

This latest report in the **WORK_IT** series provides an overview of modern approaches to measuring space utilisation and explains why the most advanced tools are essential for organisations embarking upon major workplace transformation programmes.



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SPACE UTILISATION TOOLS: PUTTING THE SCIENCE INTO WORKPLACE STRATEGY

INTRODUCTION

Workplace strategy has gone mainstream in recent years as more companies recognise the role the office can play in attracting and retaining employees; promoting collaboration; enhancing organisational culture; and controlling costs.

However, many firms continue to struggle to implement workplace transformation projects, with CBRE identifying one of the main reasons as the failure to accurately gauge space utilisation at the outset.

Outdated or misguided approaches to monitoring space utilisation can result in setting inaccurate and unachievable targets; hamper the effective operation of workplaces; and

hurt employee performance and morale.

Obtaining accurate space utilisation metrics on an ongoing basis is therefore essential for companies to be able to make data-driven, quantitative and evidence-based decisions to facilitate change management and ensure the ultimate success of their chosen workplace strategy.

APPROACHES TO MEASURING SPACE UTILISATION

There are many different methods and platforms for measuring space utilisation. In some cases, organisations

are already collecting some of this information through existing business systems and can tap into this existing data to at least obtain a basic understanding of their space utilisation.

Such information includes data from security access cards, which can be used to gauge individuals' presence in the office, and the monitoring of hard-wired and wireless data ports, which can detect employee activity.

Other methods include physical studies such as "bed checks" whereby observers walk around noting attendance; paper-based observations, whereby observers walk around noting attendance and work activities on a floor-plan which can then be analysed and visualised; and electronic based observation studies, whereby observers walk around noting attendance and entering information into a tablet which records the data geospatially and provides a broad array of automated reports and data visualisation.

There is also a wide array of technological hardware and instruments available to help companies gather utilisation data. These include "people counters" which can be installed to count the number of people entering and exiting an area through video imaging and recognition.

Passive infrared sensor systems can be mounted to the underside of chairs and other locations throughout the office to detect the presence of employees, while Wi-Fi tracking can utilise signals from devices and routers to triangulate user positions and monitor their movements over the course of the working day.

People-tracking devices such as badges worn by employees can track movements as well as conversations, tone of voice and general social patterns, helping determine why individuals spend their time in certain spaces.

Although such technology invariably leads to apprehensions about invasion of privacy, transparent and early communication of what is being tracked and how data is to be used can help alleviate employee concerns.

MOBY BY CBRE

While there exists a broad range of instruments to measure the utilisation of desks and rooms in a workplace, recent years have seen the emergence of advanced technological observation tools capable of providing a far more nuanced view of how office space is utilised.

By also leveraging the human touch, these tools have the potential to record a broad range of ethnographic information that not only supports decision making about space utilisation, but also employees' current work practices and their readiness for change.

CBRE's MOBY work profiling tool is a web-based platform used by observers to capture a wide range and high volume of information about employee space utilisation, working styles, collaboration and use of technology.

MOBY provides observers with a login they can use to access the system on a mobile phone or tablet. Multiple choice questions are provided to guide observers in their assessments of office working activity, with users able to customise every aspect of the system and save every piece of data that is entered.

At the end of this streamlined work process, MOBY automates reports and graphs providing deep insights into workplace activity and space utilisation.

MOBY enables users to improve the accuracy of their space utilisation measurements. One-step smartphone data capture does away with the two-step process of collection on paper and data entry, reducing the chances of human error. The streamlined process also means less time spent on data collation and more time on generating insights from the data.

Other benefits of this approach include speed, with the platform able to automate standard reports immediately upon completion of data collection. Preliminary reports can also be created during the data collection process itself, while

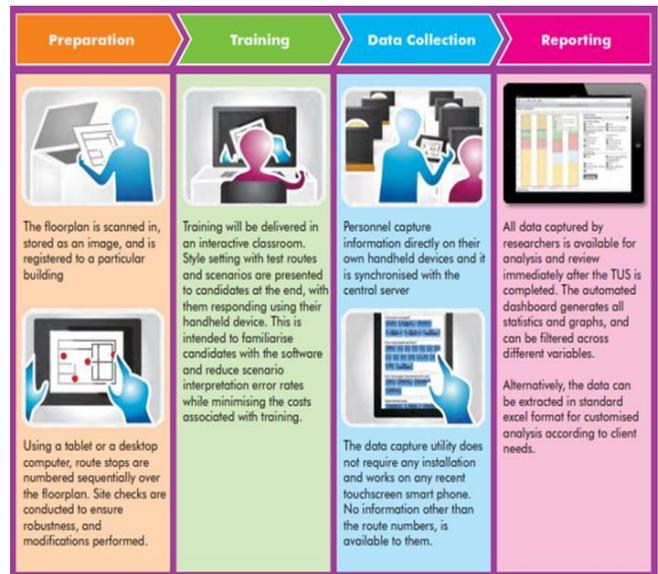
access to the application and collected information is restricted, ensuring data is kept safe.

Although other technology capture tools such as beacons or sensors can measure space utilisation data, they often fail to provide any information into the activities employees are doing. By attempting to do this, MOBY provides insights to guide the creation of a customised workplace strategy and change management solutions. Finally, MOBY can also provide a range of enterprise solutions and connect into back-end space management systems.

