

Building a Business Case for Occupancy Monitoring

Your guide to demonstrating the benefits and return on investment opportunities occupancy monitoring solutions can bring to your real estate



Contents

<u>Introduction</u>	3
<u>Examples – Occupancy data in action</u>	5
<u>Best practices for implementation</u>	13
<u>Solutions to common objections</u>	14
<u>Maximizing your building's potential</u>	15
<u>Why choose an Irisys solution?</u>	17
<u>Conclusion</u>	18

Introduction

Advocating for the implementation of new technologies and processes is no easy task in the current climate. Restricted budgets mean that almost every proposed investment undergoes additional evaluation and assessment. While many key players in real estate management recognize the benefits of occupancy monitoring, getting buy-in from other stakeholders can be a challenge. This ebook offers the information you need to build a compelling business case for the implementation of occupancy monitoring.

Keep reading to discover how occupancy monitoring solutions can provide the data you and your team need to make significant cost savings, create better experiences for occupants, and make confident, data-based decisions when scaling your real estate portfolio or investing in space optimization projects.

WHAT IS OCCUPANCY MONITORING?

Occupancy monitoring is the use of smart internet of things (IoT) sensors to measure and understand how a building is truly being used. By actively collecting occupancy data, building management teams can make confident decisions that fully maximize the potential of their premises. IoT sensors can feed this essential occupancy and utilization data to other integrated systems, facilitating optimization, flexibility, and improved functionality.

The occupancy monitoring technology deployed in today's buildings can trace its roots back to the people counting sensors that retail stores have been relying on for decades. For over 20 years, Irisys sensors have been helping internationally recognized retail brands to optimize their stores, improve queue waiting times and create better experiences for their customers.

WHAT'S DRIVING THE NEED FOR OCCUPANCY DATA?

Millions of square feet of corporate, public, and private enterprise real estate go underutilized every day. These wasted spaces often lie empty, are poorly configured, or simply don't meet the occupants' needs—meanwhile, organizations expend resources through excessive energy consumption and operational costs. In a post-pandemic world, where finances are under continuous scrutiny, improving sustainability is a key boardroom focus. Coupled with a war for talent that hedges on occupant experience and hybrid working, the need for objective data is accelerating.

It's estimated that organizations in Europe could save up to \$243 billion if their office buildings were refurbished in line with standards for efficiency to allow for better utilization. Globally, those figures climb even higher. Over 40% of corporate real estate is empty and unused but still being paid for. Add in the cost of wasted energy used to heat, light, and ventilate these unused facilities, and the potential savings grow higher. Most decision-makers are aware of the problems driving expensive inefficiencies throughout their real estate but are unsure how to solve them. This is where occupancy monitoring and occupancy data come in.

Introduction (continued)

THE INTEGRAL ROLE OF OCCUPANCY DATA IN THE SMART BUILDING ENVIRONMENT

Smart buildings use technology to automate operational processes, driving economic efficiencies and enhancing the user experience by creating a safe, comfortable and functional environment. IoT sensors gather information to share with other devices -- this is how infrastructure is brought to life. The sensors also provide critical insights that power strategic decision-making.

Occupancy data is, therefore, an essential requirement when making a building smart. It connects the physical world with the digital world and enables the building to understand and react to how it is being used, automatically and in real-time. Smart building technology must, by nature, be built with scalability and interoperability in mind, ensuring easy integration with other existing and future systems that may be added.

This is where the long-term value of occupancy data lies. Yes, it has value on its own, but it is much more valuable as an enabler of other systems. All of these factors make occupancy data an integral component in the evolution of smart building technologies, allowing them to grow in sophistication and ultimately help businesses to maximize the potential of their buildings and physical spaces.

WHO IS OCCUPANCY MONITORING FOR?

Occupancy monitoring solutions have widespread benefits and can be found in retail outlets, gyms, museums, libraries, and hospitals--just about any place where people are likely to congregate. In particular, occupancy monitoring is essential for:

- **Collaborative workspaces**
- **Offices**
- **Higher education institutions**

If you manage real estate and you want to know how employees, visitors, and other building users interact with your property, then occupancy monitoring is the first step in accessing the critical data you need. Along the way, you may also discover opportunities for improvement and cost savings.

