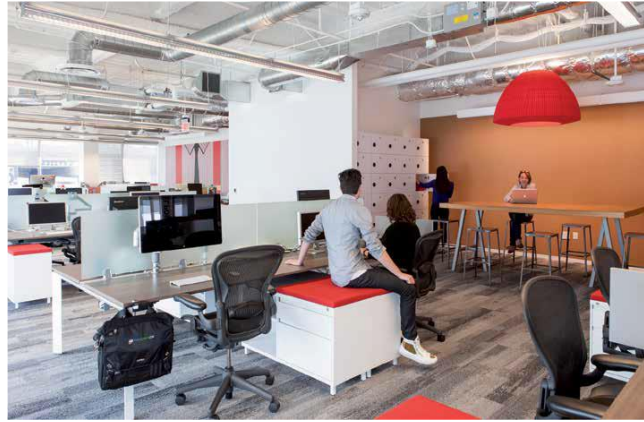


Demandas atuais dos espaços de trabalho

para o projeto e para a reabilitação de edifícios de escritórios

HOK FORWARD

WORKPLACE RESEARCH + TRENDS 2018
2018 | VOLUME 1



WELLBeing Value Proposition

Wellness initiatives improve employee satisfaction and retention, increase productivity and help companies achieve better return on investment.



Workplace Evolution

THE WAY WE WERE

THE WAY WE ARE

THE WAY WE COULD BE



*We foresee a shift from "space focused metrics"—such as square feet (SF) per person—to "human centric metrics," which include individuals' ability to successfully conduct activities that the business values, productivity, retention and attraction, user satisfaction, speed of decision making and well-being.



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Subject Areas:

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Keywords:

interaction, transparency, collaboration, communication, spatial boundaries, collective intelligence

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The impact of the 'open' workspace on human collaboration

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Organizations' pursuit of increased workplace collaboration has led managers to transform traditional office spaces into 'open', transparency-enhancing architectures with fewer walls, dividers and other spatial boundaries, yet there is scant direct empirical research on how human interaction patterns change as a result of these architectural changes. In two intervention-based field studies of corporate headquarters transitioning to more open office spaces, we empirically examined—using digital data from advanced wearable devices and from electronic communication systems—the effect of open office architectures on employees' face-to-face, email and instant messaging (IM) interaction patterns. Contrary to common belief, the volume of face-to-face interaction decreased significantly (approx. 70%) in both cases, with an associated increase in electronic interaction. In short, rather than prompting increasingly vibrant face-to-face collaboration, open architecture appeared to trigger a natural human response to socially withdraw from officemates and interact instead over email and IM. This is the first study to empirically measure both face-to-face and electronic interaction before and after the adoption of open office architecture. The results inform our understanding of the impact on human behaviour of workspaces that trend towards fewer spatial boundaries.

This article is part of the theme issue 'Interdisciplinary approaches for uncovering the impacts of architecture on collective behaviour'.

1. Introduction

Boundaries between 'us' and 'them' have long captured human interest. Yet even as social scientists continue to study the value of a vast array of boundaries [1], in an era in which the nature of work is changing [2–4], managers and organizational scholars have increasingly framed boundaries as barriers to interaction that ought to be spanned [5–8], permeated [9] or blurred [10] to increase collaboration. In the most physically salient and concrete example, 'spatial boundaries' [11] at work—such as office or cubicle walls—are being removed to create open 'unbounded' offices in order to stimulate greater collaboration and collective intelligence. Does it work?

Prior theory is divided—and empirical evidence mixed—on the effect that removing spatial boundaries has on human behaviour in the space previously within those boundaries (e.g. [12,13]). On the one hand, sociological theory presents a strong argument that removing spatial boundaries to bring more people into contact should increase collaboration and collective intelligence. The notion that propinquity, or proximity, predicts social interaction [14]—driving the formation of social ties and therefore information exchange and collaboration—is one of the most robust findings in sociology [15,16]. It has been observed in contexts as diverse as the US Congress [17,18], nineteenth-century boarding houses [19], college dormitories [14], laboratories [20], co-working spaces [21] and corporate buildings [22]. When spatial boundaries—such as walls—are removed, individuals feel more physically proximate, which, such theory suggests, should lead to more interaction. Such interaction is a necessary

Examine the effect of open office architectures on employees' face-to-face, email and instant messaging (IM) interaction patterns.

Contrary to common belief, the volume of face-to-face interaction decreased significantly (approx. 70%) in both cases, with an associated increase in electronic interaction.

In short, rather than prompting increasingly vibrant face-to-face collaboration, open architecture appeared to trigger a natural human response to socially withdraw from officemates and interact instead over email and IM.



