

Butlr Research

The New Economics of Workplace Planning

The value and cost of the workspace in 2023

butlr

The New Economics of Workplace Planning

Justifying whether or not your company needs a certain number of offices or total square footage should be grounded in insights about how the workspace does (or doesn’t) fulfill the needs of employees today. Discover how to assign a measurable ROI – in dollars – to each space in your office portfolio based on actual use and impact.

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Introduction

Managing a corporate real estate portfolio used to be easier. You knew which employees needed a dedicated desk, which didn't and where they worked. Most people came to the office at least four days a week and working from home one day a week was a luxury for the lucky few.¹

These circumstances made workplace strategy predictable. But today, real estate decisions are complicated. Hybrid work policies may be in employee handbooks, but traffic in the office still isn't meeting those expectations. Inflation and economic uncertainty have CEOs questioning how business growth and momentum will continue this year and next.²

They are naturally turning to real estate leaders to understand how portfolios must shift, not only to cut costs but to meet employees' new expectations for the workplace.

That's a lot of questions and pressure for real estate leaders who have had the luxury of predictability in how people work for decades. Justifying cuts in leased spaces – or increases – and investments in reconfiguring existing space must be grounded in data about how the spaces themselves perform.

Better yet, you need to assign a measurable ROI – in dollars – to each space in your office portfolio based on actual use and impact. This is how.

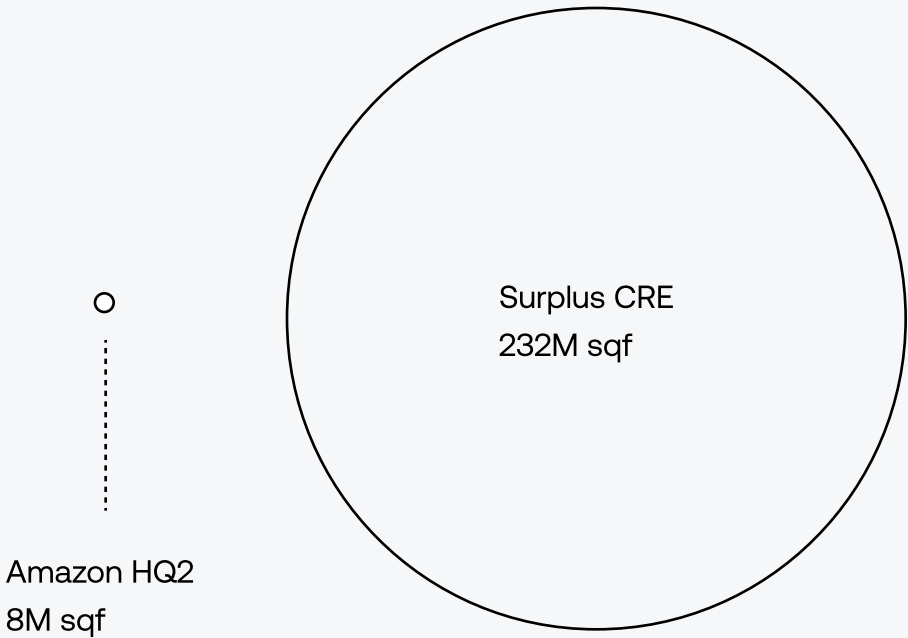
¹ Advanced Workplace Associates (AWA), Hybrid Working Index, Dec. 2022

² PwC, 26th Annual Global CEO Survey, Jan. 2023

01

It's Time to Rightsize your Portfolio

In Numbers



To put those numbers into perspective, Amazon's HQ2 is 8 million square feet. Even more telling, the 232 million square feet is **twice the level of surplus from before the pandemic.**

Source: [CNBC, Companies still have way too much office space and they can't sell it, Nov. 2022](#)

Today, most companies are leasing too much office space. One of the strongest indicators of this surplus is the volume of office space available to sublease right now. In the United States, this figure is hovering around 232 million square feet, double what it was pre-pandemic.³ This subleased space is flooding urban and suburban markets from Boston to San Francisco that are already dealing with office vacancy rates that haven't recovered to 2019 levels.

