Adaptive Spaces

2022-2023 CBRE Global Workplace & Occupancy Insights

REPORT

From measuring a plan to measuring reality: how hybrid work is changing occupancy management

CBRE INSIGHTS
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Executive summary

Corporate real estate teams are adapting and innovating at ever-greater speeds to deliver flexible workplace solutions as workstyles evolve and organizations implement hybrid work policies.

CBRE's Workplace & Occupancy Management team's annual survey of major occupiers worldwide reveals three themes set to transform workplaces and office portfolios over the next two years:

01

Purpose-driven flexibility

- Evolving workstyles and employee expectations create a new purpose for the office: connection and collaboration.
- Existing spaces are being rebalanced to support new ways of working.
- Workplace technology investments focus on integrating physical and virtual work experiences.

KEY STAT

71%

of respondents plan to expand their hybrid program in the next three years.

02

Modern metrics measure reality

- Metrics are expanding from measuring how space is planned to measuring how it's used.
- Utilization data is now the key metric to gauge portfolio performance and employee experience.

KEY STAT

90%

of respondents gather utilization data, up 11% from 2021.

03

Data management is risk management

- Workplace data is essential to continuity-of-business planning and developing business strategies beyond real estate.
- Organizations are prioritizing data quality and technology investments to develop better workplace insights.

KEY STAT

65%

of respondents made improving space data accuracy a goal for 2022.

02

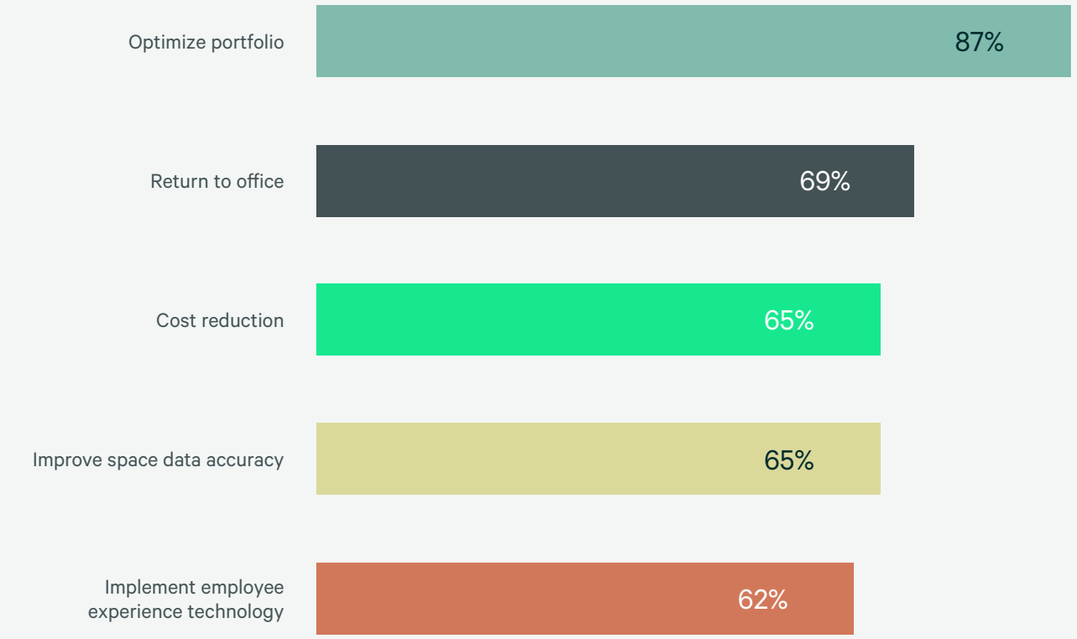
Introduction

Corporate real estate teams are challenged to establish a "new normal" for the workplace.

To stay ahead, teams need to adapt, experiment and implement increasingly flexible solutions—and deploy them at greater speed.

Portfolio optimization remains a top priority for corporate real estate leaders, but the intense focus on return-to-office planning and hybrid working is placing workplace strategy at the top of C-suite agendas. As a result, corporate real estate teams wield more influence—and also attract more scrutiny—than ever.

FIGURE 1: What are the goals of your corporate real estate team?



Source: CBRE 2022 Occupancy Benchmarking Program.

To provide these teams with better data and tools to navigate unchartered waters, CBRE's Workplace & Occupancy Management team launched last year its annual Occupancy Benchmarking Program, which combines quantitative and qualitative data, and surveys of corporate real estate decision-makers to identify and track core occupancy metrics, and modern working and workplace design trends.

This year, 60 organizations participated in the program, representing 493 million sq. ft. (46 million sq. m.) across eight sectors. Their anonymized responses were aggregated into benchmarking dashboards that offer 50,000 unique workplace, occupancy and space management data points to deliver industry-leading global, regional and market-level perspectives by sector and asset type.

The 2022 results point to three areas of focus:

- Deploying hybrid working schemes that provide the flexibility desired by employees while ensuring they remain connected to their organizations virtually or in the office.
- Measuring metrics that help organizations understand how space is used in real time so that teams can optimize space within their portfolios to deliver the optimal balance of workstations, collaboration spaces and amenities.
- Using data to mitigate risk and inform future business decisions, with an emphasis on improving the data quality and intregration into real estate and business decision-making.

For more information on CBRE's Annual Occupancy Benchmarking Program, please reach out to OccupancyManagement@cbre.com.

2022 CBRE Occupancy Benchmarking Program by the numbers:

60
organizations participated

493 MSF / 46 MSM
collectively managed by respondents

8
different sectors represented

03

Purpose-driven flexibility

> Our shared work experience defines our relationship with our organization and our colleagues.

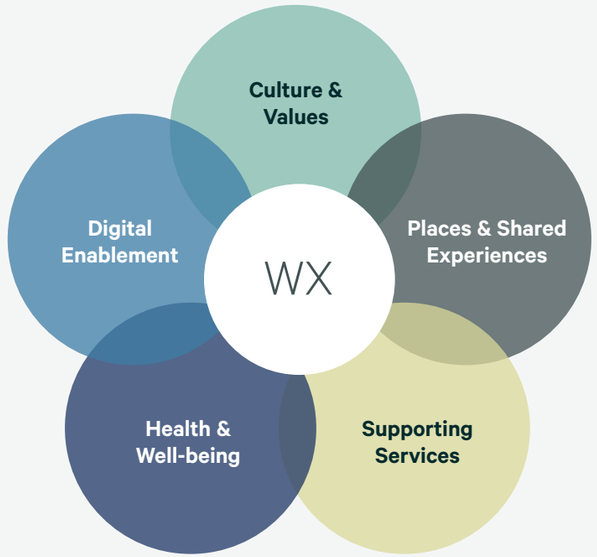
Susan Wasmund
CBRE Global Occupancy Management Lead

Flexibility shapes the new work experience

Shared work experiences (wx) shape the relationship employees have with their organization and their coworkers.

These experiences are molded by an organization's culture, its physical workplaces, supporting services and technology, and the health and well-being of its people. With hybrid flexibility now the norm, organizations are rethinking work routines and office layouts to ensure the new work experience can deliver on all fronts.

FIGURE 2: The new work experience



Culture & Values
represent the organization's brand and values through distinct experiences

Places & Shared Experiences
provide functional space and furniture to support all workstyles

Supporting Services
help employees establish and maintain relationships through experiences

Health & Well-being
consider well-being beyond the boundaries of the office

Digital Enablement
make collaboration and frictionless experience regardless of location

Source: CBRE Workplace Strategy, October 2022.

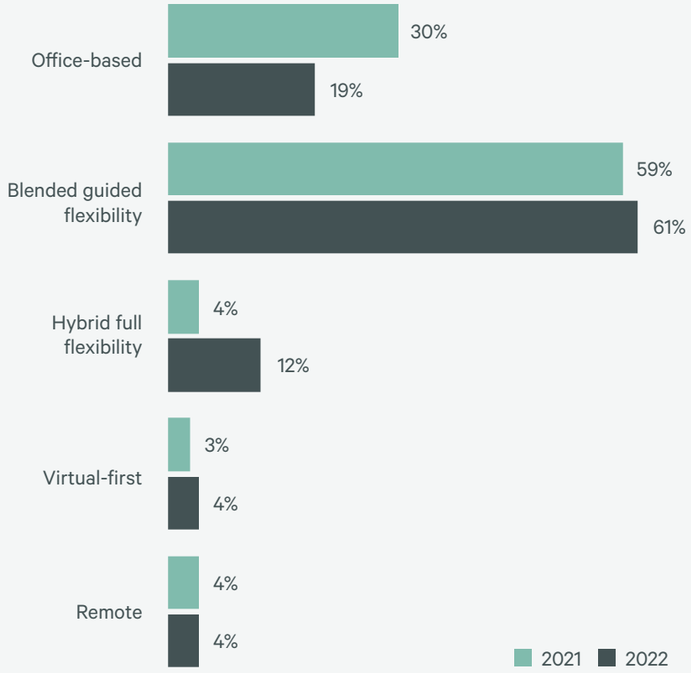
Hybrid working preferred worldwide

The last two years have demonstrated that hybrid working is not only possible but preferred by many knowledge workers. For some organizations hybrid working takes an “office-first” approach with most time spent in the office, while others take a “virtual-first” approach, with employees primarily working remotely, using the office for collaboration and on-site work as needed.

Almost 60% of companies have defined criteria for determining hybrid working eligibility. For these organizations, eligibility is largely determined by job function (57%) and manager discretion (45%). Only 21% leave the hybrid working choice up to the employee.

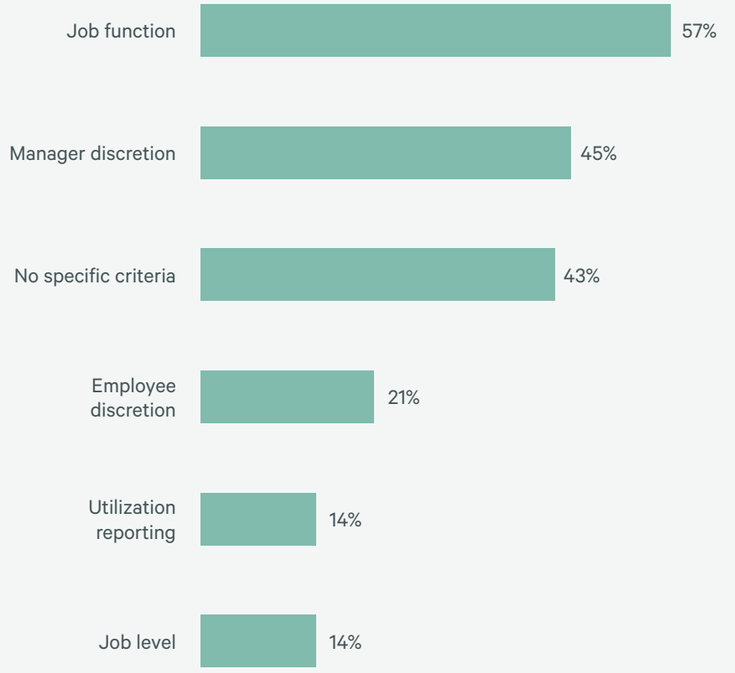
Most organizations take a “guided” approach to hybrid working, offering flexible schedules within a framework so that they know who will be in the office to better predict space needs. This transparency helps ensure employees have productive, collaborative interactions with relevant colleagues when in the office and enables office managers to prepare the right types of space and services as needed.

