Data Services: Occupancy Insights

Achieve space efficiency with data-driven decisions

5M	Up to **90%**	**1000+**	**60**	**2M**
Sensors installed	Lighting energy savings	Customer installations	Countries	Tons of total CO_2 reduction

Adapt spaces for occupant and business needs

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

Information relevant to space utilization has historically been resource-intensive to gather, aggregate, and analyze. Occupancy Insights supports corporate 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 a comprehensive dashboard 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.

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> **Because of the density of the Enlighted sensors, occupancy sensing is extremely accurate.**
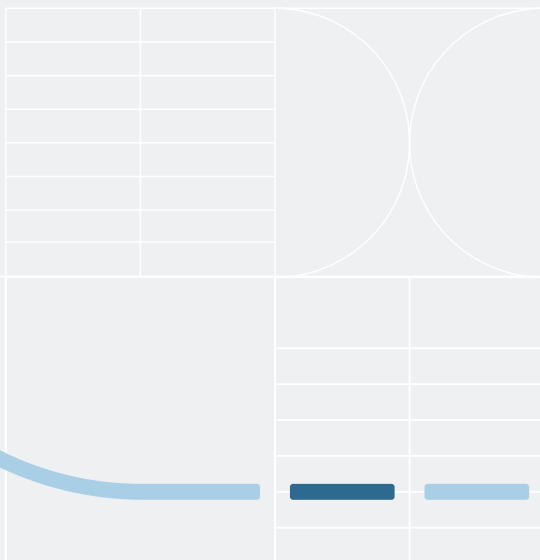>
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> **ORLANDO ORTIZ**
> Director of IT, VEECO

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 are 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.

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. There are 3 flexible options to derive insights from occupancy data:

APIs and your Integrated Workplace Management System (IWMS)

For organizations with their own analytic teams, access Enlighted Occupancy APIs to use with existing IWMS, 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 heat map data such as utilization of large open spaces, and security breaches such as break-ins

Custom Dashboards

For teams with afew resources or wanting to solve more sophisticated space questions, leverage Enlighted experts to create cstomer analytics dashboards with industry standard BI tools.

Standard Dashboards

Occupancy Insights is an end-to-end solution to acquire data, aggregate it, and visualize patterns needed for decision making.
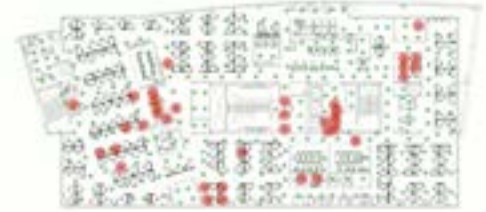
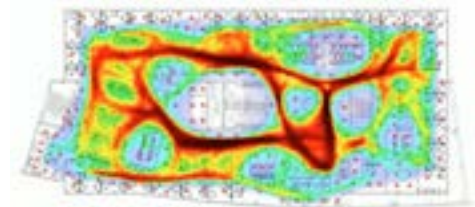| Insights / Purpose	Visualization
Overall utilization Understand occupancy patterns, identify highly utilized spaces and those areas that can be safely contracted. Identify days of week and time of day usage patterns to help plan incentives for hybrid working to smooth resource utilization curves. IoT data used or available through API: Fine-grain Motion	
Conference room utilization Understand day of week and time of day patterns to determine correct space allocation for conference room and activity-bases zones for new hybrid working. Size conference room configurations based on expected usage. IoT data used or available through API: Real Time Area Occupancy, Real Time Desk Occupancy	
Department, zone, neighborhood, and desk-level view Understand over and under-utilized space by campus, building, department or room to make space reconfiguration decisions. Such as putting high collaboration areas closer together and reducing overall space. IoT data used or available through API: Real Time Area Occupancy, Real Time Desk Occupancy	
Traffic flow patterns and preferences Examine how occupants are moving through spaces to make more refined business decisions on space use. For example, optimize lighting use in occupied areas or update sanitation routines based on occupancy history. IoT data used or available through API: Fine-grain Sensor Motion	
Portfolio analysis Examine building use across campuses and geo regions to assess facility needs while planning long term lease agreements. Download data to excel for further analysis and integration with other building data. IoT data used or available through API: Fine-grain Motion, Real Time Desk Occupancy, Real Time Area Occupancy	

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 Xceleratortm 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

Enlighted

Building Robotics, Inc.,
a Siemens Company

Turn Everyday Spaces into Extraordinary Places

Wherever space, people and work meet, Enlighted empowers organizations with the technology to transform real estate spaces into regenerative places that fuel positive impact for people, portfolio, and our planet.

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