Analysts predict that the demand for office space will continue to cool, dropping at least 15 percent. This has tremendous implications for the office market as 900 million square feet of office leases come up for renewal by 2025.

While companies may instinctively feel that they need less space today than they did two years ago, most don't have evidence to back up if they really should be renewing leases, whether they are traditional multi-year lease terms or shorter flex space agreements.

To rightsize a portfolio, it's all about understanding how existing office locations and the spaces within them are actually used. Assuming that everyone is following the company's new hybrid work policy or relying on badge swipes alone to understand occupancy and make decisions about adding or subtracting square footage means you're relying on a potentially false perception of space utilization, not the reality of it.



Hybrid work: Assumption vs Reality

“You see the big companies one day fully remote and the next day signing huge leases and telling everyone, ‘Back in the office,’ and then the minute they do, employees express consternation and they say, ‘Never mind.’ It’s all very much in flux”

Elizabeth Ptacek
Senior Director of Market Analytics at CoStar

While most hybrid work policies require employees to be in the office 3-4 days a week, people are showing up **far less than that**. Advanced Workplace Associates, a global management and workplace consultancy, analyzed 220 offices across 33 countries, accounting for nearly 250,000 people. The firm’s December 2022 study found that, on average, people are only going to the office **1.5 days out of the workweek**.⁷

Most companies are turning to access control or desk reservation data to understand if their teams follow these hybrid work policies. Both measures have notable flaws when used to inform workplace strategy. Access control data – in the form of badge swipes upon arrival – typically only measures just that, how many people arrive at the building and when. Few buildings require a swipe out to exit, hiding how many hours of their days employees are spending at the office. Desk reservations only count bookings, not the number of people who actually showed up on any given day to use those desks.

Consider a company that has leased one million square feet of traditional office space across several markets in the US. That organization implemented a four-day, in-office hybrid work policy, so the corporate real estate team makes decisions assuming that policy is, for the most part, being followed by employees. However, actual utilization hovers at 60 percent. With an assumed annual cost per square foot of \$30, that means **this company is spending \$12 million per year on space they aren’t using**. In cities like New York and Chicago where the cost per square foot tops \$100 for class-A office space, the price of underutilized space is several digits higher.

Beyond pure attendance, what people do once they get to the office remains a mystery. That data is far more useful when trying to understand how much and what types of spaces employees need to be productive and happy at work.



³ CNBC, Companies still have way too much office space and they can’t sell it, Nov. 2022
⁴ Green Street, Office: The Long Shadow of Covid, Jan. 2022
⁵ BisNow, With 900M SF of Office Leases Expiring by 2023, Owners are Getting More Aggressive, Jun. 2022

The importance of establishing a baseline

To pinpoint how a portfolio must shapeshift, you have to first understand how office locations are being used today. This baseline should go beyond occupancy or traffic and becomes the foundation for experimentation of space design and purpose.



At the portfolio level, a baseline on each location should guide real estate planning by answering questions including:

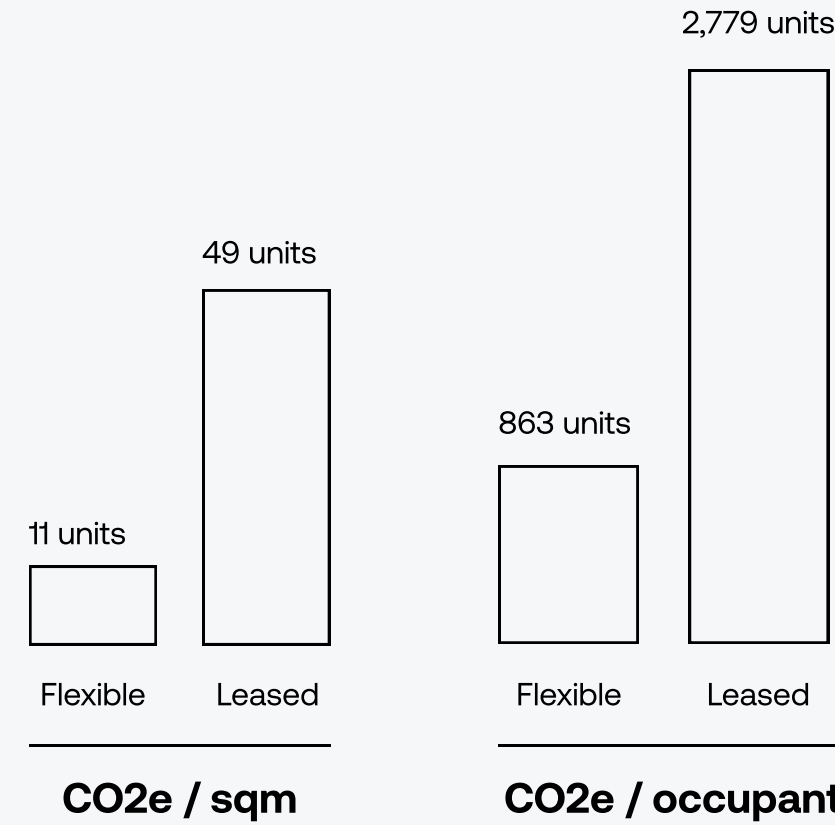
Which office locations are most popular?	What characteristics make these spaces perform better than others in our portfolio?	Which are used least often by our employees?
Where can we condense square footage?	Where do we need to add more?	Which types of spaces (desks, meeting rooms, lounges, etc.) are most commonly used?

Within an individual office location, spatial insights can determine:

Which desks, rooms, and floors are most popular? What's unique about them?	What days of the week and even times are the busiest?	Are people going to the office to collaborate or to do heads-down work?
How does actual space usage differ from desk and room reservations?	Are spaces being used for their intended purpose (i.e. are people using conference rooms to hold meetings or to do solo work)?	

The carbon cost of underutilized space

In Numbers



Source: Coworking Insights, [Leased Offices Create 158% More Emissions per Occupier than Flex Space, Nov. 2022](#)

Most companies are motivated to dig into these insights to shave down operating costs, but a more consequential cost of having too much office space is the environmental impact. Overall, buildings account for 40 percent of the world’s carbon emissions. According to some studies, this percentage is shown to be even higher in cities, causing up to 60 percent of total emissions.⁸

Real estate leaders may say they are committed to reducing energy use and resulting emissions, but often have a difficult time proving exactly how they are doing it. Simply holding more space than you need in a portfolio is a direct contributor to carbon costs. Every unused desk creates one ton of unnecessary carbon each year⁹ – and that calculation doesn’t include the impact of other spaces like meeting rooms, lounges, or cafeterias. The environmental and societal cost of carbon equates to \$185 per ton.¹⁰ For portfolios with hundreds of desks and 6+ figures of square feet, emissions associated with unnecessary, unused space multiply quickly.

“87% of global investors said they think corporate reporting contains unsubstantiated sustainability claims.”¹¹
PwC, 2022

In a time when investors and employees alike expect to see companies actually following through on their climate commitments, reducing office footprint is a measurable action that directly lowers the emissions an organization creates.



⁸ JLL, [Decarbonizing Cities and Real Estate, May 2022](#)
⁹ [Coworking Insights, Leased Offices Create 158% More Emissions per Occupier than Flex Space, Nov. 2022](#)
¹⁰ [Resources for our Future, Social Cost of Carbon More than Triple the Current Federal Estimates, Sept. 2022](#)
¹¹ [PwC, Global Investor Survey 2022, Dec. 2022](#)

02

The price of productivity



Understanding if you have too much or too little space may be the most obvious space-related financial impact, but it’s not the only one. The individual elements of workplace design from access to natural light to furniture selection all have a direct impact on employee engagement. Gallup’s decades of employee engagement research show that employee engagement impacts productivity, sales, and profitability.¹² Teams with the highest employee engagement are 18 percent more productive and 23 percent more profitable.

On average, employees who aren’t engaged cost their companies **18% of their salary every year.**¹³
Gallup

Workplace design and employee productivity have historically had competing interests, namely the cost of space and design elements vs. the ideal conditions for employees to thrive.

