee would book a specific desk on a specific floor in a specific zone, using WiFi and the InnerSpace platform, an employee could simply see all the available seating on a specific floor and pick an empty desk to work from.

For example, the InnerSpace platform can identify 11 people working in a particular area where there are 30 desks. Employees can thus reliably conclude that there are 19 spots available and make their way to the area.

Pro tip:

DON'T SETTLE FOR "PEOPLE COUNTING"

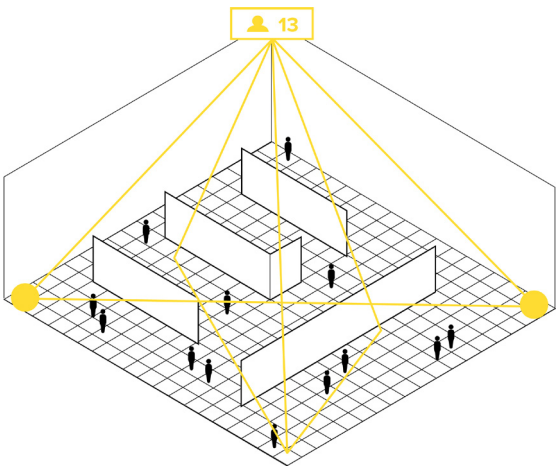
Most indoor location platforms focus on occupancy data – which basically means tracking how many people are in a space at any given time. This is fine as a baseline element, but to rely on people counting alone means you miss an enormous amount of valuable intel.

Occupancy metrics have been around for a while and, used alone, are insufficient to tell the real story of how a space is being used. These data points are not enough to build, manage and measure the hybrid workplace. Knowing how many people are in the office leaves out key questions: who are they? When do they typically come? How often do they visit? Where do they go?

A strong platform grabs occupancy data, adds in density data, and then factors in intel about time on site, frequency on site, utilization of the site – and how all of this varies between *and* within each team or department.

Only now can you get practical insights about desks, meeting rooms, lounges, lighting, schedules, and the full real estate portfolio. And importantly, you get these insights for different teams, which have different needs. Painting all employees with the same brush won't make for effective hybrid offices and, as a result, productive teams.

If there is one lesson inside this guide worth remembering, it is to not settle for people counting. Occupancy data is good – but nowhere near enough.



ZONES

Office environments are often broken down into zones within floors and wings of a company's full workspace. Often these are in preselected areas or themed zones, such as social, meeting, collaboration, or wellness.

Whatever the case, in a hybrid workplace, it's more important than ever to understand key patterns and trends about what's happening inside distinct zones. Employees must feel safe and be empowered to be productive wherever they are working.

This is where the importance of knowing *density* becomes paramount. Truly valuable insights come from going beyond occupancy data (i.e. people counting) to explore where people work in real time, and areas they tend to prefer, based on longer-term patterns.

The deeper the real estate portfolio, the more important it becomes to understand true measures of density.

Zones Yesterday...

HIGH CAPACITY

With productivity as the only constant driver, there has long been a tendency to have zones filled with as many people as needed, or as possible.

LACK OF INTEL

There is no data available with which to understand if certain zones are underutilized, where employees tend to congregate for collaboration, or what common travel patterns are through a zone.

AMBIGUITY

Zones existed without any insight into the volume of people in that area, how they prefer to work, if resources are being used appropriately, on down the list.

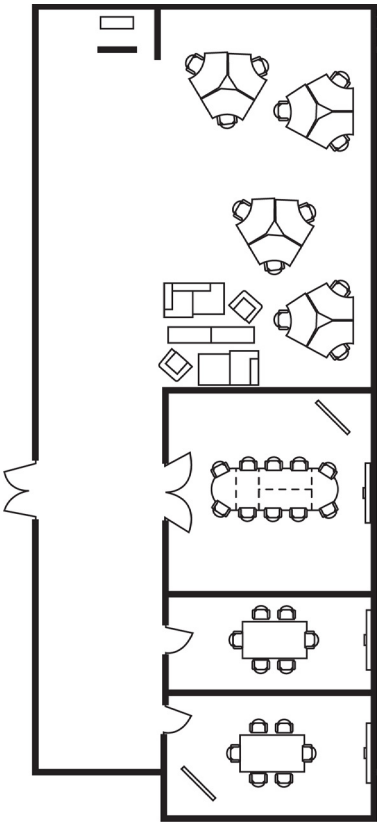
Zones Now...