FIGURE 3: Workplace policy intentions: Looking ahead, which best describes your workplace policy intentions in a steady state for most of your employees?



Source: CBRE Spring 2022 U.S. Office Occupier Sentiment Survey.

FIGURE 4: What criteria is used to determine employee eligibility for hybrid working?



Source: CBRE 2022 Occupancy Benchmarking Program.

How flexibility impacts the demand for space

There are three approaches to understanding how hybrid working policies may impact space demand. How these approaches are implemented varies based on the data available and the level of employee flexibility.

FORECASTING DEMAND BASED ON BUSINESS GROWTH

Business units identify how teams will shrink or expand, the number of employees requiring dedicated or shared space, and the time employees will be on site. This approach is best for companies using a guided hybrid program, which tends to have a lower level of variability.

ESTIMATING DEMAND BASED ON BENCHMARKING DATA

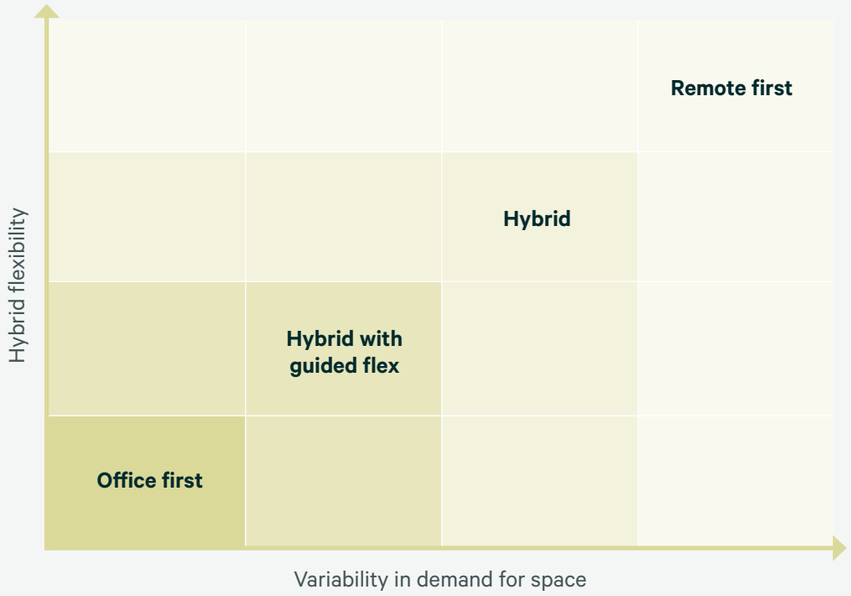
Strategists apply a space-sharing ratio to a company's portfolio based on employee personas—a profile that represent common characteristics of an employees based on their job function and work habits—workplace guidelines and hybrid working policies. This approach is ideal for companies that want to align space programs to employee preferences, and business and cultural objectives, resulting in a moderate level of variability in space demand.

CALCULATING DEMAND BASED ON UTILIZATION PATTERNS

Space demand is measured over time to identify employee patterns and habits. This approach is best for companies providing employees high levels of flexibility as to when they come into the office. This flexibility creates a high level of variability in space demand.

Whatever approach is taken, it's highly likely that space demands will vary in proportion to the level of flexibility specified in hybrid policies.

FIGURE 5: How flexibility impacts space needs

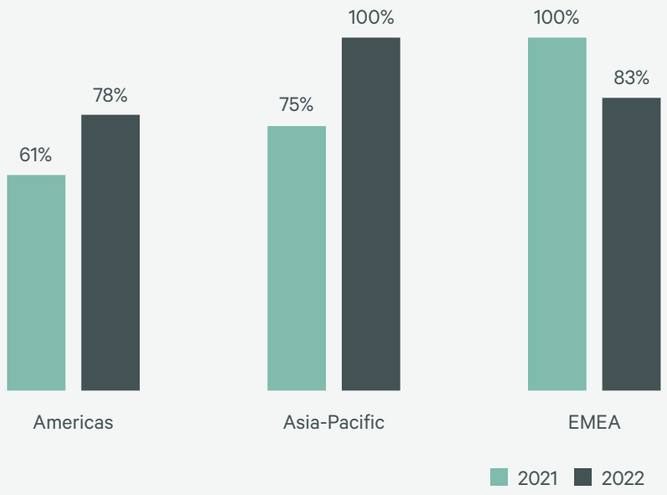


Source: CBRE Occupancy Management, October 2022.

Why some organizations don't support hybrid flexibility

The lack of C-suite support and poor cultural fit are the most common obstacles to supporting hybrid work. Of the 19% of respondents who do not have a hybrid work program, 70% cite poor cultural fit as the primary reason, up from 36% in 2021, and 20% cite lack of C-suite support, down from 21% in 2021. When considering how little job function influenced these decisions (10%), it seems that while most of these organizations could implement hybrid working, they choose not to.

FIGURE 6: Do you have a hybrid working program?



Source: CBRE 2022 Occupancy Benchmarking Program.

70%

of respondents cite poor cultural fit as the reason they do not have hybrid working, a 94% increase from 2021

20%

of respondents cite lack of C-Suite support as the primary reason, a 5% decrease from 21% in 2021

10%

of respondents cite job function as the reason they do not have hybrid working

Fundamentally, there has to be a ‘why.’

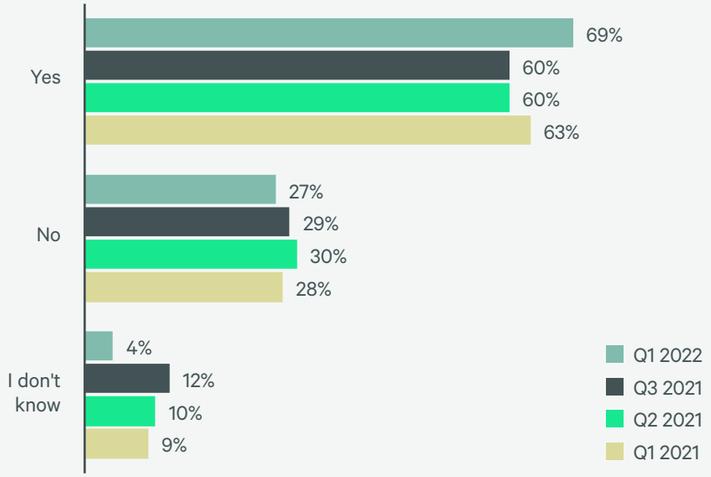
Only when the C-suite agrees on why employees should be in the office—collaboration, teamwork, connectivity, culture, compliance, mentorship—can the company best strategize on the ‘how.’

CBRE Global Workplace Solutions Client

The new purpose of the office

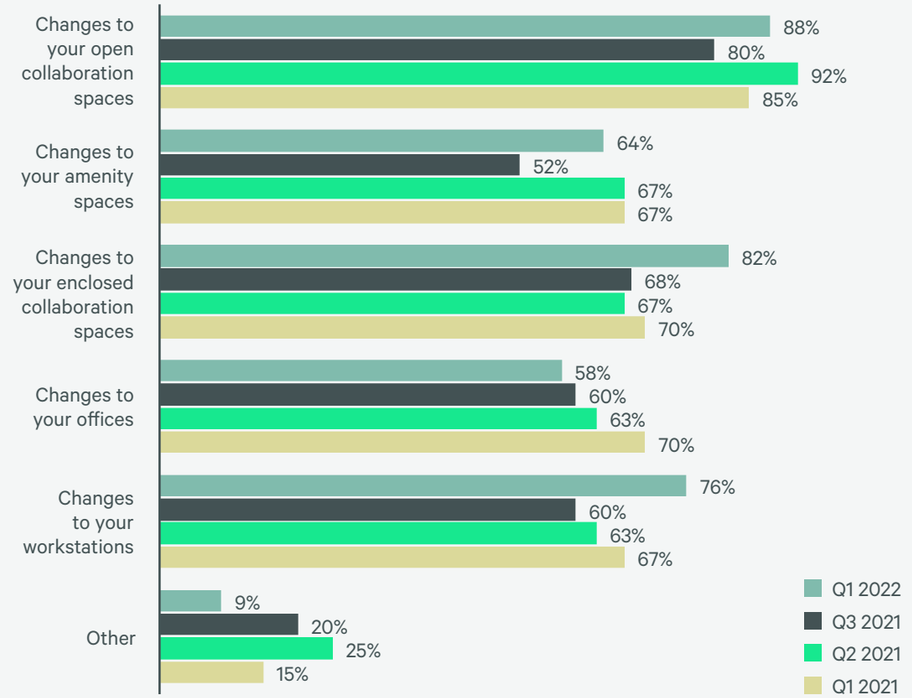
Offices are being repositioned to provide tools, spaces and experiences that can't easily be replicated elsewhere. Sixty-nine percent of respondents have revisited their workplace design standards over the course of the pandemic. During that time, over 85% have focused on changes to their open and enclosed collaboration spaces that support connection, which is the primary reason employees are coming to the office.

FIGURE 7: During the pandemic are you revisiting your current workplace design standards?



Source: CBRE Occupancy Management Pandemic Surveys 2021-2022.

FIGURE 8: If yes, what are those workplace design standard changes?



Source: CBRE Occupancy Management Pandemic Surveys 2021-2022.

Designing for the new purpose of the office

Workplaces require new planning concepts informed by employee needs and space utilization patterns. These concepts rebalance the allocation of private “me” space and community “we” space to improve flexibility, equitable collaboration for employees working remotely and face-to-face interactions.

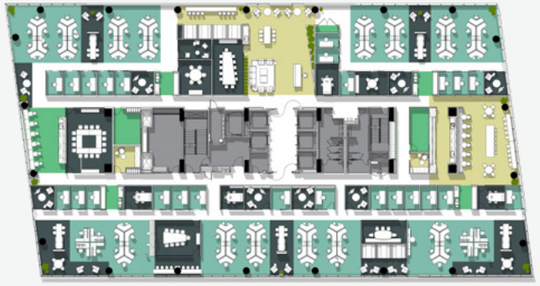
When comparing respondents’ existing portfolios with these new planning concepts, there’s a deficit of collaboration space and an excess of support space. A 25% year-over-year reduction in global "me" space indicates more organizations are making material progress in rebalancing portfolios to better support hybrid work.