Workspace satisfaction: The privacy-communication trade-off in open-plan offices

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ABSTRACT

Open-plan office layout is commonly assumed to facilitate communication and interaction between co-workers, promoting workplace satisfaction and team-work effectiveness. On the other hand, open-plan layouts are widely acknowledged to be more disruptive due to uncontrollable noise and loss of privacy. Based on the occupant survey database from Center for the Built Environment (CBE), empirical analysis indicated that occupants assess and trade-off environmental quality (IEQ) issues in different ways depending on the spatial configuration (classified by the degree of enclosure) of their workspace. Enclosed private offices clearly outperformed open-plan layouts in most aspects of IEQ, particularly in acoustics, privacy and the proxemics issues. Benefits of enhanced 'sense of interaction' were smaller than the penalties of increased noise level and decreased privacy resulting from open-plan office configuration.

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1. Introduction

There exists a large body of literature looking at how physical environment influence occupants' perception and behaviour in office buildings. As office layout has transitioned in recent decades from conventional private (or cellular) spatial configuration to modern open-plan, the impacts on occupants and organisations have been extensively studied from a variety of perspectives in disciplines as diverse as architecture, engineering, health and psychology.

In addition to tangible economic benefits of open-plan offices such as increased net usable area, higher occupant density and ease of re-configuration (Duffy, 1992; Hodge, 1982), the open-plan office layout is believed by many to facilitate communication and interaction between co-workers by removing internal walls, which should improve individual work performance and organisational productivity (Brand & Smith, 2005; Kupitz, 2003). However there is not much empirical evidence to support these widespread beliefs (Kaasila-Tammala, Helenius, Keskinen, & Hoogstra, 2009; Smith-Jackson & Klein, 2009). On the contrary, a plethora of research papers identify negative impacts of open-plan office layout on occupants' perception of their office environment. For example, some longitudinal survey results have demonstrated a significant decline in workspace satisfaction (Sandstrom, Hebert, & Brown, 1982), increased distraction and loss of privacy (Kaasila-Tammala et al.,

2009), and perceived performance decrement (Brennan, Chugh, & Kline, 2002) after relocation of employees from enclosed workplace to open-plan or less-enclosed workplace. Moreover, the occupants in these studies didn't adapt or habituate to the change in spatial layout (Brand & Smith, 2005; Brennan et al., 2002; Virjonen, Keskinen, Helenius, Hakala, & Hoogstra, 2007), and many researchers draw the causal link between declining environmental satisfaction and deteriorating job satisfaction and productivity (Sandstrom, Town, Rice, Orlow, & Bell, 1994; Veitch, Charles, Farley, & Newsham, 2007; Wiseman, 1982). Still other research studies attribute escalating Sick Building Syndrome (SBS) symptoms such as distress, irritation, fatigue, headache and concentration difficulties (Klitman & Szeleman, 1989; Pejtersen, Allermann, Kjaerskov, & Poulsen, 2006; Witzerah, Wyon, & Clausen, 2004) to open-plan office layout.

An extensive research literature consistently identifies noise and lack of privacy as the key sources of dissatisfaction in open-plan office layouts (Danielsson & Bodin, 2000; de Cooen, Sluiter, Kuijer, & Frings-Dresen, 2005; Hodge, 1982). Firstly, studies based on either occupant surveys and laboratory experiment report that noise, in particular irrelevant but audible and intelligible speech from co-workers, disturbs and negatively affects individual performance on tasks requiring cognitive processing (Sanbury & Berry, 2005; Haka et al., 2009; Smith-Jackson & Klein, 2009; Virjonen et al., 2007). The loss of productivity due to noise distraction estimated by self-rated waste of working time was doubled in open-plan offices compared to private offices, and the tasks requiring complex verbal process were more likely to be disturbed than relatively simple or routine tasks (Haapakangas, Helenius, Keskinen,

Highlights

- Satisfaction with IEQ changes depending on the degree of workspace enclosure.
- Occupants of different office layouts have different IEQ priorities.
- Noise and privacy loss identified as the main source of workspace dissatisfaction.
- Benefits of enhanced interaction didn't offset disadvantages in open-plan offices.

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MOVING BEYOND OPEN PLAN SPACES

Recently, numerous articles within the design media have called into question the effectiveness of open plan workspaces. A more critical inquiry into the topic, however, might explore the following: *Why are so many companies still using an outdated planning approach that doesn't suit their employees' needs?*

The open plan concept popular more than a decade ago has since been enhanced with smarter, more advanced planning models. Not only has the nature of work evolved dramatically since the heydays of the open plan in early 2000's, so too has our understanding of how workspaces can foster engagement, satisfaction, and productivity. Today, most work environments have evolved a generation beyond open plan spaces to Activity-Based Workplaces (ABW) and Neighborhood-based Choice Environments (NCE). And the most progressive companies are evolving even further to adopt Maker Environments, Mobile Occupants (MEMO) space and Immersive Environments. These new strategies challenge the traditional approach to office planning, and for good reason.