SAFER

Indoor location technology can reveal patterns of use and travel pathways, identifying real-time hotspots and helping workplace managers respond to situations regarding capacity and physical distancing. If one zone regularly exceeds capacity, the system will flag it as high risk.

DATA-DRIVEN

Only indoor location technology can go beyond measuring people in a building or on any one floor to reveal specifically what's happening inside each zone. The ability to capture density data down to the zone level can be very valuable.



INFORMED USE OF SPACE

Measuring density by zone will inform real-time data on the number of people per sq ft in a particular zone of the office. This feeds into answers such as: how are collaboration zones functioning, where teams prefer to work most, and what the seating density and actual use is in that area.

ELIMINATING OBSCURITY

If you don't know the density in a zone and rely on numbers of people in and out of the office, it risks giving a false sense of security. You don't know that while much of an office is empty, one zone is overextended. Indoor location technology brings clarity for both physical distancing and space/resource optimization.

Pro tip:

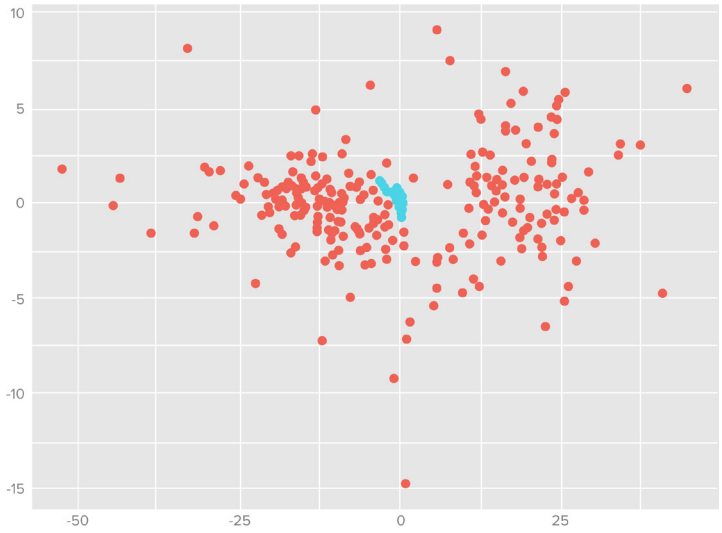
WHY IS WIFI THE BEST SOLUTION?

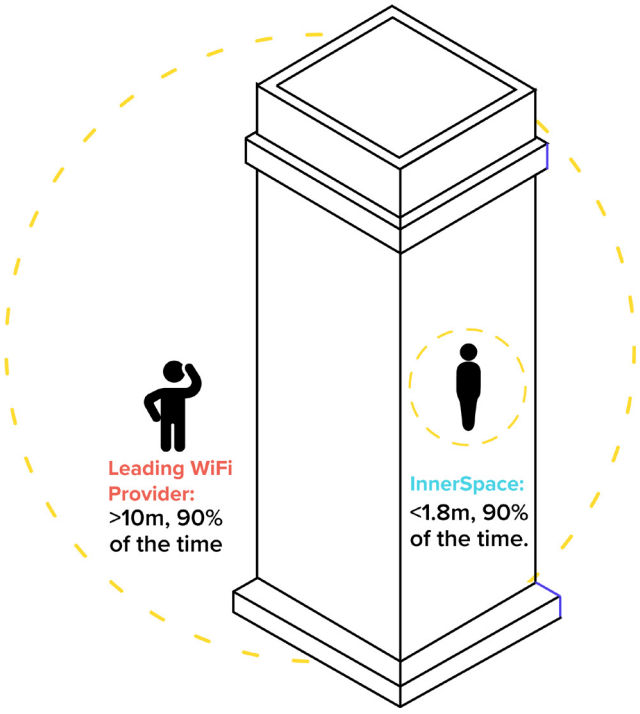
The quick answer is that WiFi is ubiquitous. Because these signals are entrenched in virtually every indoor space already, WiFi becomes the best case scenario for corporate offices to implement accurate, scalable indoor location tech solutions.