Business Area	Interested Stakeholders
Property and Facilities Management	Facilities Managers and Property Directors , responsible for operating, managing, and maintaining buildings and facilities.
Finance Management	Space Planners and Space Managers , responsible for designing, managing, and optimizing workspaces for productivity.
Human Resources Management	Administrators, procurement, and accounting teams responsible for controlling budgets, cost, and expenditure. Human Resource Manager , responsible for ensuring employee wellbeing, engagement, and productivity. Employees and building users responsible for completing their assigned tasks.

Occupancy data in action

Occupancy monitoring provides tangible short and long-term benefits. Analysis of accurate occupancy data can help you tackle specific challenges or fulfill objectives such as modernizing, optimizing, and automating your building(s).

In this section, we take a look at the specific applications for occupancy monitoring, as well as the potential impact that strategic, data-based decisions can have on your real estate. Study each particular use case to understand how occupancy data can fit into your processes and the outcomes you can expect.

SECTION INDEX

1. Verify space and facility requirements before investing or divesting	6
2. Make real savings on energy and resources	7
3. Increase productivity and enhance the experience	8
4. Implement demand-based scheduling and never exceed capacity	9
5. Identify opportunities and create office space for the hybrid workforce	10
6. Right size meeting rooms	11
7. Enable smart building automation and future-proof facilities	12



Occupancy data in action:

1. Verify space and facility requirements before investing or divesting

Real estate is expensive. Whether you are buying, renting, upsizing, or downsizing, it has a significant cost. And it's all too easy for misconceptions about your available space and space requirements to arise. Individual perceptions are all different, but they often focus on extreme periods of high or low utilization, regardless of how regularly they are experienced, making these data points subjective and unreliable.

Therefore, when expensive and time-consuming projects such as relocation, expansion, or downsizing arise, it is essential that decisions are based on hard, evidence-based data. This is where occupancy monitoring comes in.

Occupancy monitoring provides a source of reliable, unbiased, and objective utilization data that empowers decision-makers. Accurate and reliable data is key to making impactful, strategic decisions and ensuring that the changes you make to your real estate portfolio are in line with your long-term objectives and reflect the real needs of your business or organization.

Action

- Stop making decisions based on abstract feelings and subjective reports. Review historical occupancy and utilization data.
- Investigate trends and anomalies in the data to determine the best action.

Impact

- Data empowered strategic decision-making results in significant cost-savings and financial benefits.

“Using occupancy data, the facilities team at the University of Technology in Sydney, Australia, were able to demonstrate that adequate capacity on campus was already being provided. This insight saved the university approximately \$5 million on proposed expansion plans.”

CASE STUDY - UNIVERSITY OF SYDNEY, AUSTRALIA

[Read the case study](#)

Occupancy data in action:

2. Make real savings on energy and resources

Smart buildings address energy issues by relying on Internet of Things (IoT) connected devices to not only collect but also process and feed data back to a central building management system (BMS) that either alerts human operators or automatically controls HVAC technologies to ensure they are only powered on when occupants require them.

Occupancy sensors are part of this information chain, providing insight and data based on real-time occupation. When integrated into a smart building BMS, occupancy monitoring solutions can help to automate room temperature regulation, lighting, and ventilation without the need to manually patrol every zone within your property. This ensures that you are only using energy when it's required. Ultimately, the insights gathered from occupancy data may result in you downsizing – the smaller your real estate, the less energy you consume, the more savings you make.

Action

- Integrate occupancy data with existing BMS, HVAC, or lighting systems to enable demand-based energy control.

Impact

- Lower costs associated with energy consumption.
- Improve the eco-credentials of your operation and reduce resource wastage.

“People counting technology for buildings has the potential to open up new ways of thinking around campus facilities and operations. That goal is one of the reasons why sustainability is a big driver on our campus and why we are implementing this technology.”

CANADIAN UNIVERSITY ASSOCIATE
DIRECTOR OF OPERATIONS

[Read the case study](#)

Occupancy data in action:

3. Increase productivity and enhance the experience

The nature of work and study has evolved, and so too must the places where these activities are carried out. The hybrid work and study model relies on smart technology integrations to create more fluid, flexible, and people-centric locations that encourage collaboration, productivity, and engagement.

Better user experiences can be created through occupancy monitoring solutions that feed occupancy data to connected devices, giving users real-time updates on the availability of resources such as desks, meeting rooms, and other onsite facilities.