Design trends often follow what a marquee company has implemented, whether that’s Ford or Google, but research inevitably comes out that’s Ford or Google, but research inevitably comes out that pokes holes in that design philosophy. Consider the rise of the open office concept, which shrunk square footage per employee and ultimately, cost per person.

However, the design concept touted for its ability to spur collaboration and conversation is also proven to hinder employees’ privacy and their ability to focus.

Now that most office workers have had a taste of working from home and more control over their work environment, their expectations for an in-office experience have also shifted. Some of those expectations are easy for people to communicate, like the ability to choose when and how often they go to the office, while others are more challenging to articulate.¹⁴

8 JLL, Decarbonizing Cities and Real Estate, May 2022
9 Coworking Insights, Leased Offices Create 158% More Emissions per Occupier than Flex Space, Nov. 2022
10 Resources for our Future, Social Cost of Carbon More than Triple the Current Federal Estimates, Sept. 2022
11 PwC, Global Investor Survey 2022, Dec. 2022

So, why are people **really** coming to the office?

Early research from the pandemic showcased that people who were working from home missed the opportunities for connection and culture that the office provided. Companies scrambled for nearly two years, trying to translate brainstorming, happy hours, and team-building exercises to virtual platforms. These may be things that people initially missed, but they aren’t always the reasons why people are braving their commutes again.

In [a global study performed by Steelcase](#), “quiet, professional environment” was one of the top five reasons why respondents from nine of 10 countries wanted to return to the workplace.¹⁵ A US [research study by the Gensler Research Institute](#) during the summer of 2022 also found this to be true, which was a marked shift from the firm’s 2020 study which found people wanted to come back to the office to socialize and collaborate with their team.¹⁶

While this type of research is important to understand workplace trends as a whole, it cannot replace understanding how these motivations work for your teams and how they may vary from office location. Surveying employees on what type of work they like to do in the office and using that data doesn’t often account for the biases that survey data may have. With pressure on people to come back to the office, employees are likely to answer with the answers they think they are supposed to say.

14 [Gallup, Returning to the Office: The Current, Preferred and Future State of Remote Work, Aug 2022](#)

15 [Steelcase, Changing Expectations and the Future of Work, Jan 2021](#)

16 [Gensler Research Institute, Returning to the Office, Oct 2022](#)

Spaces for creative group work and individual quiet work have the greatest impact on space effectiveness and experience.

Workplace Performance Index* (WPI) and Experience score comparisons for each amenity, differences in scores between people who have the amenity in their workplace and those who do not. Both scores are on a 100-pt scale.



*Gensler’s Workplace Performance Index is a proprietary aggregate measure of the effectiveness and performance of a workplace.

In Numbers

sqf
space dimensions x \$ x sqf
annual lease rate x %
utilization rate = \$
annual cost / asset

A better indicator is looking at how space is actually being used today and how that may differ from intended use. For example, are people booking meeting rooms to do solo heads-down work? Are phone booths or private working spaces more popular than conference rooms or desks in open floor plans? Or, perhaps the opposite is true and data should be more focused on ensuring that the space meets the needs of employees trying to work and solve big problems together.