25%

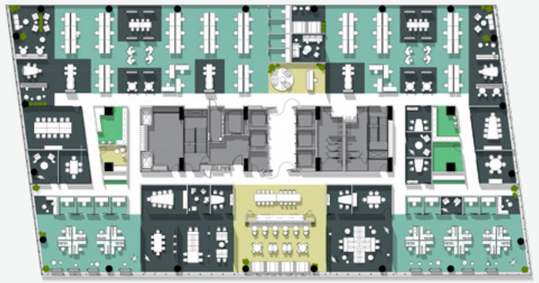
year-over-year drop globally in private "me" space

FIGURE 9: New workplace design concepts

Office-first work
Primary purpose: well-rounded productivity



Blended work
Primary purpose: team collaboration



Virtual-first work
Primary purpose: community building events

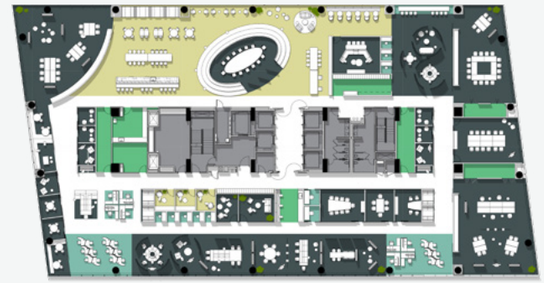
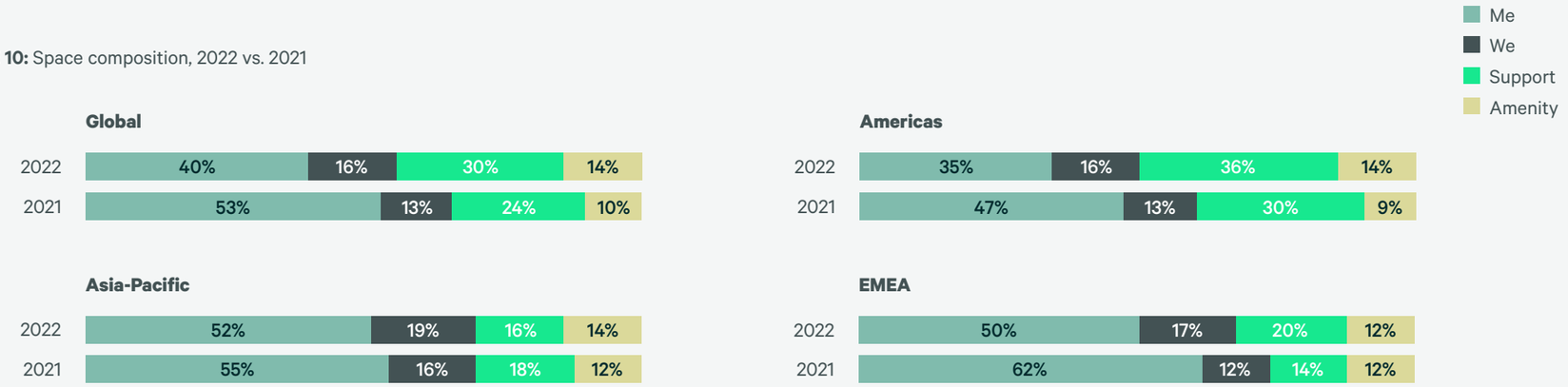


FIGURE 10: Space composition, 2022 vs. 2021

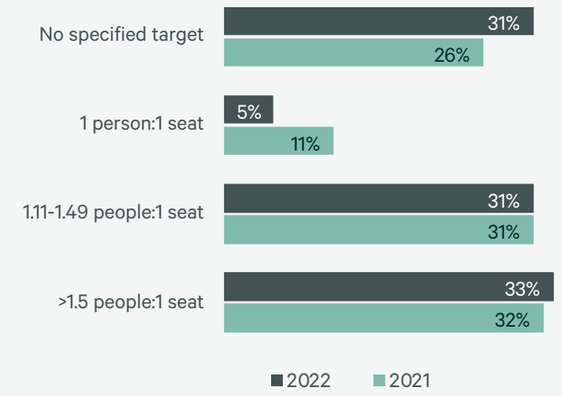


Source: CBRE 2022 Occupancy Benchmarking Program.

Optimizing sharing ratios

Sharing ratios are a key metric for companies seeking to optimize their portfolios. More than a third of respondents target a sharing ratio above 1.5 to 1. Thirty-one percent of respondents have not specified a target sharing ratio, potentially missing a significant opportunity to optimize their portfolio. Sharing ratios are a critical planning concept that enables hybrid working, cost savings and space consolidation initiatives. Space sharing efficiencies will vary depending on employee preferences and hybrid work strategies. Utilization data can help determine the right sharing ratio based on measurable employee habits and preferences.

FIGURE 11: Global target sharing ratios, 2022 vs. 2021



Source: CBRE 2022 Occupancy Benchmarking Program.

What is a sharing ratio?

A sharing ratio is the relationship between the number of employees that can share one space over time. For example, a sharing ratio of 1.5 to 1 means a single shared space is needed for every 1.5 employees. Sharing ratios greater than 1 to 1 are frequently used in hybrid strategies. This is often referred to as desk sharing, activity-based working, free address, hot desk or hoteling.

1:1 sharing ratio

1.5:1 sharing ratio

5:1 sharing ratio

31%

of respondents do not have a specific space sharing target, a 19% increase from 26% in 2021

5%

of respondents target a 1:1 space sharing ratio, a 55% decrease from 11% in 2021

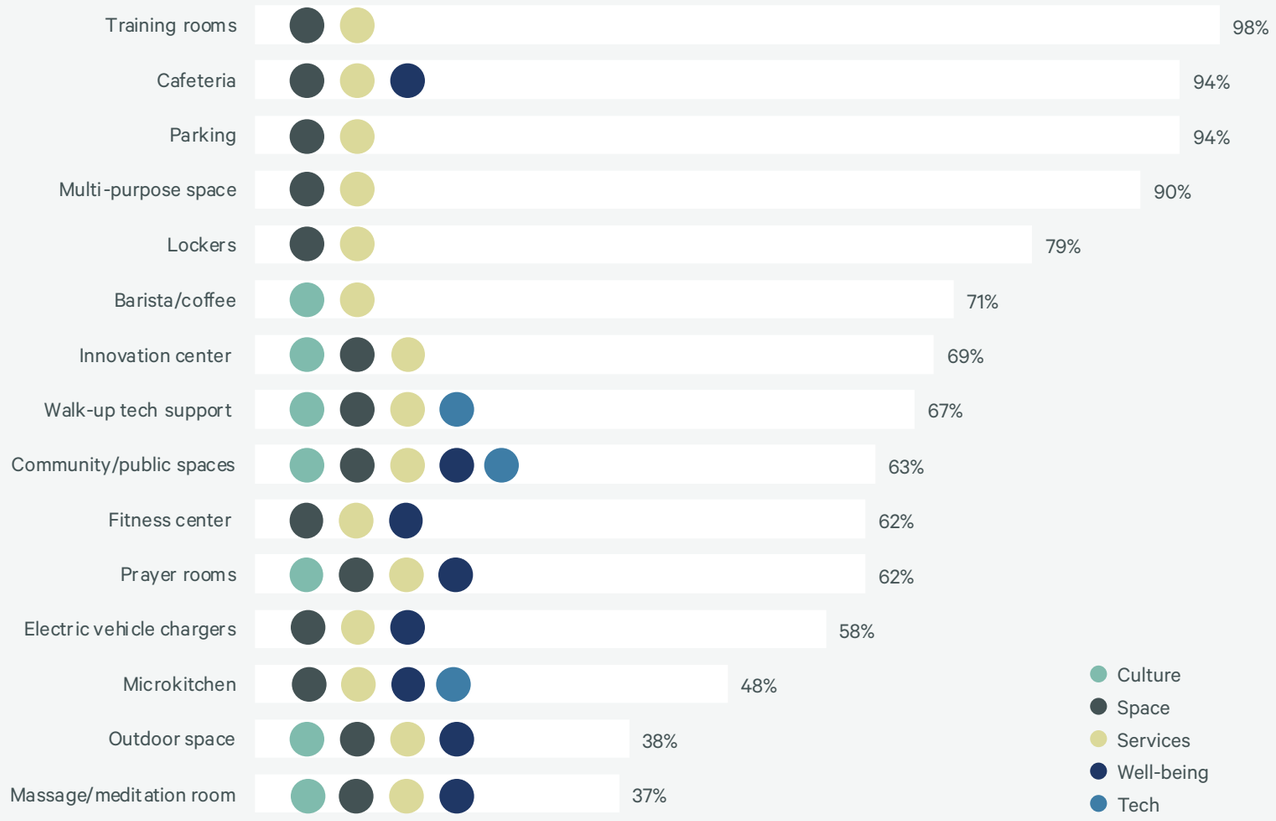
33%

of respondents have a target space sharing ratio >1.5:1, a 3% increase from 32% in 2021

Spaces that attract people to the office

Future workplaces will be designed with collaboration and socialization in mind to match new work styles. To compete with the allure of working from home, occupiers will implement hospitality-inspired experiences in the office.

FIGURE 12: Which of these specialty spaces or amenities are currently offered at your headquarters (global, regional business unit) facilities?



Source: CBRE 2022 Occupancy Benchmarking Program.

“The most important amenity in the return to the office is other employees.”

Lenny Beaudoin
Executive Managing Director
CBRE Workplace Strategy

Flexibility requires presence awareness

Hybrid work policies mean employees must collaborate in both physical and digital work environments. Presence awareness, or the importance of building transparency and predictability around where and when employees are working, is critical to ensuring meaningful workplace interactions.

To foster presence awareness, consider deploying employee experience apps that leverage existing reservation, occupancy and utilization data. This provides workers a single source for navigating the office, accessing office-based services and connecting to teammates with flexible schedules.

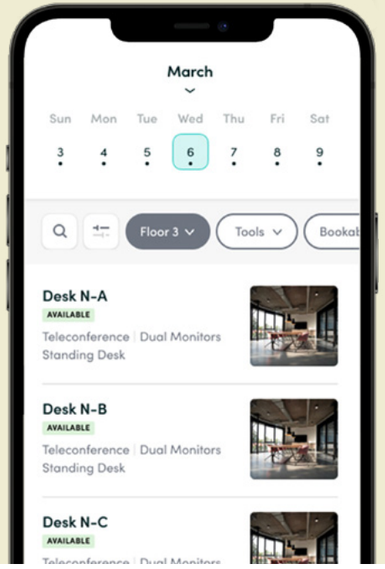
The benefits of employee experience apps

Employee experience apps bring the office to life for hybrid workers. By making workplace information and resources easier to access, they can increase the value of time spent in the office. Benefits include:

ENHANCED WORKPLACE EXPERIENCE
Easily deliver news and information to employees, including articles, building information, content templates and event calendars or registration.