Occupancy data can help you determine how much and what type of space is required for certain tasks and activities. Facilities specialists can identify the optimal position for specific tools, furniture, or amenities by studying historic occupancy data and traffic flow. These improvements will encourage the utilization of purpose-built areas and improve the satisfaction that occupants experience when performing work or study-related tasks.

Action

- Review and compare utilization data for different spaces and areas.
- Integrate real-time occupancy data to resource booking systems (e.g., meeting rooms and desks).

Impact

- Better user experiences lead to increased happiness and productivity.

“Workplace experience affects employee attraction, retention, and collaboration, and there are studies that go a long way to proving that. [...] Smart building technologies, especially occupant-centric applications, provide benefits that do outweigh cost savings due to space and energy usage reduction. However, such benefits are not always tangible.”

JAMES MCHALE – MEMOORI

[Read the full Q&A](#)

Occupancy data in action:

4. Implement demand-based scheduling and never exceed capacity

Your building can only accommodate a limited number of individuals per floor. Exceeding this threshold can affect insurance premiums, health and safety, and the quality of the environment you provide.

Depending on which brand you choose, occupancy sensors can be accurate, discrete, automatic, and completely anonymous. The ideal occupancy monitoring solution will compile reliable data on real-time capacity levels and alert individuals and facilities management teams before occupancy thresholds are exceeded, ensuring compliance and preventing overcrowding.

A quick glance at an occupancy dashboard can let an employee know whether a facility is fully occupied and redirect them to an alternative location. This can save time, reduce frustration, and enhance hygiene by enabling cleaning and sanitization schedules to be based on utilization.

The data collected from your occupancy sensors can help to identify patterns and create a clearer picture of when peak demand for your particular services occurs—for example, your onsite cafeteria. Leaders can then make provision for sufficient staffing so that queues can move quickly and efficiently.

Action

- Configure capacity limits and receive automated alerts when these levels are approached or exceeded.
- Deploy smart display signage outside key areas to inform building users of area utilization in real-time.
- Use occupancy data to schedule cleaning, meetings, and services.

Impact

- Boost employee wellbeing and safety.
- Ensure regulatory and legal compliance.

“The kitchen was more capable of meeting demand, and there was less stress on employees. Staff satisfaction increased, and use of the restaurant increased, enabling National Grid to make the facility self-funding.”

NATIONAL GRID

[Download The Truth About Occupancy Analytics eBook](#)

Occupancy data in action:

5. Identify opportunities and create office space for the hybrid workforce

Occupancy data can help you study and understand changes in the way your building is utilized to enable more confident decisions about resource investment – it's intrinsic when facilitating a safe return to the workplace and creating spaces better suited to hybrid work.

Occupancy data can, for example, reveal inefficiencies in your open-plan office. Are people looking for spaces to collaborate and meet in order to discuss ideas and work together? This may reveal opportunities to repurpose existing zones and create more meeting rooms. Alternatively, you may discover pockets of unutilized space that could be rented out for additional income without impacting core activities on-site.

Hybrid work and study methods have accelerated the transformation of rigid infrastructure, ushering in fluid and flexible approaches. Occupancy sensors can collect data and provide insights on the frequency and length of time that specific facilities are being used – for example, the traditional work desk. This can help you to reconfigure your office so that only an optimal number of desks or workstations remain, leaving room for collaborative spaces or other more beneficial facilities on your premises.

Action

- Analyze utilization data for changes in trends over time.
- Identify underutilized areas that can be repurposed.

Impact

- An optimized, purposeful environment that meets current and future needs.
- Cost savings and income opportunities are generated for the organization.

“We predict firms will make physical updates to their office space by bringing new zones for collaboration, community, and socialization.”

VERDANTIX

Occupancy data in action:

6. Right size meeting rooms

As your business evolves, what's required for certain tasks will evolve too. How can you be sure that your large boardrooms and meeting rooms are providing the same level of utility?

Occupancy sensors can build an accurate picture of meeting room use over time, helping you to understand how many individuals are actually utilizing these rooms at any given time. If these spaces are not used to capacity, perhaps it's time to break them up into smaller, better-equipped spaces that offer more functionality and require fewer resources to heat, light, and ventilate.

Action

- Compare actual meeting room usage against room capacity and room bookings.

Impact

- Increased productivity and satisfaction, thanks to purpose-built spaces that meet occupants' needs.

“People's perception of how a workplace is used is often very different from reality. We had people saying we needed more large meeting rooms for up to 20 people, but the analysis showed most people meet in twos, threes, and fours, so really, we needed more breakout space.”

