Workplace Occupancy Measurement Methods

A short guide on the 4 methods used to measure workplace occupancy and space utilization.

The reasons to measure workplace utilization and office occupancy are manifold: it is imperative for companies today to reduce operating costs, understand working patterns, and determine the space and working requirements needed for a happy and productive workplace. In fact, some of the largest investments made by organizations today are in office space. With that said, being able to track the impact of such investments are of utmost importance. However, due to the increasing flexibility and mobility of today's workforce, it is becoming more and more difficult to measure workplace occupancy. We've created this short guide on the pros and cons of each of the four most common technologies used to measure workplace occupancy today.

Method 1: Access badge systems

Many organizations use an access badge system to ensure authorized access to company facilities. The data from these systems can then be used as an indicator of how many employees are present in a building. The advantage of this measurement method is that it relies on technologies which are often already in place. On the other hand, the limitations of using access badge data include a lack of information on working patterns inside the office building, the inability to track multiple people entering a building at the same time, and the often non-observance of people exiting a building. Furthermore, if an organization uses different badge systems across its real estate portfolio, it may hinder the comparability of the collected data.

Access badge data

+   leverages existing facility infrastructure

-   prone to data inaccuracies (exits not measured, tailgating building entries)

-   different badge systems across different buildings lead to lack of consistent data

-   does not provide information on workplace utilization

-   requires IT involvement

Method 2: Manual occupancy studies and surveys

This is the classic method of measuring workplace occupancy. In manual occupancy studies, company or external personnel walk through the office space at regular intervals and perform manual head counts. In addition to attendance, these studies may include notes on different activities being performed by employees. In a manual survey, personnel may collect more qualitative information about selected employees' feelings and attitudes towards their workplace. Manual occupancy studies and surveys provide qualitative and granular insight, but are labor-intensive and difficult to scale.

Method 3: Sensors

Sensors are quickly becoming a popular method to measure workplace occupancy. As hardware technology becomes more advanced, it is now easier than ever before to implement sensor systems in the workplace. Mounted on various locations throughout a building, they can be used to measure noise levels, temperature, air quality, and employee presence. Out of all the measurement methods, sensors provide the most precise and granular level of data. However, their main drawback is their costly setup and maintenance. Furthermore, many sensors only provide insight on workplace occupancy and do not provide analytics on utilization.

Method 4: IT infrastructure

Using a company's existing IT infrastructure is a powerful yet little-known method of measuring workplace occupancy and utilization. This is due to the fact that this method measures office occupancy through device location, not people. Using Wi-Fi and Ethernet as data sources, it is possible to extract continuous and real-time data on the whereabouts of a device. The coordinates of a laptop connected to an office docking station, for example, can be easily identified. It is also possible to deduce a device location using Wi-Fi, although the accuracy of these measurements are determined by the setup of the wireless access points. Depending on the use case, location data gathered from devices can be a very effective way to measure office space utilization.

Manual occupancy studies and surveys

+ detailed insight on individual employees
- lack of continuous data and scalability
- no detailed analyses on work patterns
- costly and labour-intensive
- prone to human error

Sensors

+ provides the most accurate and precise data
+ provides continuous data
- cost-intensive setup and maintenance
- poor scalability across large real estate portfolios
- requires IT and legal involvement
- battery life

IT infrastructure (Ethernet and Wi-Fi)

+ leverages existing IT infrastructure; no additional hardware needed
+ provides continuous data
+ cost-effective
+ highly scalable
- requires IT and legal involvement

Locatee is the leading workplace analytics solution that empowers you to make decisions about your real estate portfolio with confidence.

We look forward to hearing from you.