EXPLORING IDEAS THAT SHAPE THE PLACES WE WORK

Moving Beyond Open Plan Spaces

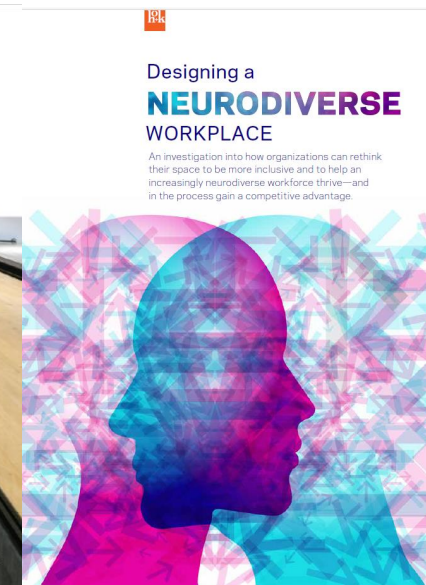
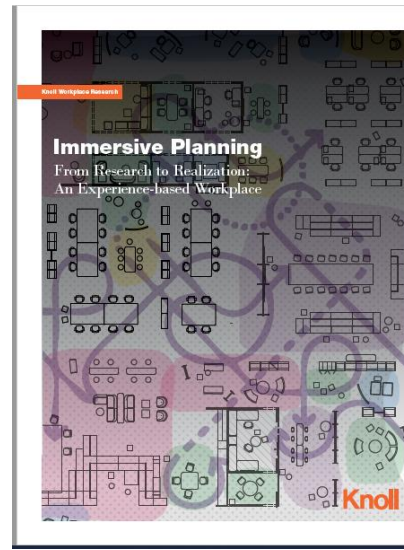
Many recent articles within the design media have called into question the effectiveness of open plan workspaces. A more critical inquiry into the topic also would explore the following: Why are so many companies still using an outdated planning approach that doesn't suit their people's needs?

The open plan concept popular more than a decade ago has since been enhanced with smarter, more advanced planning models. The nature of work evolved dramatically since the heyday of the open plan in early 2000s. So, too, has our understanding of how workspaces can foster engagement, satisfaction and productivity. Today most work environments have evolved a generation beyond open plan spaces to become Activity-Based Workplaces (ABW) and Neighborhood-based Choice Environments (NCE). And the most progressive companies are evolving even further to adopt Maker Environments, Mobile Occupants (MEMO) space and Immersive Environments. These new strategies challenge the traditional approach to office planning, and for good reason.

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Beachbody, Santa Monica, California



KEY FINDINGS

1. People are asking for more private space at work
2. Not all amenities are worth the investment
3. 14% of employees at large companies use coworking spaces



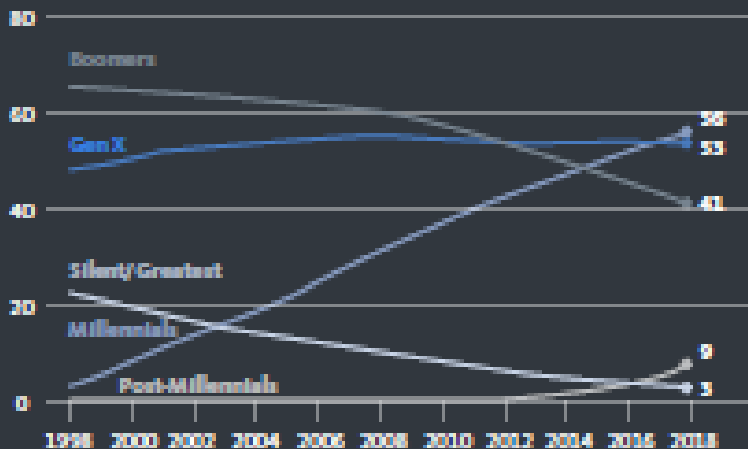
It's time for a new workplace narrative; we need to move past a language of extremes.

Since the release of our U.S. Workplace Survey 2016, Millennials have become the largest contingent of the U.S. workforce, and Generation Z's integration has already begun.

As the workplace accommodates five generations, its diversity is also growing in other ways.