SUPPORTED PRODUCTIVITY
Help employees discover and use the right workplace resources, including room and desk bookings, in-office and campus wayfinding, onsite and local dining information, and service or concierge requests.

DATA-DRIVEN INNOVATION
Use employee experience data and analytics to optimize the workplace, such as discovering which rooms and space types are most and least used.



92%

of respondents have a reservation system for meeting rooms, up from 81% 2021

62%

of respondents are implementing employee experience technologies, up from 60% 2021

54%

of respondents have a reservation system for shared/hoteling seats double 2021's mark

Integrating the physical and virtual work environments

Hybrid working requires technologies that span physical and virtual environments. Integrating workplace technologies that interact with the built environment and work productivity tools that connect employees is key to creating holistic work experiences that transcend the workplace to enable work from virtually anywhere.

WORKPLACE TOOLS CONNECT PEOPLE WITH SPACE AND SERVICES

To drive meaningful workplace interactions, employees need to know who is present and which spaces and amenities will be available when working on-site. Workplace technology tools help workers find colleagues, reserve work and meeting spaces, and navigate building amenities while in the office.

Workplace technologies that support interaction with the built environment:

- Employee experience apps
- Reservation/booking systems
- Building navigation and wayfinding systems
- Occupancy sensors
- SMART building technologies

PRODUCTIVITY TOOLS DRIVE COLLABORATION AND CONNECTION

Productivity technologies, such as enhanced video conferencing tools and asynchronous communication platforms, connect office-based and remote workers.

Productivity technologies that support employee connection and information sharing:

- Enhanced video conferencing
- Asynchronous communication platforms
- Information management systems
- Process management applications

04

Modern metrics measure reality

The metrics that matter most

For the second year in a row, utilization is the metric that matters most, with cost per seat, design density and vacancy tied for second place.

These results reflect the increased focus on metrics that measure the space efficiencies of hybrid working. The importance of people density rose 27% year-over-year, while both space-sharing ratios and reservation rates spiked more than 200%. While the emphasis on the cost per seat remained steady, both design density and vacancy decreased 25%, suggesting these metrics will be less meaningful as hybrid working evolves.

Utilization will continue to dominate occupancy metrics as the data informs workstyle personas, employee experience programs and portfolio optimization strategies. The focus on the cost per seat will likely continue if economic uncertainty persists through 2023.

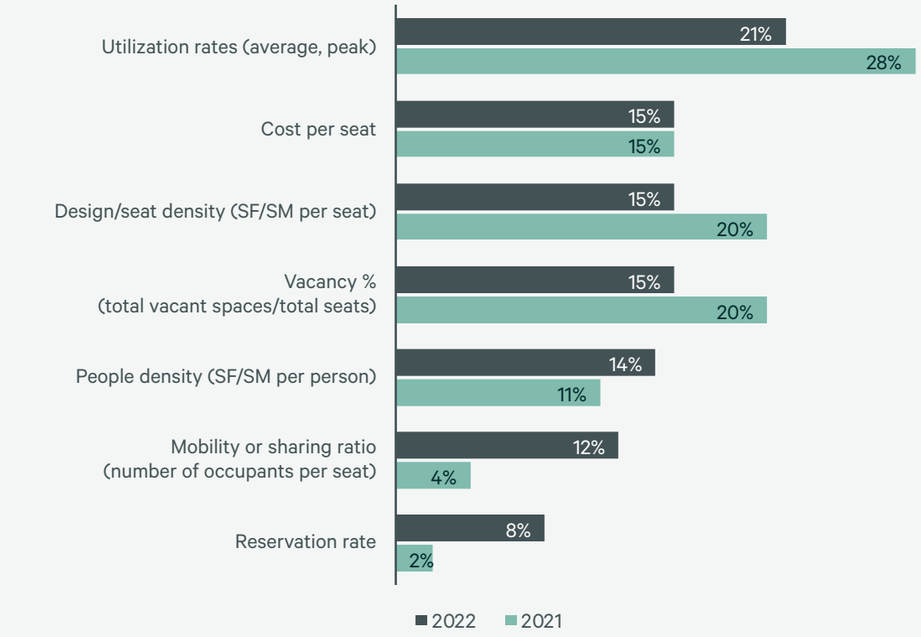
89%

of respondents use utilization data in scenario development, up from 74% in 2021

58%

of respondents plan to increase the use of utilization data for planning

FIGURE 13: Occupancy metrics that matter the most



Source: CBRE 2022 Occupancy Benchmarking Program.

The key occupancy metrics

Corporate real estate teams are using these five key data points—utilization, sharing ratio, design density, vacancy and people density—to assess the performance of their office portfolios.

FIGURE 14: Top five office occupancy benchmarks in 2022

Source: CBRE 2022 Occupancy Benchmarking Program.

From measuring a plan to measuring reality

Traditionally, occupancy metrics measured how a company plans to use space. For example, density metrics measure the efficiency of a design or occupancy plan, while vacancy and occupancy rates measure how space is assigned or allocated to teams and individuals.

Economic uncertainty and hybrid work are placing new emphasis on quantifying the cost of underutilized space. As a result, corporate real estate leaders *need to measure the way space is planned and how space is used in real life*. Utilization data is the key to understanding the new realities of hybrid working environments.

FIGURE 15: Measuring a plan versus measuring reality

		Measures how space is intended to be used (measures a plan)	Measures how space is used (measures reality)
Capacity	The total number of seats (e.g., workspaces like offices or workstations)	✓	
Design density (sq. ft./sq. m. per space)	The total rentable or usable sq. ft. or sq. m. divided by the total number of seats.	✓	
People density (sq. ft./sq. m. per person)	The total rentable or usable sq. ft. or sq. m. divided by the total headcount.	✓	
Sharing ratio (mobility)	A planning concept that identifies the number of people that can share a single seat over time. For example, a sharing ratio of 1.5:1 means that for every 1.5 people a single shared space is needed.	✓	
Vacancy % (assignable only)	The total number of seats not assigned to an individual headcount or business unit divided by capacity of assignable seats.	✓	
Utilization rate (capacity based)	The number of people using a space over a period of time divided by the capacity of the space.		✓
Utilization rate (time based)	The time a space is occupied divided by the total time a space is available to be occupied.		✓

Source: CBRE 2022 Occupancy Benchmarking Program.

91%

of respondents use utilization data for occupancy planning, up from 74% in 2021

Utilization measures space efficiency

Utilization data is usually captured at the building level using badge swipe data from existing security systems. Capturing utilization at the building level is often referred to as a show-up rate since it identifies how many people came in, but not necessarily how long they were on site.

Building-level utilization is a powerful way to measure how efficiently a building or portfolio is used on a macro level, but is not granular enough to provide insights on use patterns and employee preferences within a building.

Sensors and Wi-Fi data provide both macro and micro level data since they can measure real-time utilization for individual spaces and groups of spaces (including workspaces, rooms, neighborhoods and zones). Using sensors provides a consistent and accurate way to understand which space types are used most often.

Occupancy is not utilization

Hybrid work challenges traditional planning methods, which focus on office occupancy rather than utilization. What's the difference between the two? While occupancy measures how a space is used at a single point in time, utilization measures how a space is used over a period of time. Occupancy has traditionally referred to the assignment of a space to a person or team for their exclusive use. The occupancy rate was the primary metric for measuring portfolio performance because space planners assumed that an assigned space wasn't shared and would be used. As assignable and shared spaces are mixed in hybrid environments, utilization is the more effective metric to evaluate portfolio performance.

Top five sources of utilization data

The five most common sources of utilization data offer varying levels of granularity and accuracy. The use of visual observations dropped to 34%, from 56% in 2021, a pattern which will likely continue as data accuracy is prioritized and pricing for sensors continues to fall.

FIGURE 16: Top five sources of utilization data

Badge swipes

Existing data source that is free and ubiquitous but lacks accuracy or precision. Not anonymous.

91%

▲ 15% increase from 79% in 2021

Visual observations

In-person walkthrough to understand utilization levels and capture human behavior. Insights are useful for one-off projects.

34%

▼ 39% decrease from 56% in 2021

WI-FI & network analysis

Existing data source that is not free but is ubiquitous. Accurate but not precise. Not anonymous.

32%

▼ 30% decrease from 46% in 2021

Ceiling-mounted area sensors

New data source focused on utilization in a specified area or zone. Anonymous and accurate. Hardwired installation or battery operated.

23%

Threshold sensors

New data source focused on understanding total building or floor utilization. Anonymous and accurate. Permanently installed.

15%

▼ 17% decrease from 18% in 2021

Source: CBRE 2022 Occupancy Benchmarking Program.

70%

of respondents use more than one method to track utilization, up from 59% in 2021

Why utilization measurement is changing

Prior to the pandemic, utilization data was used primarily for space optimization and densification efforts. The initial response to the pandemic prompted a wave of interest in measuring occupancy and utilization to support social distancing and workplace re-entry. Now, utilization data is used to track return-to-office progress, employee work preferences and habits.

Badge swipe data provides high-level insights into how buildings are being occupied and is the default input for portfolio planners when reviewing the supply and demand of space. However, there's been a decrease in organizations attempting to use Wi-Fi and network analysis, mostly due to the accuracy of the outputs, which can be skewed by the use of multiple devices, and the time-consuming, complex set-up required, which is further complicated by internal data collection approvals and processes.

There's now a focus on leveraging utilization data to craft new work experiences. Identifying where employees work can help planners ensure they have meaningful interactions in the office by locating related personnel and amenities nearby.

Utilization data will also play a key role in assessing the quantity, quality and performance of spaces. There will be greater focus on quantifying space demand based on actual use patterns and to justify investment in technology and design changes based on measurable work habits. Utilization data will also be integrated into building automation systems to help power smart buildings. In 2023, the demand for sensor-based utilization data will increase as companies seek more granular data to identify cost efficiencies and guide ESG commitments.

Demand for sensor-based utilization data will increase as companies seek more granular data to identify cost efficiencies and guide ESG commitments.

The business case for utilization

Many organizations struggle with articulating the value of utilization data, so such efforts fail to gain organizational support or funding. Investments in utilization sensors and analytics tools may appear expensive when considered in isolation. However, contextualizing the benefit of utilization data in terms of supporting and meeting business objectives strengthens the business case:

OPTIMIZE SPACE

Validating new demand for space is critical to portfolio management in hybrid work environments. Utilization data quantifies actual space demands and identifies the type of spaces workers prefer.

IMPROVE WORKPLACE EXPERIENCE

Empowering employees to choose where, when and how they work improves their experience, which ties directly to engagement and retention.

REDUCE ENVIRONMENTAL IMPACT

Using utilization data to optimize HVAC systems to improve comfort levels while managing energy spend and carbon reduction more effectively.

INCREASE OPERATIONAL EFFICIENCY

Integrating utilization with building management and control systems can automate a building's response to occupancy changes and environmental factors.