WiFi is the default mode of connectivity across the world, far outpacing cellular in Internet traffic. It can transform any building into a smart building.

For companies, the larger the real estate portfolio, the faster and more affordable solution WiFi sensors become. This equals more data at lower costs, because there needn't be as many sensors to install.

Most importantly, the insights are accurate. WiFi location data is unbiased, reflecting the true picture of what's happening in each office, floor, zone, or conference room. At InnerSpace, we see how accurate it really is, because our platform can pinpoint location to within six square feet – leaving no room for guesswork.





CAFES AND COMMON SPACES

The same level of data insights and efficiencies brought to meeting rooms, desks, and zones also applies to cafes and other large common spaces in an office or corporate campus.

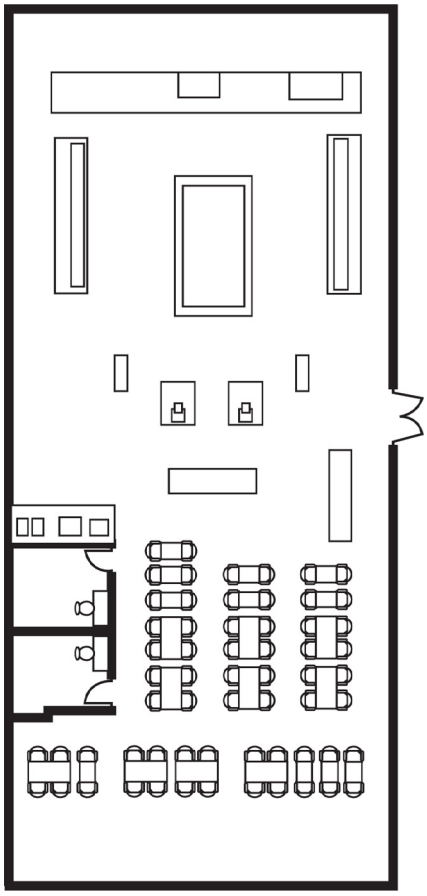
Again here, indoor location technology can not only detail how many people are using that particular space or amenity – but how they are doing so. Data such as visitor count, visit length and visit frequency can provide an easy, straightforward glimpse of the movement of visitors in common spaces.

Smart cafes and common spaces illustrate for company leaders how employees use them over time, exposing any troublesome bottlenecks, and identifying any high-traffic regions. For employees who must optimize every visit to the office, using their personalized dashboard to see how long the line at the cafeteria a few floors away is very useful information.

Common areas yesterday....

CROWDED
Bottlenecks aplenty in most cafes of mid-to-large-scale companies, with no way for staff to know how long lineups are or if there are spaces to eat in advance.

INCONVENIENT LAYOUTS
Before there was data to drive decisions, spaces were designed and developed without insights into how people actually move in a space.



CLEANING SCHEDULES NOT OPTIMIZED
Because there is no way to know what areas were used most or the best times to deploy cleaning services, employers' typical directive is to clean common areas at night.

NO INSIGHT INTO OVERALL COSTS
In managing that cafeteria, it's unclear how best to staff the space or predict and manage how much food should be available at a given time.