FIVE GENERATIONS AT WORK

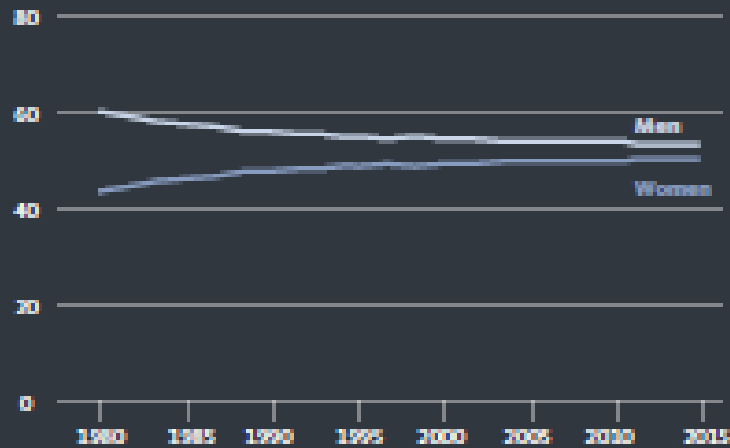
U.S. labor force, in millions



Source: Pew Research Center (2018)

GENDER DIVERSITY

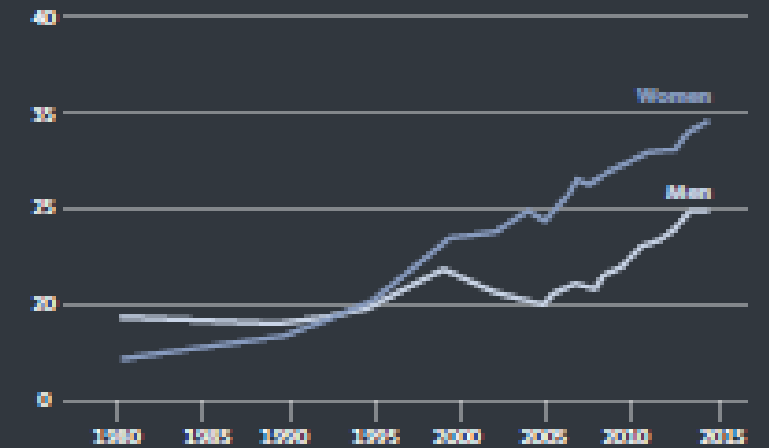
Percent of the workforce, women vs. men



Source: U.S. Department of Labor, Women in the Labor Force (2016)

EDUCATIONAL ACHIEVEMENT

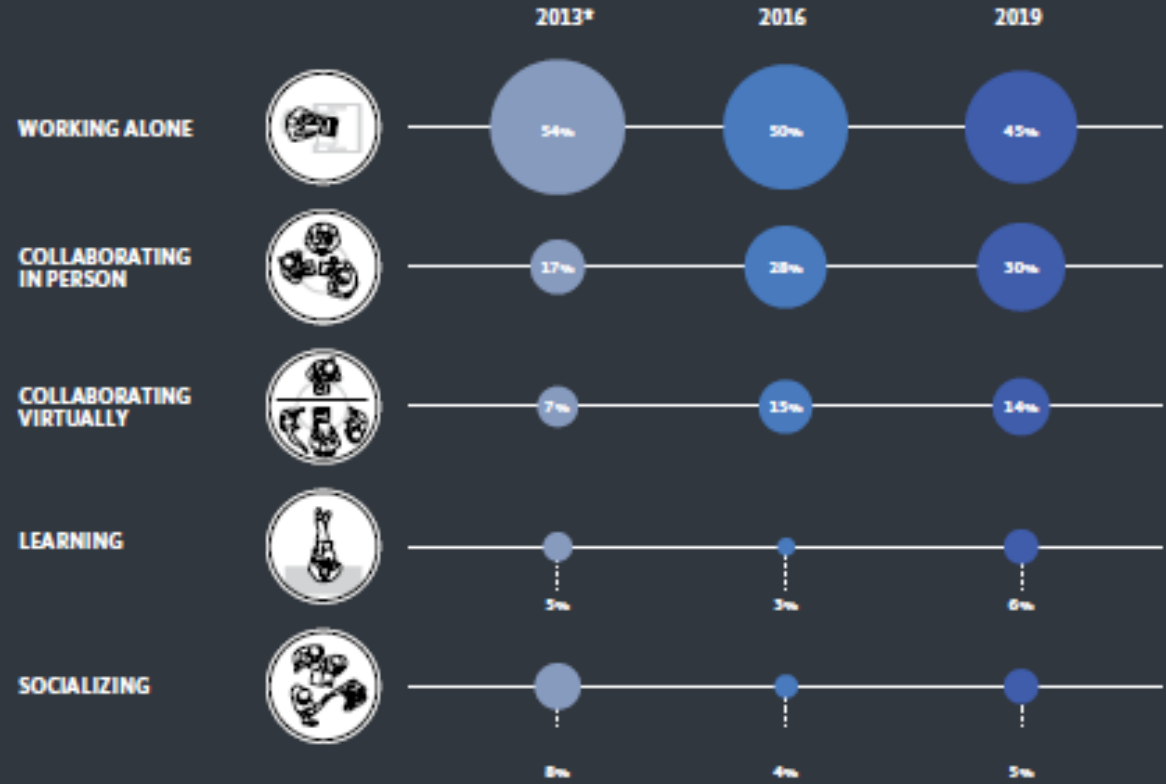
Percent of Americans 25-29 years old with a bachelor's degree or higher