DRIVE FINANCIAL SAVINGS

Optimizing space and increasing operational efficiency can reduce ongoing occupancy and operational costs.

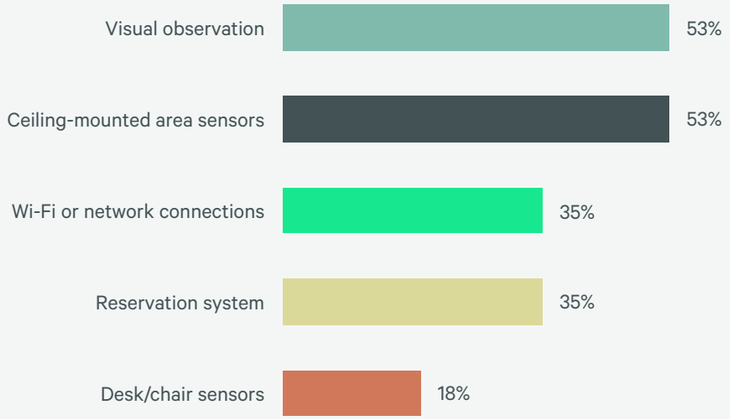
Utilization data plays a key role in assessing the quantity, quality and performance of spaces.

Utilization also measures employee experience

Understanding how space is used helps identify space optimization and workplace experience improvements based on employee preferences and work patterns. By tracking how improvements impact space utilization over time, organizations can quantify the value created in workplace design, technology and experience investments.

Thirty-six percent of respondents track utilization in collaboration or amenity spaces. While most organizations still rely on visual observations for this data, ceiling-mounted area sensors are the most popular technology tool for automating the capture of utilization data.

FIGURE 17: Utilization data sources for collaboration spaces in use



Source: CBRE 2022 Occupancy Benchmarking Program.

36%

of respondents track utilization in collaboration or amenity spaces

Understanding how space is used helps identify space optimization and workplace experience improvements based on employee preferences and work patterns.

How hybrid working impacts metrics and reporting

The rising dependence on utilization data is not the only change to occupancy metrics. Traditional occupancy reporting, terms and metrics are being updated to measure new ways of working.

36%

of respondents track utilization in collaboration spaces, a 38% increase from 26% in 2021

50%

of respondents charge back for space, a 28% reduction from 69% in 2021

Utilization rate

Q: *If hybrid and remote workers primarily use collaboration and meeting space when in the office, should you be measuring utilization in those spaces?*

A: Workers are no longer tethered to a desk. Measure utilization in work, collaboration and amenity spaces to understand portfolio performance and which space types best support new work styles.

Vacancy rate

Q: *If shared workspaces are never assigned to a person or team, should they be counted in the vacancy rate?*

A: Including unassignable spaces in your vacancy reporting may create the impression that those spaces are available for assignment to a person or team. Consider tracking assignable and unassignable workspaces separately to avoid inflating vacancy rate reporting.

People density (sq. ft./sq. m. per person)

Q: *When talking about people density, should hybrid and remote workers who regularly visit the office be part of headcounts?*

A: Real estate leaders should consider the full worker population regularly accessing a location to target the right services and space types needed for on-site work, collaboration and socialization.

Chargeback methodology

Q: *Can you optimize space by creating neighborhoods of "free" shared space? Would eliminating chargebacks encourage space sharing across teams?*

A: Consider creating neighborhoods of commonly held reservable workspaces that are not allocated to one team to promote space sharing. Explore the benefits of eliminating chargebacks or transitioning to a pay-per-use methodology based on utilization data.

New occupancy metrics for new ways of working

To measure portfolio performance more effectively in hybrid environments, CBRE has refined the terms and metrics in its Occupancy Benchmarking program. This includes updating terms in the context of hybrid working and adding new terms and metrics.

FIGURE 18: Updated terms for select occupancy metrics

Updated term: Headcount

The total number of people that are planned to access an office location over time. Accounts for the full population including people assigned a seat, hybrid workers who share seats and virtual workers who access the office on a regular basis.

New term: Design capacity

The number of total physical seats that can be used at any one point in time. Includes dedicated and shared seats. Organizations with hybrid working strategies may include collaboration spaces in this number.

Design capacity = total count of dedicated seats + total count of shared seats

New term: Sharing capacity

The maximum number of people that can be planned to use seats over time. Unlike design capacity. sharing capacity takes in to account the sharing ratio of shared seats to quantify the full planning opportunity.

Sharing capacity = total count of dedicated seats + total count of (shared seats x sharing ratio)

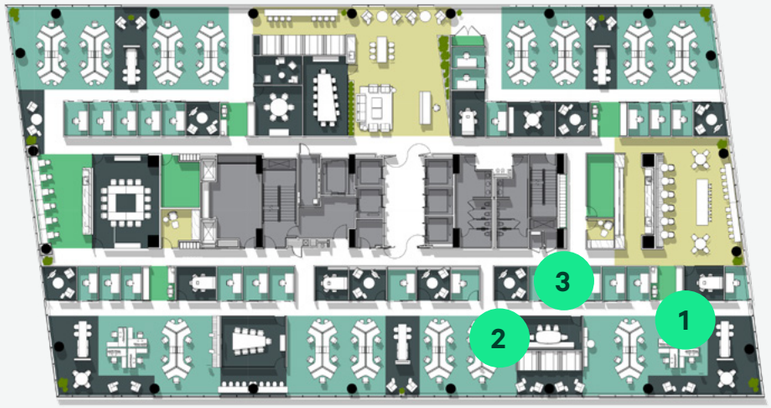
New metric: Sharing efficiency

A planning concept that quantifies the efficiency gained by applying a space sharing ratio(s) in a hybrid work environment.

Sharing efficiency = (headcount / design capacity) – 1

Note: See the Appendix for more definitions of the terms contained in this report.
Source: CBRE 2022 Occupancy Benchmarking Program.

FIGURE 19: Example of new terms used in an office-first planning concept



	1 Hoteling spaces	2 Shared spaces	3 Assignable spaces
Total headcount: Total 125	20 remote workers	80 hybrid workers	25 office-based workers
Design capacity: Total 103	8	70	25
Sharing ratio	2 people : 1 seat (2:1)	1.5 people : 1 seat (1.5:1)	1 person : 1 seat (1:1)
Sharing capacity: Total 146	16	105	25

This sharing strategy is 21% more efficient than dedicated (1:1) seating

Source: CBRE 2022 Occupancy Benchmarking Program.

Driving data quality through integration

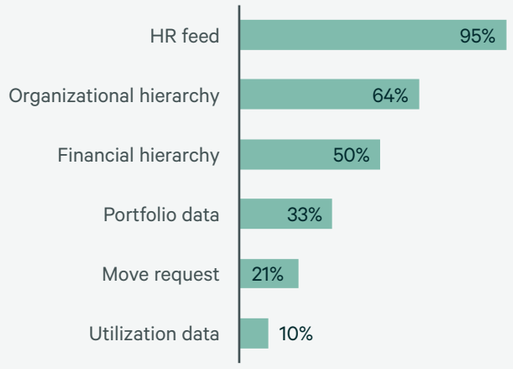
Modern occupancy metrics rely on data from multiple parts of a business. Integrating these data sources directly with a company's space data management system, or indirectly through a data warehouse or data lake, helps automate planning processes and improve data quality.

FIGURE 20: How data is integrated

Inbound data feeds

86%

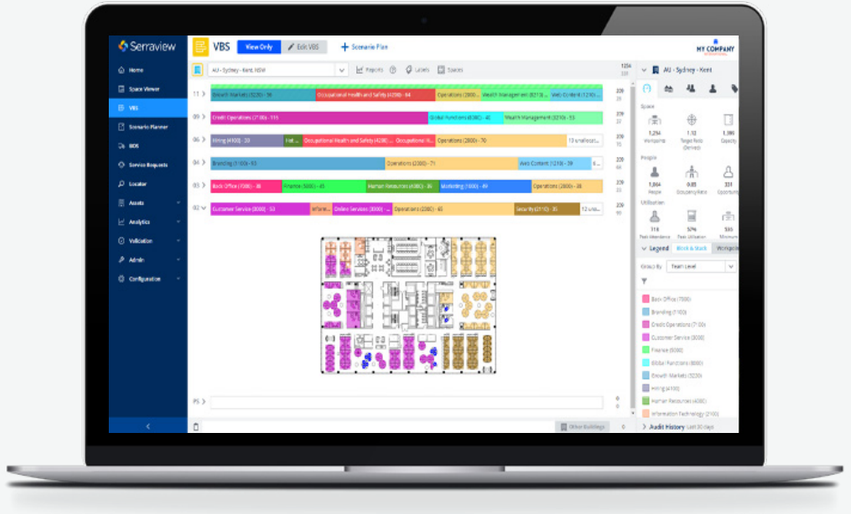
of respondents' CAFM or IWMS system have automated data feeds to receive data from upstream systems



Space data management system

94%

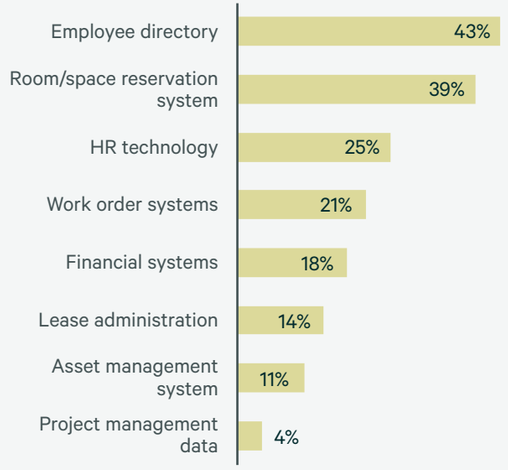
of respondents use a space data management system (e.g., CAFM, IWMS, or point solution), a 2% increase from 92% in 2021



Outbound data feeds

57%

of respondents are automatically feeding occupancy data to send data to downstream systems