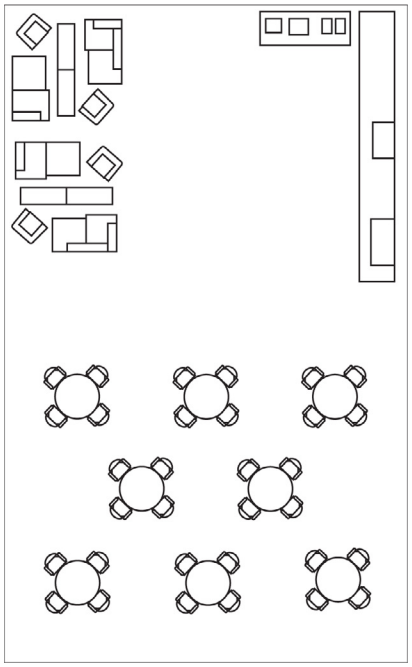
Common areas now...

TAILORED TO WHAT PEOPLE WANT

Cafes and spaces equipped with indoor location data can be adjusted to best suit employee habits. Metrics can show how people spend in certain areas – and empower new decisions about the space an underused coffee bar lounge is taking up.

ENHANCED BY DIGITAL SIGNAGE

Help employees make decisions on cafe lineups by setting accurate expectations. Indoor location tech can feed digital signage to display wait times – helping them make decisions about their day.



KNOW HOW A ROOM IS USED

That same technology can show over time if a room is being used to its ability. Data shows the typical number of people per meeting, how it is most commonly configured, how the tech is being used, and other patterns of use that will help you tweak them for what your teams want most.

CLEANING AND COSTS ALIGNED WITH USAGE

With an understanding of usage, dwell time and repeat visitors, cleaning, staffing and resources can be more proactively and reactively planned – bringing precision in an era when sanitation is a prime concern.

A BETTER EMPLOYEE EXPERIENCE

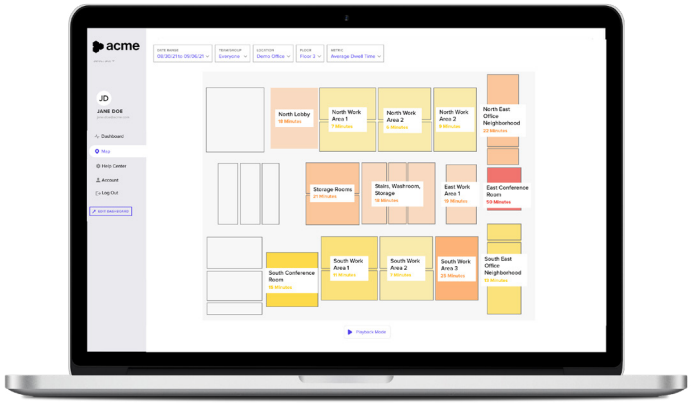
Picture a dashboard that shows, in real-time, how many colleagues are in line, eating at the cafe, or the number of people inside any common space. Staff are empowered to make their own choices about when to eat, or break, collaborate, or socialize with data at the fingertips.

Pro tip:

UNDERSTANDING DWELL TIME

Dwell time is a key metric in understanding how long employees remain in a space – and how that space is used. Because of this, it can be a valuable insight in promoting both employee comfort levels and the efficient use of space.

The InnerSpace platform supports dwell analysis at the room, zone, neighborhood, floor and building levels. Dwell analysis leverages both Occupancy Sensors and WiFi location intelligence, so this metric is available across the entire footprint of every building.



This is accomplished through our web-based analytics portal, InTELLO, which offers concise answers to key questions about how a space is used. In addition to dwell time, inTELLO provides insight into occupancy, visit counts, space utilization, visit frequency, new vs. returning people, density, team-based behaviours, meeting room usage, pathway analysis and visitor behaviours. It truly offers the most comprehensive overview available of how a space is being used.

By going beyond just metric presentation, InTELLO can offer unparalleled comparison analysis and smart recommendations based on the overall dataset, helping employers gain a deep understanding of usage comparison based on capacity, peak utilization, and average utilization; the effectiveness of different spaces by type and time of day; insight into underutilized and overutilized spaces; and importantly, a deep understanding of team behaviors. Heatmaps are even available for a variety of supported metrics, with time-based playback.