Source: Steven Johnson / The Atlantic (2017)

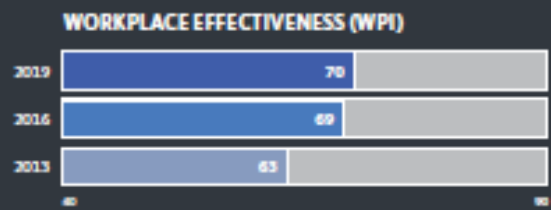
workplaces that successfully prioritize both individual and collaborative work, and which has proven to be highly correlated to effectiveness and performance.

People today also report greater levels of choice and autonomy at work—45 percent of U.S. workers now report having choice in where they work within their office.



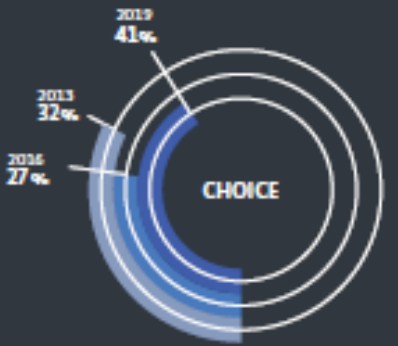
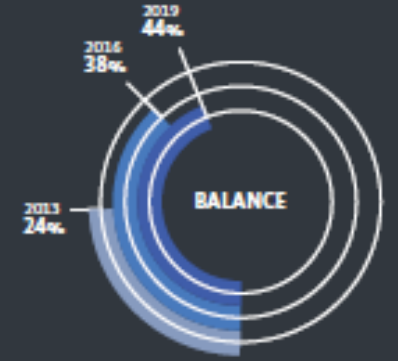
TIME SPENT BY WORK MODE
Percent of average week spent in each work mode, by year.

*Percentages do not add up to 100% because respondents were given an "other" option in 2013.



2019 marks the highest workplace effectiveness score measured, driven by high levels of balance and choice at work.

WORKPLACE EFFECTIVENESS
Workplace effectiveness by year, as measured by GenSlr's Workplace Performance Index (WPI) score. The WPI is a proprietary aggregate measure of workplace effectiveness.



BALANCE & CHOICE
Percent of respondents who work in a balanced workplace (top), and who report choice in where to work (bottom), by year.

KEY FINDING 1: People are asking for more private space at work

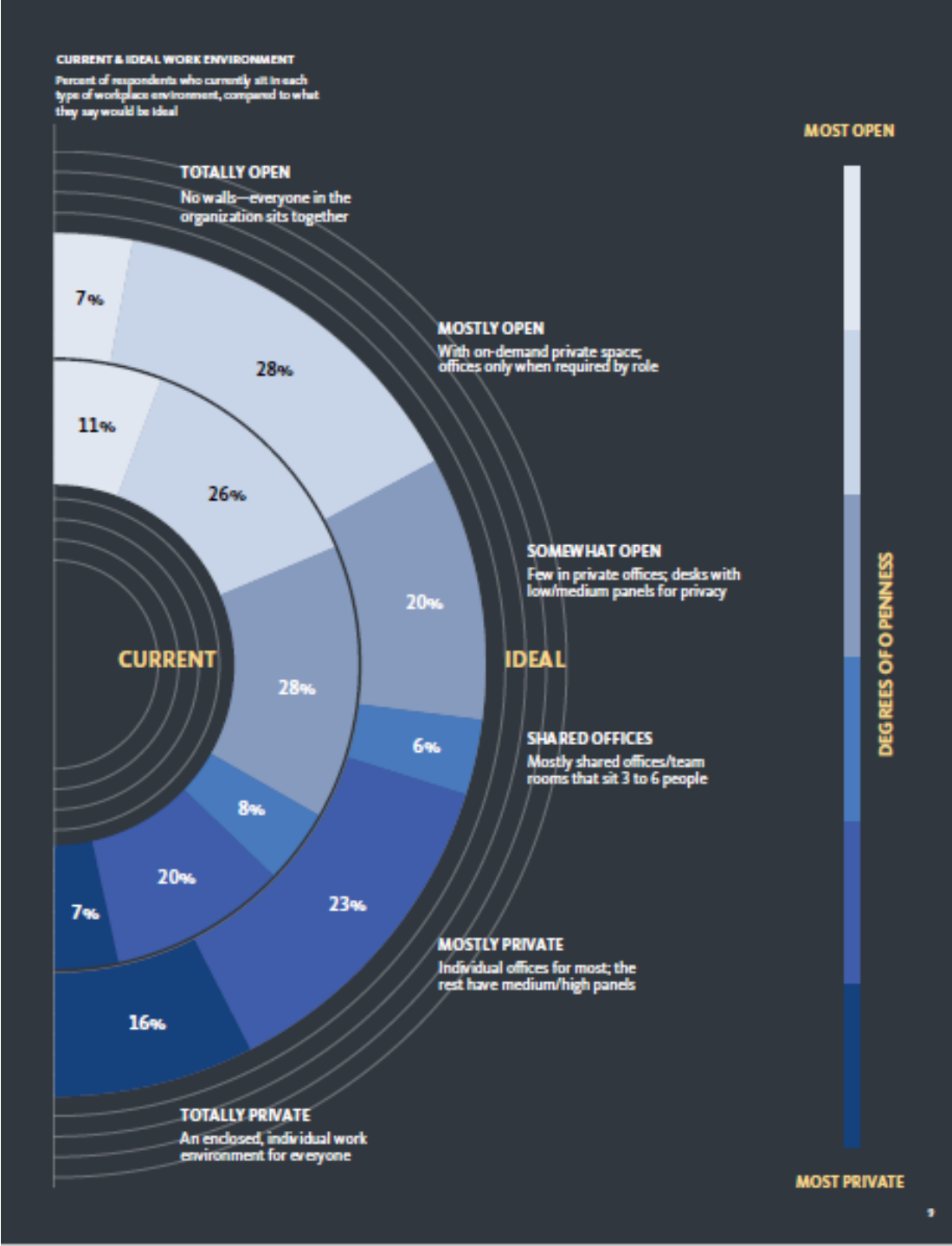
Only a fraction of people would prefer working in a totally open or a totally private environment; over two-thirds consider environments that fall between these extremes to be ideal.

