

# Data Services: Occupancy Insights

Achieve space efficiency  
with data-driven decisions



**5M**

Sensors  
installed

Up to **90%**

Lighting energy  
savings

**1000+**

Customer  
installations

**60**

Countries

**2M**

Tons of total  
CO<sub>2</sub> reduction

## Adapt spaces for occupant and business needs

In a post-pandemic environment, business leaders are now required to adjust and future-proof buildings to meet new occupant requirements. Spaces must be productive, attractive, and safe for people, while meeting financial, decarbonization, and productivity goals for the organization. Achieving this balance requires granular data to inform portfolio right-sizing and environmental design.

Information relevant to space use has historically been resource-intensive to gather, aggregate, and analyze. Occupancy Insights supports real estate teams with business intelligence dashboards that deliver valuable intelligence to generate prescriptive, actionable insights. The result is real business value generation through more efficient use of energy and space, reduced real estate costs, and increased collaboration and productivity through space designs configured to occupant needs.

### Occupancy insights benefits

- Continuous access to granular, time-series building utilization data
- Report templates and dashboards with customization options
- Opportunities for portfolio right-sizing with reduced risk of business disruption
- Secured and accurate sensor-based data correlation with flexible sampling frequencies
- Historic data for trend analysis and to predict future space use
- Insights on floorplan layouts, based on utilization and people-flows
- Ability to leverage existing visualizations or extract data via standard API for further analytics

## Advanced sensors and network

### Lighting Sensors

With Occupancy Insights, utilization and occupancy data can be continuously collected with your existing Enlighted system, a wireless sensor network across buildings and campuses.

Data is gathered non-intrusively and reliably with smart sensors to measure usage of workstations, rooms, departments, floors and building levels.

Enlighted's advanced, patented IoT devices capture information about what is happening in the building, continuously gathering data 65 times a second, about ambient light, occupancy, motion, energy consumption, and temperature.

Visualization of this information is provided via comprehensive dashboards that highlights trend analysis for space programming, ensures space is being used as intended, and provides the foundation to design spaces more relevant for occupants.



**Because of the density of the Enlighted sensors, occupancy sensing is extremely accurate.**



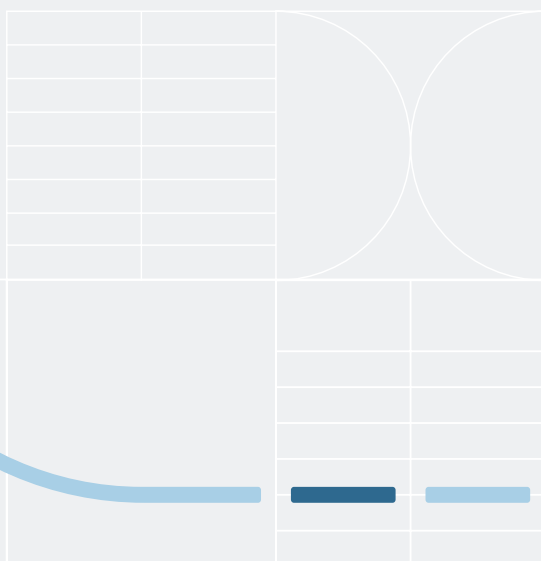
**ORLANDO ORTIZ**  
Director of IT, VEECO

## Transforming raw data to intelligence

A challenge with dense and granular raw data is that it is not valuable on its own. Unformatted, large datasets with dozens of columns of detail require time and resources to manipulate into useful formats.

Aggregation, correlation, and proprietary algorithms are applied to raw data to derive meaning. Data engineering allows Enlighted to directly deliver intelligence on how your spaces are being used with little to no additional effort by the data consumer.

Once processed, useful business decisions can be derived, such as detection of underutilized or inefficiently used areas, identification of space in need of reconfiguring, detecting occupant preferences and understanding which spaces can be safe to contract.



## Speed to value across use cases

Finding patterns in data to inform decisions can be time and resource intensive. Tools and budget are not always easy to secure, especially when competing for internal analytic resources. From the intelligence delivered by Occupancy Insights, you can quickly move from data to informed decisions with standard visualization dashboards, powered by Space.

Leverage insights for multiple use cases to understand occupant patterns preferences and trends to adapt space for maximum efficiency and occupant well-being.

No matter your analytic resources, data services are meant to support you wherever you are in your building modernization journey.

### APIs and your Integrated Workplace Management System (IWMS)

For organizations with their own analytic teams, access Enlighted Occupancy APIs to use with existing IWMS or BI tools, combining with other operational data for further insights and process automation. These APIs include:

- **Real time area occupancy** - Know if a zone or floor is occupied to display availability of bookable spaces, automate check-in of bookable spaces, report on utilization for bookable spaces, and occupancy based control of HVAC systems
- **Real time desk occupancy** - Know if a desk is occupied to display availability of unassigned desks, automate desk check-in or report on utilization of desks
- **Fine-grain motion** - Get motion and activity data such as movement through spaces, and security breaches such as break-ins
- **Shared space Insights Access API** - Obtain Comfy App reservation data by bookable space

### Space Dashboards and Reports

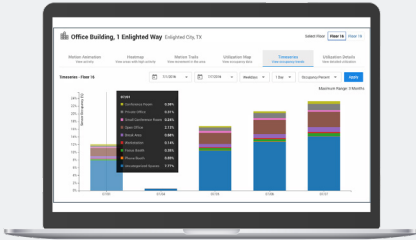
**Space** is an intuitive dashboard and reporting solution surfacing comprehensive occupancy, utilization and activity trends from complex multi-use space.