HELPING TO BUILD THE CASE FOR CHANGE

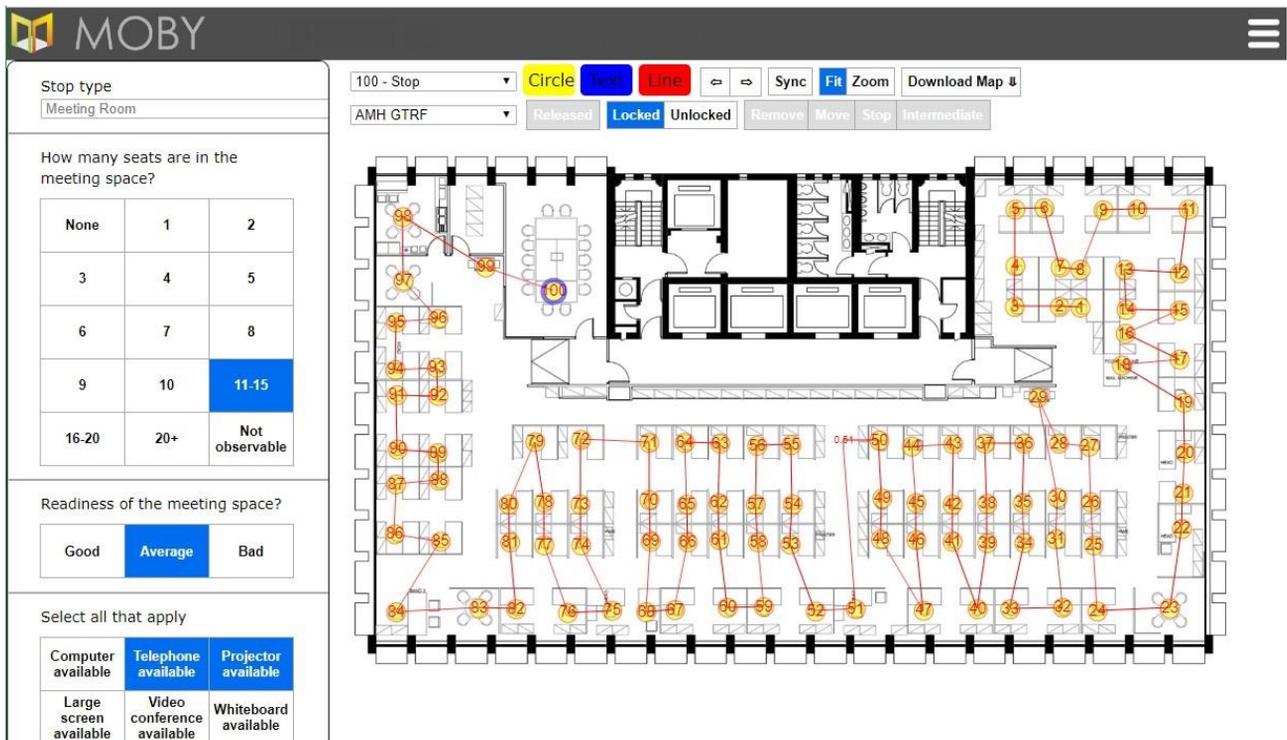
Measuring space utilisation is an ideal starting point for organisations thinking seriously about workplace strategy. Diagnostic tools such as MOBY enable companies to take stock of their current workplace situation, rethink their

Figure 1: MOBY work process



Source: CBRE, August 2019

Figure 2: Example of automated MOBY space utilisation report



Source: CBRE, August 2019

office density and utilisation, and generate robust evidence to build a business case for change.

While benchmarking metrics such as space utilisation is becoming critical in helping corporate occupiers inform workplace decisions and manage their real estate as a strategic asset, CBRE believes organisations should firstly seek to understand why they need space utilisation data and what data they need before implementing solutions.

Companies often adopt a one size fits all approach that does not consider the local context and almost always fails to recognise the need for different target space utilisation rates for different rooms or settings within a single office.

Workplace strategists should also manipulate space

utilisation data to be forward looking and use it to design offices for future and not current workstyles. Accommodating headcount volatility and fluctuation must also be considered.

In addition, understanding the difference between peak and average utilisation and understanding how to set appropriate sharing ratios is essential, otherwise a company's entire workplace strategy can fail.

Once companies have accurately determined their space utilisation, workplace design and planning platforms such as CBRE's [Spacer](#) can be used to provide square footage recommendations for every desk, office and collaboration space, along with built-in amenities such as wellness rooms and community areas for eating and socialising.

CBRE GLOBAL RESEARCH

This report was prepared by CBRE APAC/EMEA Research Team, which forms part of CBRE Global Research – a network of preeminent researchers who collaborate to provide real estate market research and econometric forecasting to real estate investors and occupiers around the globe. For more information regarding this research report, please contact:

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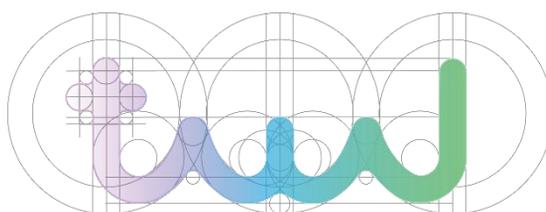
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As technology exerts a greater influence on all aspects of our lives, this report series examines the various dimensions and impacts of technological change in the workplace.

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