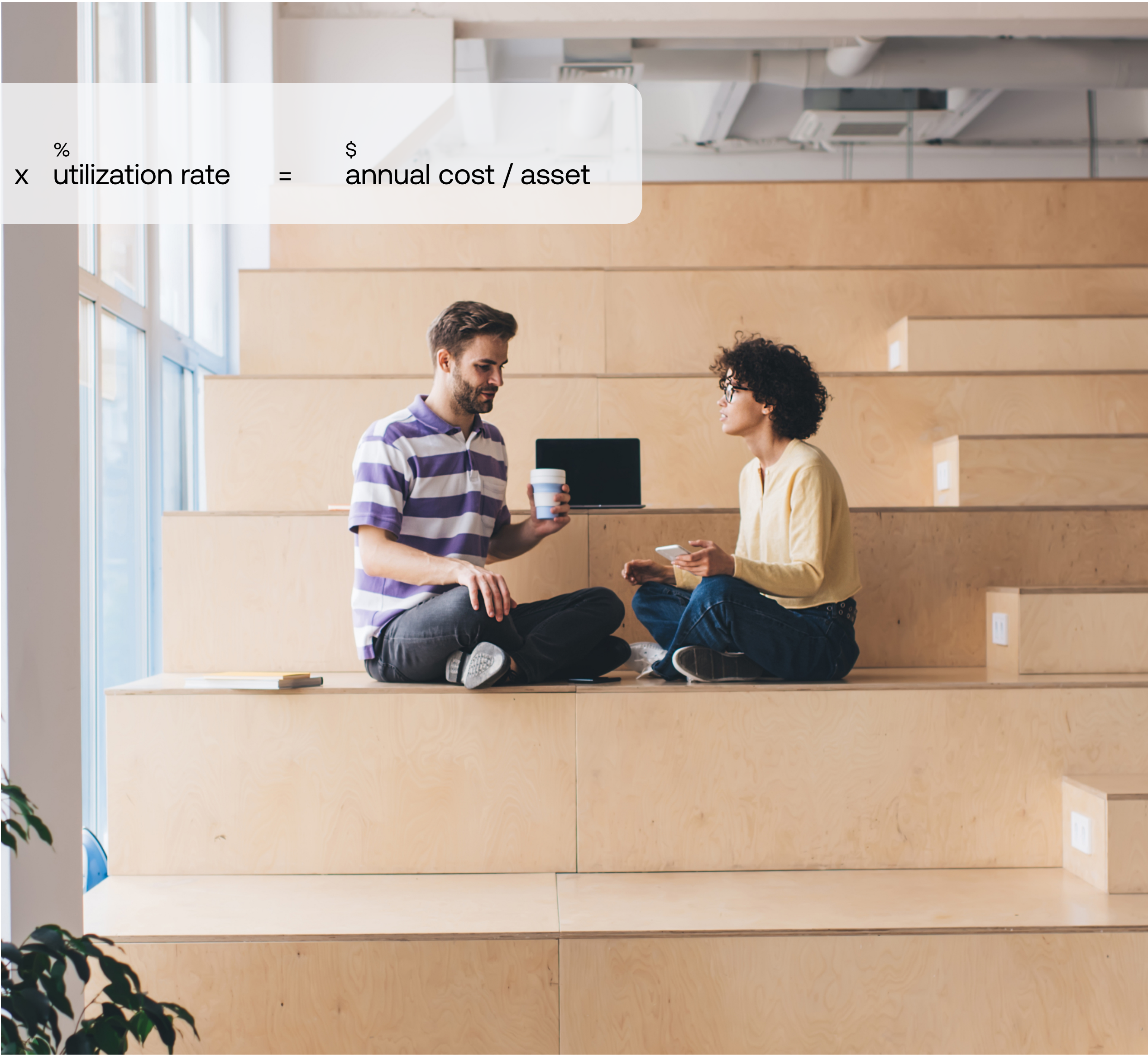
The ideal conditions for spurring innovation are more complicated to uncover. Part of the challenge is the natural preferences that teams and individuals have when it comes to what fosters their creativity. Workplace strategy should acknowledge these challenges, offering spaces for different modes of work, from deep concentration to ideation and pure socialization. This also helps fulfill people’s new desire for more control over their work environment, a byproduct of remote work.

At the end of the day, when people feel their workplaces meet their needs, they are more likely to go into the office more often. That utilization is the ultimate way to assign a measurable ROI on each asset in your portfolio.¹⁸

Much like putting a dollar sign on underutilized leased space, companies can calculate the same cost for other assets like desks (assigned or for hotelling) and conference rooms.

One conference room that’s only used for the equivalent of one workday a week, can cost a company more than \$10,000 a year. When you consider that traditional office environments factor in one conference room for every 10-20 employees, the cost of underutilized meeting space alone justifies a deeper look into space utilization across the board.¹⁹

¹⁷ Steelcase, [Changing Expectations and the Future of Work](#), Jan 2021
¹⁸ Gensler Research Institute, [Returning to...](#), Oct 2022
¹⁹ Robin, [Moving to a New Office? Determine the Right Office Space Size](#), Jan 2018



03

Building confidence for future pivots

The KPIs of Space

If the last few years have proven anything, it’s that how we work and the office itself aren’t constants. The ghosts of workplace eras past – the corner office, cubicles, the open office – serve as reminders that what works today probably won’t tomorrow. Insights about how people are interacting with the office, past and present, empower companies to evolve their portfolios with conviction. That could mean shrinking square footage, expanding it, or changing the mix of leased, owned, and flex space.