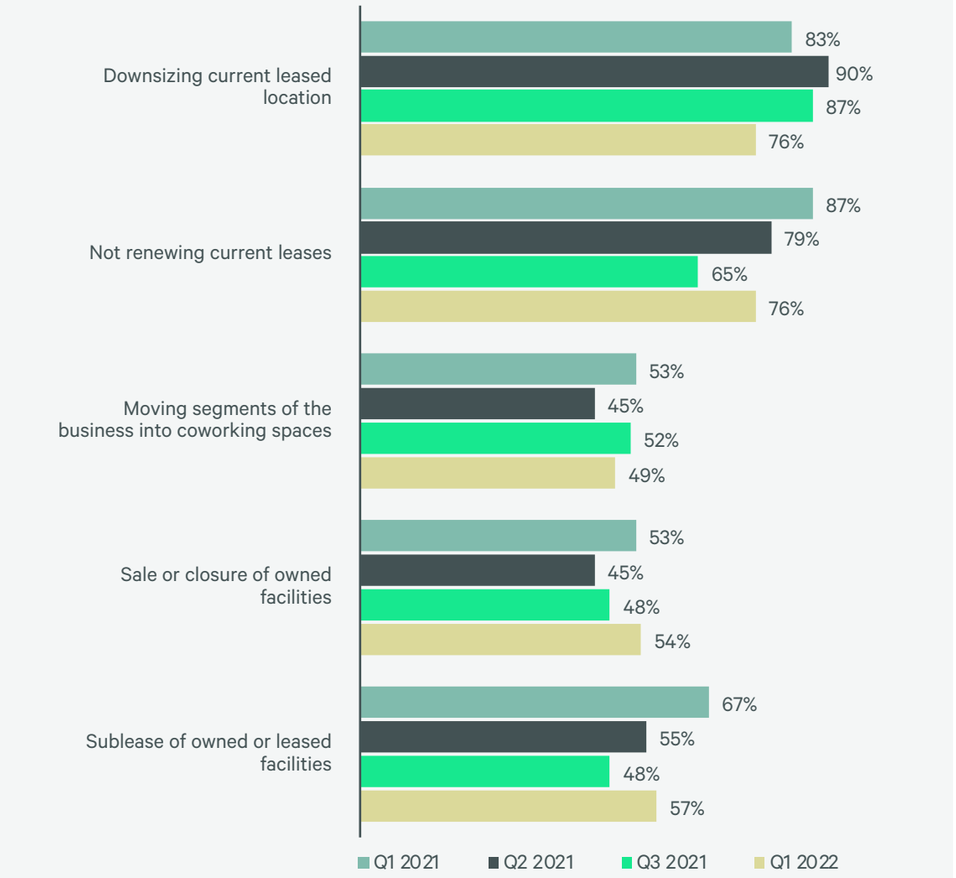


Source: CBRE 2022 Occupancy Benchmarking Program.

Modern metrics enabling portfolio optimization

In Q1 2021, CBRE launched a survey of Occupancy Management clients to understand return-to-office trends. Seventy-seven percent of respondents planned portfolio optimization projects during the pandemic. While most optimization methods focused on reducing space, recent conversations have shifted to strategies for rebalancing and maximizing space—most notably, space-sharing strategies that can accommodate future business growth within existing spaces. While space optimization strategies are shifting, each approach relies on utilization data.

FIGURE 21: Design changes during the pandemic



Source: CBRE 2022 Occupancy Benchmarking Program.

77%

of respondents are optimizing their portfolio during the pandemic

05

Data management is risk management

Occupancy data plays a key role in business continuity

Real estate decision-makers relied heavily on occupancy data during the pandemic, from early measures to bring essential workers back into the office, to return-to-office planning, to reshaping work experiences to support hybrid working.

Through the journey, occupancy management helped drive business continuity and minimize operational risk, partnering with the C-suite, human resources, business units, information technology teams and other stakeholders.

Many stakeholders now view space occupancy and utilization data as an essential tool for business continuity and safety planning to mitigate operational risks caused by geopolitical conflicts, extreme weather and public health emergencies. The same data is critical to designing hybrid working and employee experience programs based on employee preferences and work styles. As a result, there's an increased focus on workplace data quality and technology investments as occupancy data is used to develop business strategies beyond the real estate portfolio.

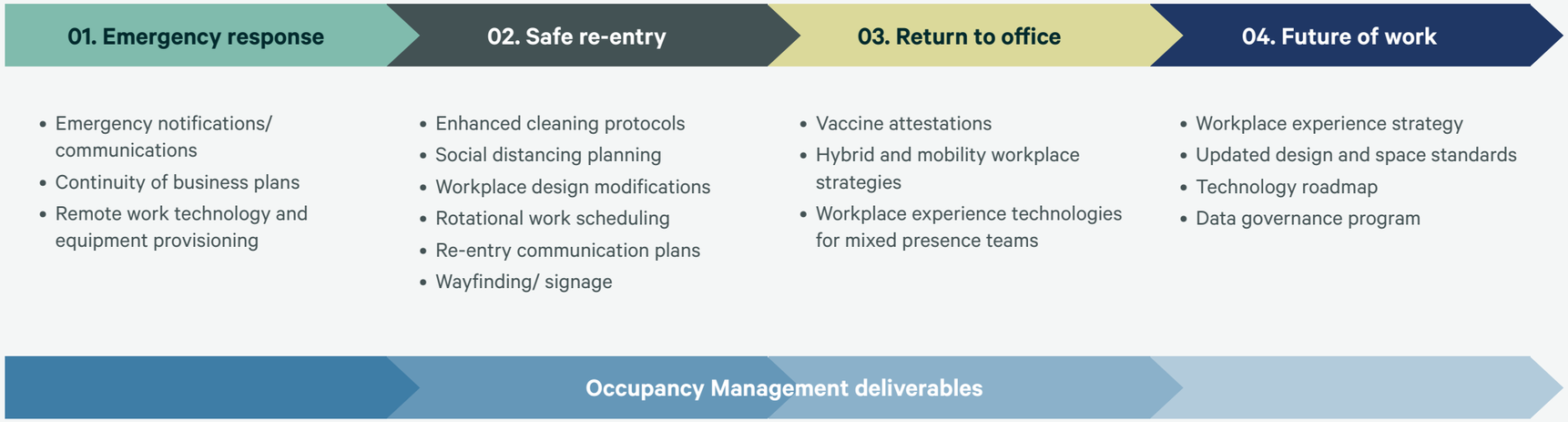
44%

of Occupancy Management team leads are involved in the real estate decision-making process

Being prepared means maintaining your data

Teams are now considering the post-pandemic future of work armed with lessons learned over the last two years. Many companies who struggled with HR and space data for pandemic response and re-entry planning are considering data management and technology solutions to minimize future operational and safety risks.

FIGURE 22: Phases of pandemic response



Source: CBRE 2022 Occupancy Benchmarking Program.

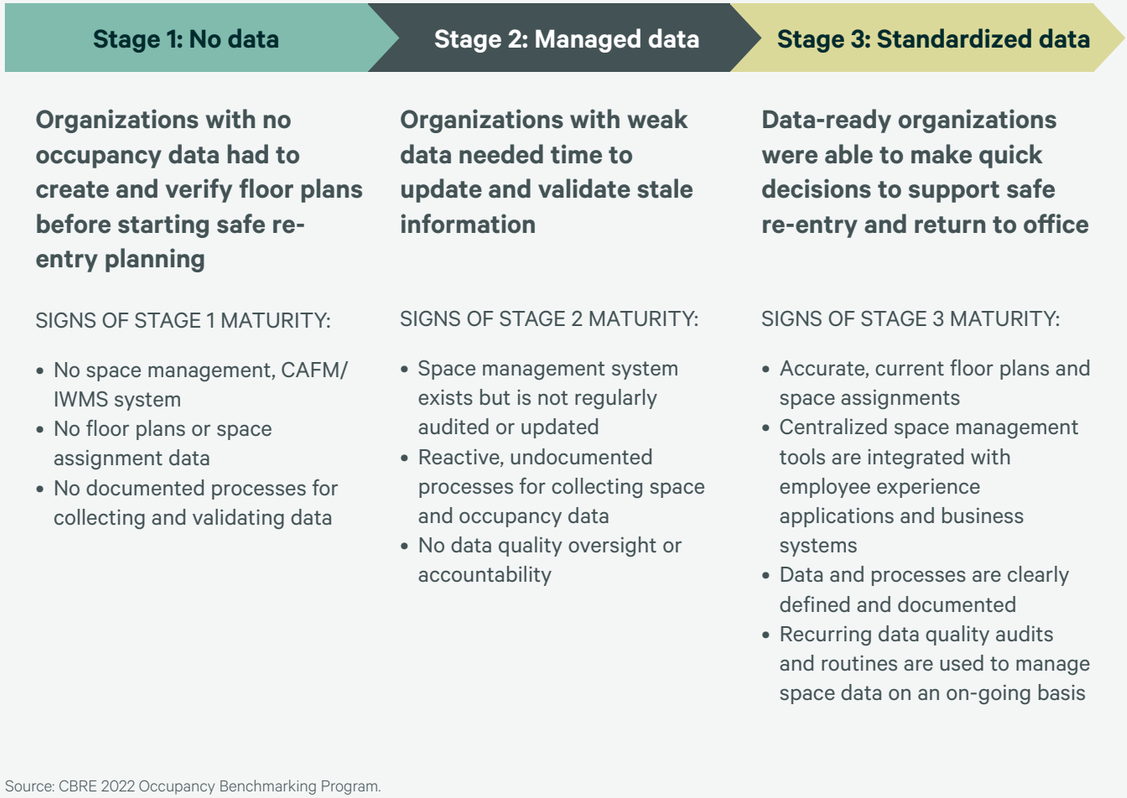
Data maturity key to success

The rapid speed of the COVID-19 outbreak highlighted the importance of data maturity in business continuity planning. Companies with low levels of data maturity struggled with safely returning essential workers and return-to-office planning. Without up-to-date floor plans and space assignments, it was difficult to know who could safely be brought back while maintaining safe social distancing. By contrast, data-ready teams emerged from the pandemic as valued partners within their organizations because their trusted data enabled quick decision making.

Overall, 65% of respondents made improving data accuracy a goal for 2022. For some organizations, improving data accuracy will focus on implementing or strengthening a data governance program while others may invest in integrating space data management systems.

65% of respondents made improving data accuracy a goal for 2022.

FIGURE 23: Stages of space and occupancy data maturity



Source: CBRE 2022 Occupancy Benchmarking Program.

Four steps toward quality data

01

Establish a data governance program

Start by creating an end-to-end framework for gathering, storing and delivering data. While this will look different for every organization, best practices include creating data standards, identifying critical business data and generating data quality rules. Implementing a data governance program should include a change management plan to train, build support and drive adoption across stakeholder groups.

02

Document the data in your process

Leverage a workflow management tool to document how critical data is gathered, stored or delivered during a process. This not only clarifies how the data is used and by whom, it creates transparency so data can be gathered or updated if needed to respond to emergency situations.

03

Integrate data streams

Integrating systems automates data transfers to speed process execution and eliminate the risks of manual data entry. As the number of systems sharing data increases, an organization may establish a centralized data warehouse, making it easier for separate systems to contribute and feed from a single source.