To capture this nuance, we measured “degrees of openness” with six variables, from “totally open” workplaces with no walls, to “totally private” workplaces in which all employees have individual offices. We asked each respondent to tell us which type of environment they currently have, and which they consider to be ideal.

Women’s preferences lean slightly more toward privacy; Millennial and Gen Z respondents lean more toward openness.

Which environments work best?

Environments that are mostly open environments but provide ample on-demand private space have both the highest effectiveness and the highest experience scores. This largely aligns with people’s stated preferences: they **prefer open environments with ample on-demand private space to support individual, focused work**, but very few say they would prefer a totally private environment.



BY OFFERING A VARIETY OF SPACES IN THE WORKPLACE, COMPANIES ARE ABLE TO SUPPORT THEIR PEOPLE'S DESIRE TO HAVE BOTH OPEN COLLABORATIVE AREAS AND SPACES WHERE THEY CAN DO MORE FOCUSED PRIVATE WORK.



Parsons, San Francisco. With a balance of creative spaces and workplaces, Parsons's headquarters attracts creatives and community investors.



North USA headquarters, Arlington, Va. Innovative graphics highlight Nike's global social impact.

What talent wants

Data and insights uncovered by the Genesler Research Institute show that people get their best work done when they have a variety of spaces that they can choose from during the day. Choice leads to a feeling of empowerment, which boosts individual performance.

For example, Genesler's 2019 U.S. Workplace Survey (U.S. WPS) found that a majority (79%) of people in workplaces that offer a variety of settings reported a great experience, and 71% of people with choice in where to work reported the same.

We're talking about spaces that are neither open nor closed, but somewhere in between. In other words, people still like open office setups as long as they have the option to dip into more private spaces at points during the day. By the same token, most people also don't prefer workplaces that are completely closed off into private offices. Our research finds that "mostly open" environments with ample on-demand private space clearly score the highest on effectiveness (as measured by Genesler's Workplace Performance Index) and score the highest on experience (as measured by the Genesler Experience Index).

A great example of an office with a variety of spaces is Campari Group's new North American headquarters in Manhattan. The U.S. home of the global spirits group cultivates collaboration and experimentation among staff and clients with an innovation lab whose master mixologists, bartenders, and visiting brand ambassadors can craft and quaff new cocktails. Within Campari's open workplace, four distinct "bars" provide alternative, but immersive spaces that foster connection and creativity.

THE IDEAL OFFICE IS BOTH OPEN AND PRIVATE

Percent of respondents who currently sit in each type of workplace environment, compared to what they say would be ideal

SOURCE: Genesler 2019 U.S. Workplace Survey



DEGREE OF OPENNESS

TOTALLY OPEN
Nowhere-averse in the organization site design

MOSTLY OPEN
With on-demand private space, offices only when required by role

SOMEWHAT OPEN
Few in private offices, desks with low/medium panels for privacy

SHARED OFFICES
Mostly shared offices/teams rooms that sit 3 to 4 people

MOSTLY PRIVATE
Individual offices for most, the rest have medium/high panels

TOTALLY PRIVATE
An enclosed, individual work environment for everyone



Adobe, San Jose, Calif. A mix of collaborative and focus spaces empowers people to do their best work.