With InnerSpace, employers know:

+ How many people are not only in the office, but how often they come and how long they stay
+ How specific teams function within a space, including individual time in-office, in team zones, meetings, or off the floor
+ Whether collaboration spaces or specific meeting rooms are under- or over-utilized – and what times of day, or days of the week are most popular to use those spaces
+ How hot-desking density compares to assigned seating density
+ Where employees tend to congregate by floor and by key zones
+ How many interactions are happening between employees, visitors and customers
+ Where people move throughout the building and how often they do so – a key consideration for resource utilization, movement patterns, bottlenecks and more.

CHECKLIST

There is opportunity in every square foot.

In this guide we've demonstrated what's possible in transforming an office space to a more efficient, more functional, more purposeful hybrid working environment.

To build, manage, measure and adjust space, it's vital to find out how people actually use it. You can build a hybrid strategy any time in many ways, but when it comes to the physical office environment, ensure that you:

- [ ] Rationalize your current and future real estate portfolios
- [ ] Put flexibility at the forefront across the office – because things will evolve
- [ ] Go beyond people counting measures to answer questions like: 'who, when, how often, where'
- [ ] Don't skimp on the research – ensure solid metrics are informing decisions
- [ ] Make informed changes to the office layout to enhance productivity
- [ ] Build adaptable, sustainable solutions
- [ ] Consider your full office in the context of: "how can I make this best suitable for hybrid work by understanding the behaviors and preferences of our employees"
- [ ] Stay focused on the fact that different teams have different needs – including individuals within the same teams
- [ ] Build safety and physical distancing into the strategy
- [ ] Flag any areas you already know are underperforming or, the opposite, overly taxed
- [ ] Empower employees to make personal decisions on how they'd prefer to work
- [ ] Build meeting room and desk reservation systems that respond in real time
- [ ] Consider whether idle contact tracing is a worthwhile solution to incorporate

Overall, it's important to start small – but start somewhere. Allow several months to get a true sense of how people are feeling in the new environment before investing in major structural changes.

You may find that cost-effective, small changes are all you need to realize an efficient hybrid working model – and with an indoor location platform outputting real-time data, it's now possible to evolve a space in lockstep with employees' changing needs.

ABOUT INNERSPACE

InnerSpace helps businesses proactively build hybrid workspaces that support productivity and collaboration. Delivering the world's most accurate WiFi-based indoor location data, the company gives clients unparalleled insight into how people use their space.

The scalable and cost-effective platform includes an easy-to-use API, out-of-the-box analytics, and workflow initiation solutions. The company's Fortune 500 clients use InnerSpace to create innovative solutions that drive revenue and improve operations in their Smart Buildings. innerspace.io

Let's Bring Your Hybrid Workspace Blueprint to Life

No matter where you are in your hybrid workplace journey, we can help. Please reach out to the InnerSpace sales team to discuss anything from this guide, learn how Forture 500 companies are using InnerSpace at sales@innerspace.io, or alternatively book a demo with the button below.

GET A DEMO

A WORD ON PRIVACY

InnerSpace is the only Wifi-based location service built with privacy in mind. The platform tracks movement, not individuals, to provide the full picture of how a space is being used.

InnerSpace is committed to supporting the right to privacy and protecting our customer data in accordance with today's security standards. Our platform follows the standards set out in the EU General Data Protection Regulation (GDPR), considered to be the most advanced and citizen-centric policy in managing personal data.

Important facts:

+ The InnerSpace platform maintains absolute anonymity. It does not store any personally identifiable information such as someone's name, phone number or email address, nor does it have facial or body recognition capabilities.
+ The platform analyzes the media access control address (MAC address) of a person's electronic smart device such as a smartphone or computer when they are in the vicinity of an InnerSpace sensor or existing access point (AP). The platform does not store MAC addresses.
+ All data generated during the analysis is fully encrypted using industry best practices.
+ A person can temporarily opt-out of the system by turning off WiFi and Bluetooth on their smart devices, or per GDPR requirements, they can permanently opt-out.
+ Individuals can also opt-in at their own discretion to share their presence with their colleagues. Each time the portal is closed, the system analysis is reset to further protect individual privacy.