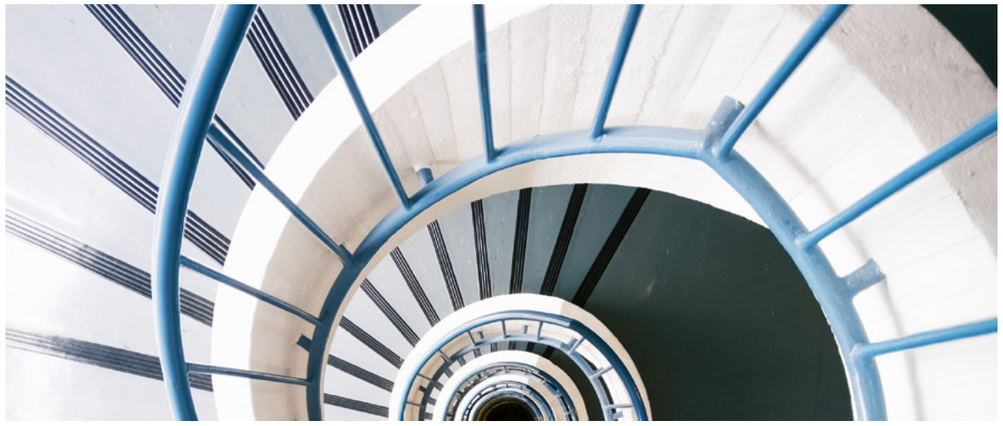
04

Rinse, repeat and fine-tune your program continuously

A strong data management program takes time and needs continuous improving and ongoing communication and realignment with key stakeholders as enterprise goals evolve.

91%

of respondents are conducting recurring data accuracy audits as part of their data management routines, 78% of which are automated



06

Outlook

Signals to watch in 2023

Work styles and the purpose of the office have been forever changed by the pandemic.

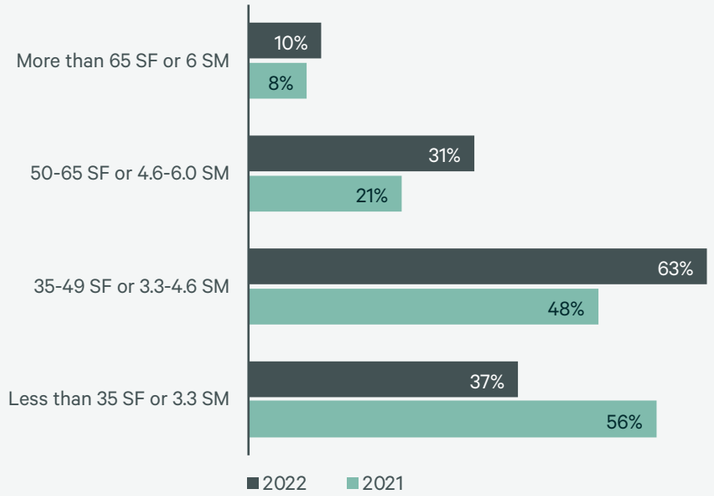
While the full extent of these changes are not yet measurable, patterns are emerging that will redefine workplaces in the years to come. The following questions highlight some of the signals to monitor in 2023.

It's likely that workstations will grow in size but shrink in quantity.

Will workstations get bigger?

In 2021, workstation sizes under 35 sq. ft. (3.3 sq. m.) were the most common. In 2022, workstations ranging from 35 to 49 sq. ft. (3.3 to 4.6 sq. m.) are the most common. It's likely that workstations will grow in size but shrink in quantity as users become more comfortable with space sharing.

FIGURE 24: Standard workstation sizes

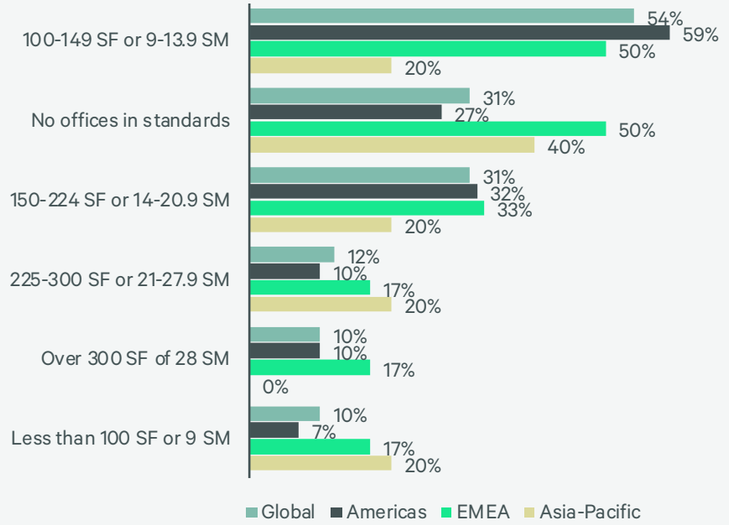


Source: CBRE 2022 Occupancy Benchmarking Program.

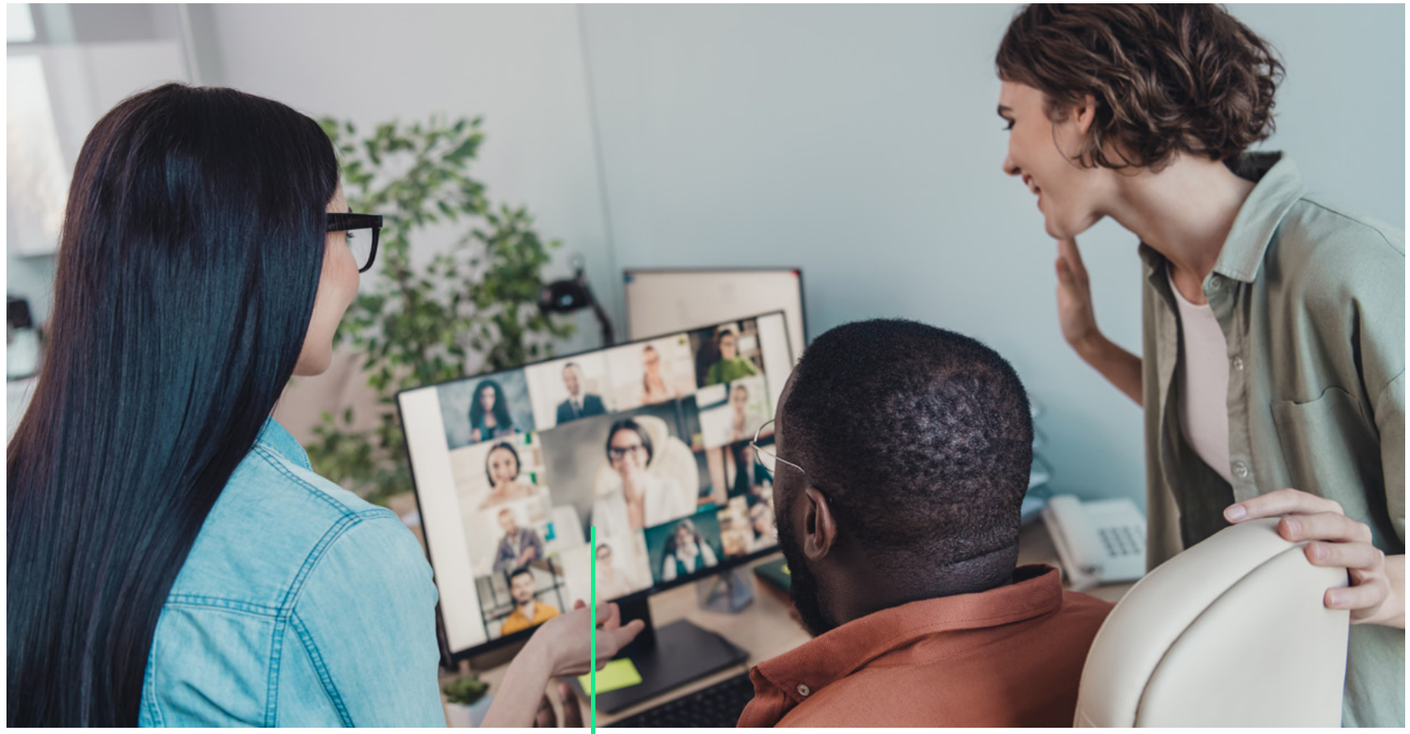
Are private offices going away?

Thirty-one percent of respondents do not provide offices in their standards, up from 25% in 2021. Since organizations create standards for their most common space types, this suggests private offices may be falling out of favor, resulting in fewer of them as companies repurpose those spaces as reservable shared offices and provide enclosed collaboration spaces such as huddle rooms. Private spaces remain important, however, and organizations will continue to provide them in various formats.

FIGURE 25: Standard office sizes



Source: CBRE 2022 Occupancy Benchmarking Program.



Hybrid working will become the default work model for knowledge workers globally.

Will hybrid work continue to grow?

Seven out of 10 respondents plan to expand their hybrid working program over the next three years. This indicates that hybrid working will become the default work model for knowledge workers globally.

Will space chargebacks be eliminated?

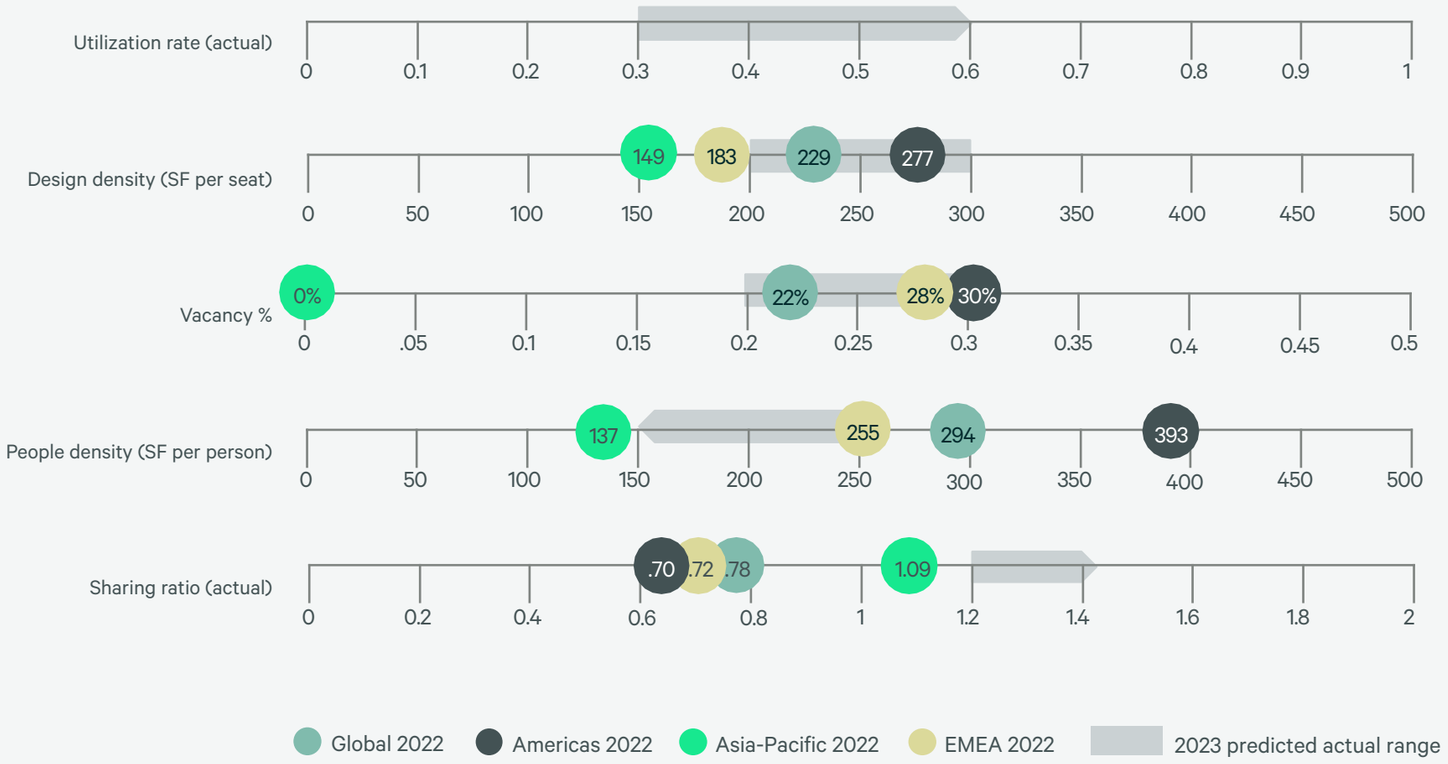
Twenty-eight percent of respondents are considering changes to their chargebacks in 2022. There is no evidence that chargebacks will be eliminated in the next two to three years, but the process is poised for disruption thanks to hybrid working. Recent increases in space-sharing and an emerging employee preference for collaboration areas over workspaces challenge traditional chargeback methodologies. This will likely speed the adoption of pay-as-you-go chargeback models that leverage space utilization and booking data.