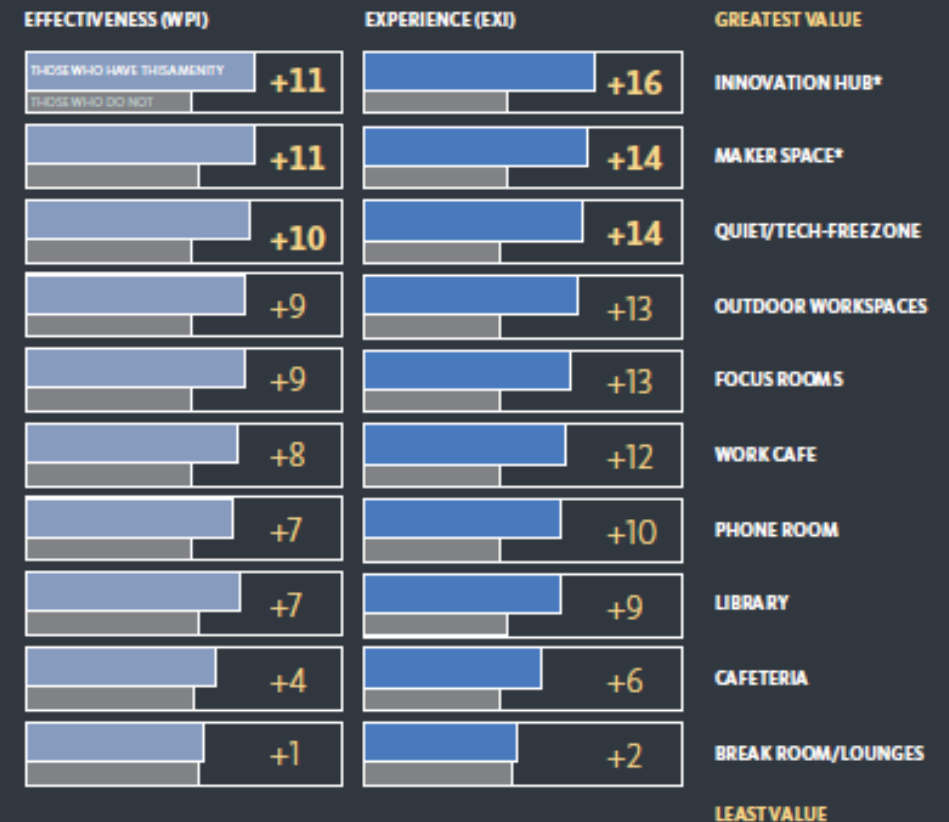
KEY FINDING 2. Not all amenities are worth the investment

The amenities that deliver the greatest impact connect directly to people's most salient needs and preferences:

1. spaces directly connected to **innovation, making, and collaboration;**
2. and quiet places to perform focused or individual work.

The key takeaway: work-focused amenities that align with the direct needs and priorities of people's jobs have the most value; **amenities aren't for escaping work, they're for optimizing it.**

Target workplace investment on the amenities that deliver the highest impact. Those that directly support work process have most value.



THE AMENITIES THAT DELIVER MOST ON EFFECTIVENESS AND EXPERIENCE

EXI and WPI score comparisons for each amenity; differences in scores between people who have the amenity in their workplace and those who do not.

*Innovation hubs and maker spaces are most prominent in technology, media, management advisory, and finance firms.

5 AMENITIES THAT ARE WORTH THE INVESTMENT

DATA AND INSIGHTS FROM THE GENSLER RESEARCH INSTITUTE FIND THAT AMENITIES THAT SUPPORT EFFECTIVE WORK HABITS ARE CRUCIAL TO AN OFFICE'S OVERALL PRODUCTIVITY.

BY AMANDA CARROLL

Today's companies are constantly looking for amenities that give them an edge attracting and retaining top talent. While many office perks are useful signifiers of a company's culture and values, the amenities that have a measurable impact on people's experience and effectiveness at work are those that give people a choice of workspaces.

Genster's 2019 U.S. Workplace Survey found that the spaces that deliver the greatest impact connect directly to people's most salient needs and preferences: quiet places to perform focused or individual work, and spaces connected directly to collaboration and group innovation. Amenities with a non-work focus, such as lounges and break rooms, deliver the smallest performance gains.

In fact, choice itself can be an important amenity. In today's work-everywhere culture, having a variety

of spaces to choose from is directly connected to a great workplace experience. An innovation hub or maker space, for example, can offer an alternative setting to one's daily workstation, as well as an opportunity to work with a different set of tools and skills.

When evaluating which workplace amenities are worth the investment, there's one key factor to remember: the most effective amenities aren't meant as an escape. Rather, they're designed to support workers' freedom to be productive where they like, while instilling in them a sense of pride for the values, heritage, and future of the company.