Space utilization can give you insights about performance across an entire portfolio or an individual asset, from a floor to a meeting room or individual desk. Not only do these indicators help determine how much space is needed in the portfolio, but they also help workplace strategists understand which types of spaces employees prefer. This can support decision-making around investments in shifting floor plans, the introduction of new space types, and capital expenditures such as new furniture and technology to connect in-office and remote employees.

As a result, underutilized flex space quickly becomes a sunk cost. For example, instead of signing leases for traditional offices, a company gives their newly distributed team access to 10 serviced offices across the country with six private desks in each location. If only half of those desks are used each year, the company is out \$300,000 when you assume an annual per-desk cost of \$3,000.

★ One word of caution: getting this type of data from flex or coworking providers often proves to be difficult. While signing up for these spaces seems like an easy way to offer an in-office solution for employees without the commitment of traditional leases, companies are left with little knowledge, other than anecdotes from staff, about how the spaces are used and if they are meeting people’s needs.



Going deeper than data about whether or not people are actually in the office and when enables companies to optimize their portfolios for employee engagement and productivity, not just the operational costs of space. The first step is understanding what occupancy and spatial data is available today to create your baseline. From there, the focus shifts to supplementing that perspective to ensure there are insights about the function of each asset – location, floor, room, and desk.

Even though real estate portfolios are arguably more difficult to manage than ever before, there’s also never been this granularity about space utilization. It builds natural confidence in workplace strategy whether that means shedding leases for underutilized space, adding leased square footage, and making build-or-buy decisions.

KPI	What it measures	Points of Comparison and Context
People count	How many employees are accessing each office?	● Daily Variance ● Time in Office ● Variances across location ● Seasonality
Traffic Distribution	Which spaces in each office are the busiest?	● Space typology ● Access to technology ● Access to natural light ● Size of room
Energy Consumption vs Occupancy	How much energy usage can be assigned to a person based on occupancy?	● Average energy \$ / person and / space ● Energy Usage and emissions / space based on average occupancy
Amenity Usage	Which amenities are most popular and which are not?	● Amenity usage by time and day ● Performance by amenity category ● Planned vs Spontaneous usage
Assigned desk utilization	Which assigned desks are used most often?	● Daily Variance ● Desk Location ● Access to natural light ● Comfort (temperature) ● Type of desk ● Proximity to other space types & amenities
Hot Desk Performance	How does the actual desk usage compare to reservation rates?	● First time vs Repeated bookings ● Desk location and proximity to amenities ● Length of usage vs time booked
Room Utilization	When are rooms booked and actually used?	● Daily Variance ● Utilization by booking vs spontaneous use ● Average # of people during use ● Virtual participation ● Average length of use

04

How can Butlr help?

Wasted resources, underutilized space and shrinking budgets are some of our customers’ biggest concerns. Navigating in the always-in-flux Corporate Real Estate territory can be overwhelming—especially during times when most of what is at stake is directly dependent on how people choose to use space every single day. Even worse, people use space in an arbitrary way, making it difficult to discern patterns with traditional means and media such as simply observing, relying on budge data or running surveys.

When optimizing costs, more important than knowing “how many” is simply asking “how”: “how are people using my space and is there room for improvement, smart shrinking and sqf-to-value increase?” This is where Butlr’s anonymous people sensing and occupancy detection platform helps enterprises across the globe: to improve their workplace planning and operations. Using just body heat and advanced AI technologies, Butlr infers contextualized human activity and delivers rich spatial insights instantly. One of the most robust and cost effective solutions in the market, Butlr helps clients create enhanced workplaces, improve employee experience, design effective asset strategies and optimize building operations.



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