SIMON CARTER, MANAGING DIRECTOR AT ANITICUS CONSULTING AND FORMER HEAD OF CORPORATE PROPERTY AT NATIONAL GRID

[Read the full Q&A](#)



Occupancy data in action:

7. Enable smart building automation and future-proof facilities

Whether retrofitting an old building or investing in a new one, integrating smart building technologies will likely be part of the process. It's important to consider traditional technologies and devices currently used throughout your building and how they will evolve. An effective IoT ecosystem that ensures data integrity will be essential for automated decision-making.

Deploying a building-wide occupancy monitoring system will help your organization now and in the future. Besides the immediate cost-saving benefits and positive impact on occupants' experience, occupancy monitoring will help you detect trends over a longer period of time to plan and service the needs of your real estate effectively.

From space planning to signage placement, occupancy data enables you to take a proactive approach to noticeable changes in occupants' behavior. An important observation is that the occupancy sensors you choose should easily **integrate** with other solutions and building systems to ensure long-term results.

Action

- Ensure occupancy data is available for other systems via standard IoT protocols.

Impact

- A more connected and responsive building that integrates with existing and future systems and devices, allowing for improvements to be rolled out economically and at scale.

“Occupancy data is the bridge between your physical space and the smart building technology that delivers automation, connectivity, and improved user experience. It has great value on its own, but when it's shared, integrated, and leveraged across building systems, it becomes a cornerstone in any smart building initiative.”

TIM WHEATLEY, CTO OF IRISYS

Best practices for occupancy monitoring implementation

1. Ensure buy-in

Occupancy data is extremely valuable, but its benefits are not always obvious to all. It's necessary to highlight the direct relevance and impact of occupancy data on specific job roles. Show stakeholders how occupancy data can enhance results and simplify their daily tasks. This can only be achieved through clear communication, training, reinforcement, and accountability, ensuring that everyone understands the metrics and can apply them effectively. Occupancy doesn't just solve one particular problem, it's a ubiquitous asset that can be built into everything your business does.

2. Make data simple

Not all the data you generate will be of equal interest to everyone. Presenting all the data you extract from your occupancy monitoring sensors to everyone in the organization can be overwhelming, leading to paralysis by analysis and, ultimately, disengagement. The business opportunity should be clearly identified and the metrics defined, making it obvious to the people responsible for reviewing and responding to the metrics what is of immediate importance to them.

3. Address privacy concerns without delay

Reassuring stakeholders that their privacy and identity are protected is a critical step in implementing and integrating an occupancy monitoring system. Take the time to explain the capabilities and limitations of the devices you've selected for your premises to ensure that all questions and reservations are addressed. Non-intrusive, passive devices like those built by Irisys provide consistently accurate data without capturing personal information. Ensure that the solution you chose uses non-camera-based technology to protect the privacy of individuals on-site.

4. Go for accuracy

Occupancy data is only valuable if it's accurate, up to date, and consistently reliable. The individuals whose daily tasks will be affected by the data your occupancy monitoring devices provide will quickly disengage if the data they are presented with is error-prone. Ensure that you're investing in sensors that have been built by a reputable company, offering adequate support and continuous innovation. Live and historical data should always be accurate – cheap sensing solutions with low accuracies are a false economy because their data is unreliable and therefore not valuable or usable.

Occupancy monitoring: Solutions to common objections

It's too expensive

The cost of implementing an effective people-sensing network throughout your premises depends on several factors -- for example, the size of the building and the number of entrances or areas that need to be monitored. It's also important to choose durable devices backed by established and recognized brands that can step in and offer support or assistance when repair or maintenance is required.

Data quality is critical in determining how effective your occupancy monitoring initiative will be. As with most technologies, you get what you pay for; when you choose solutions from a reputable provider that offers robust, thoroughly tested devices and algorithms, you'll enjoy the benefit of accurate and reliable data. In turn, this can drive down operational

costs, appreciate the value of your property, boost productivity and help you make savings by right-sizing each area within your facility. These benefits are, in essence, the return on investment you get from deploying occupancy monitoring sensors -- ultimately, they pay for themselves and act as a sound business investment.