Will office utilization return to pre-pandemic levels?

No for now, but eventually yes. According to a Q2 2022 utilization survey of five Fortune 500 multinational organizations, global office utilization has been slowly rising through 2022 but remains under 40%. By Q3 2023, multiple parallel activities will change utilization rates. Return-to-office projects and more settled hybrid work patterns will normalize utilization rates in the 30% to 50% range, under pre-pandemic levels of approximately 70%. By 2024, utilization rates should increase and headcount density decrease as office spaces are right-sized for hybrid working—chiefly by rebalancing of existing space to support more in-office collaboration and shedding of underutilized space. Right-sizing office portfolios will increase utilization rates closer to pre-pandemic levels as more efficient designs optimize space for new work patterns and preferences.

2023 predictions for office occupancy benchmarks

FIGURE 26: 2023 predictions for office occupancy benchmarks



Source: CBRE 2022 Occupancy Benchmarking Program.

The future of Workplace & Occupancy Management

Flexibility reinvents occupancy management

Near term
The pandemic highlighted the value of occupancy data in developing business strategies beyond the real estate portfolio. As a result, there is increased investment in data governance and system integrations to improve data quality and access, as well as workplace and productivity technologies that integrate physical and virtual work experiences to fuel collaboration.

This additional investment also speeds innovation in video conferencing, reshaping work, meeting and collaboration space design. These changes increase shared and common spaces, prompting some organizations to eliminate space allocation and chargebacks while others use utilization and reservation data to implement pay-per-use chargeback methodologies.

Long term
Artificial intelligence-powered occupancy management platforms and building information modeling (BIM) use utilization data to automate and predict demand and scenario planning, space allocations and space reservation recommendations.

Utilization data reframes portfolio performance

Near term
Corporate real estate leaders will seek to measure both the way space is planned and how space is used in real life, leading to wide adoption of utilization tracking across office portfolios. Employee preferences and utilization data will be used to quantify new space demand and identify space sharing opportunities, held vacancy and underutilized spaces.

Long term
Utilization data is used to measure employee experience and preferences that inform user personas and design standards. Over time, space designs are refined to better support worker needs, increasing utilization rates. This virtuous cycle has an unprecedented positive impact on portfolio optimization over time, creating portfolios and spaces that directly aligned with measurable user preferences and quantified space demand.

Digital twins shape the future of the workplace

Near term
BIM will become the norm for space data and building systems management. This facilitates the expansion of digital twins for modeling building operations and capital improvements.

Long term
Digital twins will include digital personas that use real-time utilization patterns to predict future behaviors and model space use scenarios. Predictions and real-time validation will drive new ways of designing and operating workspaces, with lower operational and financial risks, and reduced environmental impact of buildings. In the future, the 3-D modeling and data inter-operability standards established by digital twins will build the foundation of the Metaverse.

07

Appendix

Methodology

The content of this report is based on CBRE's Annual Occupancy Benchmarking Program, which combines quantitative and qualitative data to identify core occupancy metrics as well as modern working and workplace design trends.

In 2022, 60 organizations participated, representing 493 million sq. ft. (46 million sq. m.) across eight sectors in the Americas, Asia-Pacific and EMEA.

The program consists of two parts:

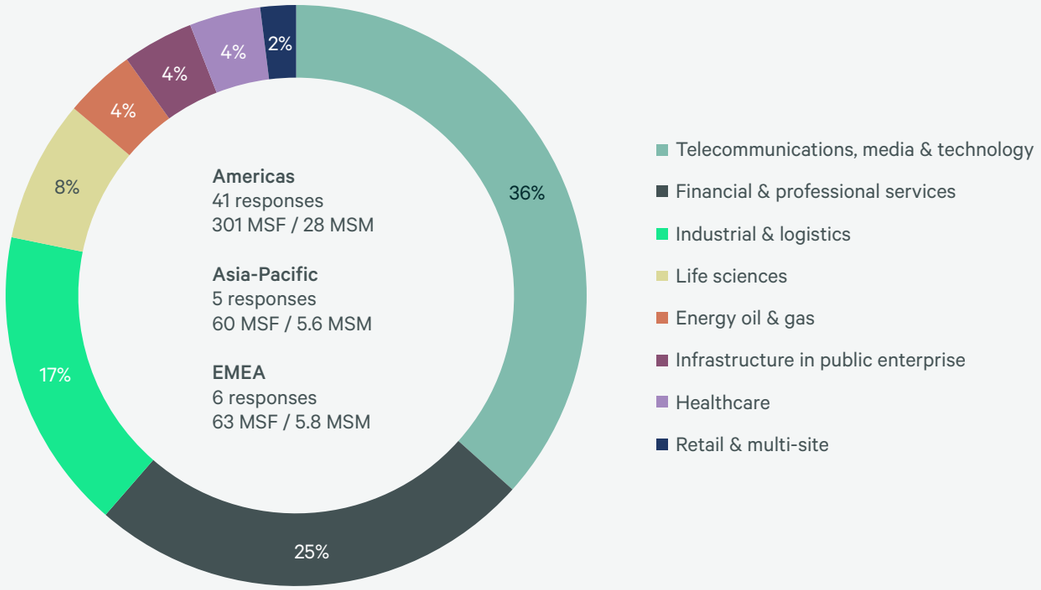
- A property benchmarking exercise that collects and analyzes anonymized space and occupancy data from across CBRE Occupancy Management clients.
- An extensive subjective survey of occupancy strategists and planners that explores evolving organizational priorities, design standards, and workplace programs, such as hybrid working, across CBRE clients.

Findings are supplemented with additional CBRE research and insights to contextualize their impact on Workplace and Occupancy Strategy trends for the year.

The results and findings of the subjective survey are based on data and responses from 48 global CBRE Occupancy Management client leads. We received 52 total responses (several clients teams had individual responses by region). Collectively, the clients participating in the Subjective Survey oversee 424 million sq. ft., or 39 million sq. m., of space across eight industries.

The 2021 and 2022 results will serve as a baseline for future studies to track ongoing shifts in space, occupancy, mobility and utilization trends.

FIGURE 27: Survey responses by sector



Source: CBRE 2022 Occupancy Benchmarking Program.

Glossary of terms

BUILDING INFORMATION MODELING (BIM)

Transitioning and maintaining data-rich 3D models from design and construction into the as-built operations environment.

CAFM

A computer-aided facility management (CAFM) system is used to plan, execute and track facility management activities including space and move management, floor plan/drawing management, asset management, reactive and planned preventative maintenance, and service requests.

DEDICATED SEAT

A workspace, such as a desk workstation or office, with a sharing ratio of 1 to 1.

DESIGN CAPACITY (NEW TERM)

The number of total physical seats that can be used at any one point in time. Includes dedicated and shared seats. Organizations with hybrid working strategies may include collaboration spaces in this number.

Design capacity = total count of dedicated seats + total count of shared seats

DESIGN DENSITY (SQ. FT./SQ. M. PER SEAT)

The total rentable or usable sq. ft. or sq. m. divided by the total number of seats.

HEADCOUNT

The total number of people that are planned to access an office location over time. Accounts for the full population including, people assigned a seat, hybrid workers who share seats, and virtual workers who access the office on a regular basis.

IWMS

An integrated workplace management system is a software platform used to manage the end-to-end life cycle of corporate facilities. It includes modules or capabilities for space and facilities management, real estate management and lease accounting, maintenance management, capital project management and sustainability and energy management.

SHARING RATIO (MOBILITY)

A planning concept that identifies the number of people that can share a single seat over time. For example, a sharing ratio of 1.5 to 1 means that for every 1.5 people a single shared space is needed.

OCCUPANCY RATE (ASSIGNABLE ONLY)

The total number of seats assigned to people or business units divided by capacity of assignable seats.

PEAK UTILIZATION

The highest utilization rate reached during a specified time period.

PEOPLE DENSITY (SQ. FT./SQ. M. PER PERSON)

The total rentable or usable sq. ft. or sq. m. divided by the total headcount.

RESERVATION RATE

The time a reservable space is booked divided by the total time a space can be booked.

SEATS

A dedicated or shared workspace such as a desk, workstation or office.

SHARED SEAT

A workspace, such as a desk workstation or office, with a sharing ratio greater than 1 to 1.

SHARING CAPACITY (NEW TERM)

The maximum number of people that can be planned to use seats over time. Unlike physical capacity, sharing capacity takes into account the sharing ratio of shared seats to quantify the full planning opportunity,

Sharing capacity = total count of dedicated seats + total count of (shared seat x sharing ratio)

SHARING EFFICIENCY (NEW TERM)

A planning concept that quantifies the efficiency gained by applying a space sharing ratio(s) in a hybrid work environment.

Sharing efficiency = (headcount / design capacity) – 1

UTILIZATION

A method of measuring the use of a space to determine if it is being used effectively

UTILIZATION RATE (CAPACITY-BASED)

The number of people using a space during a period of time divided by the capacity of the space.

UTILIZATION RATE (TIME-BASED)

The time a space is occupied divided by the total time a space is available to be occupied.

VACANCY RATE (ASSIGNABLE ONLY)

The total number of seats not assigned to an individual headcount or business unit divided by the capacity of assignable seats.

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