Rich visualizations and reports offer insight into how to adapt space to occupant needs and uncover operational cost saving opportunities.

# Space Dashboard: Trends and Impact

## Occupancy

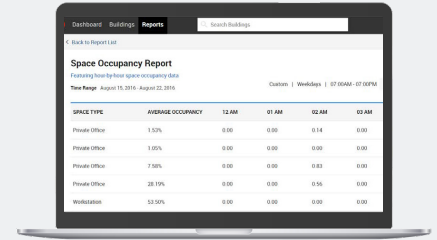
Optimize real estate by repurposing or downsizing underused areas. The occupancy percentage indicates the amount of time a room or area is in use. It is calculated by determining the percentage of time, within specific time intervals, that at least one sensor detects occupancy.



For each to floor and date, you can view the occupancy rate for all space types stacked on top of each other for comparison with the Timeseries Chart.



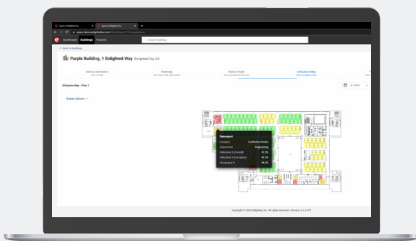
Understand where people spend the most time with heatmaps, a graphical view of aggregation of occupancy measurements over a given period.



The Space Occupancy Report gives you a detailed breakdown of how each area in the building is being used hour by hour for easy executive reporting.

## Utilization

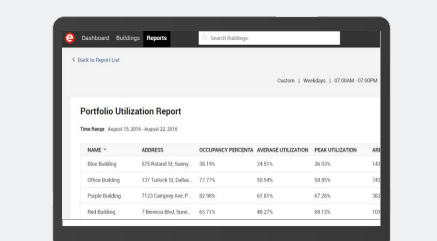
Gain insights into the performance of your current space in relation to its intended purpose or capacity. Identify underutilized areas and make necessary adjustments for data-driven space allocation. Obtain attendance trends to better understand utilization patterns and efficiently manage energy consumption in underused and underutilized spaces.



Utilization Map offers a visual representation of the occupancy and utilization rates, side-by-side, for each space on a floor.



Utilization Details show concentration of space capacity used by space category on the floor.



Analyze portfolio, floor, and space utilization by hour with utilization reports.

### Activity

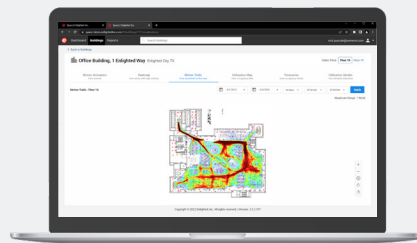
Gain in-depth insights into occupant behavior through the analysis of movement patterns. Enlighted's proprietary algorithm tracks patterns of motion between sensor areas, providing a comprehensive understanding of how people use space.

By validating space popularity and redesign success, you can optimize floor plans, furniture arrangements, and the placement of amenities. This data-driven approach ensures that spaces are tailored to meet the needs and preferences of occupants.

Improve maintenance and sanitation staffing schedules by leveraging occupant activity data. By understanding how spaces are being utilized, we can implement targeted measures to enhance cleanliness.



Motion Animation shows a playback or step through of occupant movement for selected time periods.



Motion Trails visualization presents a static representation of dynamic activity over time.

## Create environments where people do their best work

Enlighted solutions transform buildings with the occupant experience in mind. Our IoT offerings complement our workplace experience ecosystem to create autonomous, comfortable, spaces.

Analyze both employees' intentions to use office space, via reservation data, as well as actual employee behavior via sensor or WIFI data. This helps answer questions like: Which rooms or desks are being reserved but not used? Which are the most popular rooms and desk traits? Are employees using rooms and desks without reserving them?

## Grow while maintaining sustainability goals

Choosing a partner that can help you grow in sophistication as requirements change is key to continuously improve sustainability and employee experience over time. We offer a suite of flexible and integrated solutions for environmental IoT sensing and Lighting Controls, Apps and Data Services, with the option to integrate 3rd party IoT sensors. The IoT infrastructure can offer energy savings of up to 75 percent when being utilized as a lighting control system.

## Data privacy

Enlighted aligns to your high standards when it comes to data privacy, security and regulatory compliance, understanding that your building spaces are an extension of your brand. To protect you, our systems

and solutions leverage best practices and protocols for cybersecurity and privacy.

Enlighted delivers seamless, intuitive employee applications and autonomous smart buildings with the lowest reputation risk and security risk.

## Your partner for smart buildings and IoT data insights

Through implementations of thousands of occupancy data driven lighting and heating control systems, Enlighted has developed technologies and industry knowledge about capturing, correlating and analyzing data from movements and activities in buildings. As part of the Siemens Xcelerator marketplace, Enlighted is an experienced integration partner for a vast number of building management systems and software solutions.



**IoT platforms are now also going beyond day-to-day operations; collated building datasets can offer more strategic insights into businesses, which can impact and inform decisions around business strategy, such as real estate sizing or sustainability.**



**VERDANTIX**

Green Quadrant: IoT Platforms For Smart Buildings 2022, January 2022