The installation process will be disruptive

Before installation, a specialist will typically visit your premises to identify the most suitable position for occupancy sensors. The type of sensor you choose will affect some steps in the installation process. For example, some sensors are battery-powered (e.g., for simple desk utilization monitoring), while others are PoE devices and will require a single ethernet cable for power and data transfer. These cables

are very common in buildings and where no existing ones are available, can typically be installed very easily by qualified personnel. Installation is generally straightforward and will not affect daily activities on your premises.

Occupancy sensors compromise occupants' privacy

Depending on the solution you choose, there is no reason why your occupancy sensor should collect personal data through which individuals can be identified.

Anonymous sensing technologies, such as infrared and Time of Flight, both of which are utilized by Irisys in their sensors, do not gather personally identifiable information about building occupants.

"The Irisys solution was completely passive, and there were no privacy issues which was key to ensuring buy-in from our colleagues."

JO SALMON - INNOVATION
MANAGER, CORPORATE
PROPERTY, NATIONAL GRID

Maximizing your building's potential:

The key benefits of occupancy monitoring

User experience benefits

- Occupancy data can **enable happier, more productive employees or occupants** by using **reliable utilization data to create more practical and functional areas that focus on user experience** and better meet their requirements.
- Occupancy monitoring can help to **ensure that occupancy thresholds are never exceeded**, thereby **mitigating safety concerns** and increasing comfort.
- Occupancy data alerts users to the **real-time availability of resources and facilities**, helping to increase productivity and wellbeing.
- Occupancy monitoring solutions can provide the data your janitorial teams need to **ensure frequent and adequate sanitation** when it is required.

Financial benefits

- **Enables strategic decisions about selling or purchasing additional real estate** to accommodate genuine business needs.
- Automated, real-time control over HVAC and lighting can **drive down costs** and **reduce energy usage**.
- By creating a safe, functional, and inviting facility that meets the needs of users, **productivity and output increase**.
- Scalable and flexible solutions **future-proof your facility** and enable a more reactive approach to changing needs, **such as return to work** or **hybrid working** initiatives.

Why choose an Irisys occupancy monitoring solution?



Irisys has delivered people counting and occupancy monitoring solutions for over 25 years. Backed by Fluke (part of Fortive, NYSE: FTV) we're part of an industry-leading brand that enables our technologies to evolve and continuously improve.

Our patented algorithms enable our privacy-protecting, non-camera-based occupancy sensors to operate in almost any environment and in all areas of your building, offering reliability, flexibility, and value for money. As building and real estate requirements shift towards the standardization of smart building technology, the need for smart, scalable, and interoperable solutions will grow; that's why our occupancy monitoring solutions are built to grow with you.

Armed with knowledge and experience, Irisys has strong partnerships with industry-leading specialists, ensuring everything from installation, implementation, and maintenance is taken care of.

For organizations that value privacy, anonymity, and security, Irisys offers the go-to solution. Most importantly, you can be reassured that the data and insights your occupancy solution provides are highly accurate and reliable.



25 years
experience

500,000 sensors
deployed

1 billion people counted
annually

Conclusion

If you're considering an occupancy monitoring solution for premises you own or manage, it's likely because you know one critical thing: Data is the holy grail.

Data translates into powerful insight—insight that can transform how you manage and adapt your buildings now and in the future, creating functional, people-centric spaces that deliver true value in every sense of the word.

The information provided in this ebook can be used to highlight the benefits of occupancy monitoring and to prepare you for the frequently asked questions stakeholders and other key decision-makers in your organization may have.

Accurate occupancy monitoring data can be the catalyst for a wide variety of improvements throughout your premises. One of the best ways to uncover the hidden potential of occupancy monitoring for your organization is to book a free demo with an Irisys expert. Our specialists will provide more details about the features and benefits of our devices and platform, showing you how they may benefit your particular use case.

[Book your free demo today](#)





Get started.

Watch a demo

Talk to an expert

Irisys provide the essential technology for understanding people movement in buildings. For over 25 years, businesses have relied on Irisys solutions to deliver actionable insights on people in places – helping them to improve and optimize their workplaces and real estate.

With 500,000 sensors deployed to date, Irisys are experts in occupancy monitoring and people counting – perfectly positioning us to help businesses on their occupancy measuring journey.

CONTACT IRISYS

InfraRed Integrated Systems Limited
Park Circle, Tithe Barn Way,
Swan Valley, Northampton,
NN4 9BG
United Kingdom

T +44 (0)1604 594 200

E sales@irisys.co.uk

www.irisys.net

trueoccupancy.com