 AMANDA CARROLL is a Technology Workplace leader based in Genster's New York office.

2 MAKER SPACE

WELLS FARGO BANK
MINNETONKA, MINN. USA



3 QUIET/TECH FREE ZONE

WELLS FARGO BANK
MINNETONKA, MINN. USA



1 INNOVATION HUB

ACCENTURE
CHICAGO, ILL. USA



4 OUTDOOR SPACE

COCA-COLA
DENVER, COLO. USA



5 FOCUS ROOM

GLAXO SMITHKLINE
NEW YORK, N.Y. USA



We also try to limit the width of the core, so it doesn't form a barrier in the center of the building. When examining the placement of the core elements in relation to the building's overall floor plan, the best solution is sometimes an offset, partially offset, or split core that frees up square footage for a larger, more flexible office space on each floor, allowing for more daylight and higher density of people. In the case of larger floor plates, we're creating dual cores for even better connectivity and flexibility.

Connecting to the city

We're also mindful of the importance of connecting office buildings to the context of the cities and regions where they exist. The rules are changing with the fast adoption of ride-sharing services and the emergence of autonomous vehicles. This is having an immediate impact on office buildings, where we are providing wider driving lanes at the entrances for pickup and drop-off. Building entrances will also require longer lanes for driverless cars to queue up without blocking city traffic.

Even the entrances to buildings are becoming more complex, with growing demand for multiple "front doors." Creative companies, for example, want direct access to their offices with a front door that reflects their brand. No one wants to be hidden on a lobby directory and located "down the hall." This can be accomplished with a ground-floor storefront entrance or, in the case of the I/O at Playa Vista office building repositioned by Geneset, by adding an external stair that connects to tenant spaces on levels above.

Enhance value for tenants

None of these improvements are added to building plans without considering their cost, but we think they're a smart investment. Typically, real estate and operating costs are about 20% of the cost of running a company while the investment in staff salaries is about 80%. Since even a small increase in real estate costs can yield measurable improvements in productivity and innovation from your most valuable asset—your people—then the potential payback is enormous.

Stated another way, all these things—promoting collaboration, fostering community, and producing a concerted workplace environment—promise the kind of long-term returns that tenants demand.



BEN TRANEL is a Principal based in Geneset's San Francisco office. **DANIEL FULLBRIGHT**, based in San Diego, is an Office Buildings Developer leader.

"THERE'S INCREASING DEMAND FOR EXTERIOR AMENITIES LIKE BALCONIES AND FINISHED ROOFTOP TERRACES.... A CLEAR REPRESENTATION OF HOW TENANTS ARE ACTUALLY USING SPACE."

—Ben Tranel, CEO, Building Owners and Managers Association (BOMA) International



NOI Midtown, Atlanta. This new workplace for NOI's office and developers team includes a landscaped roof terrace where people can connect and relax.

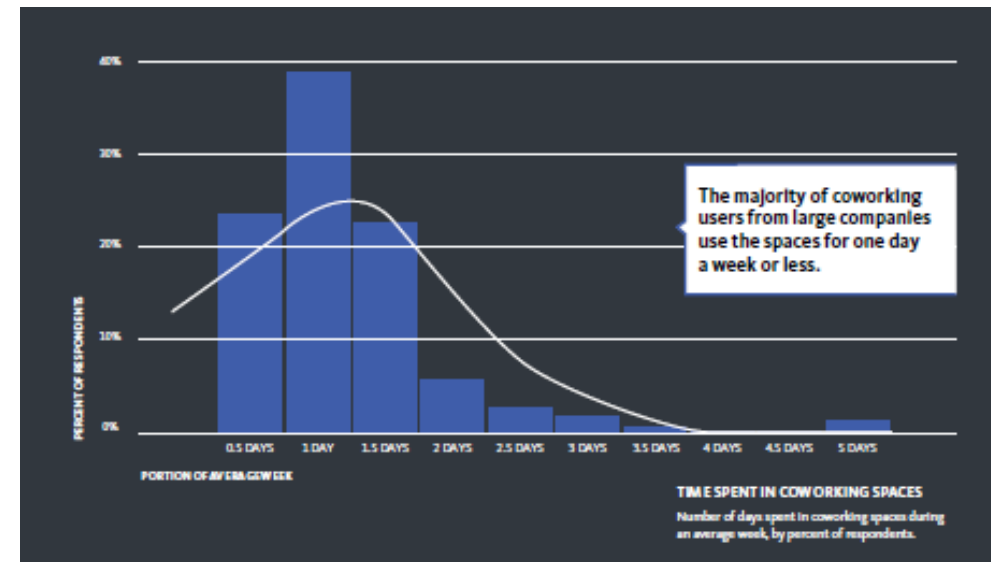
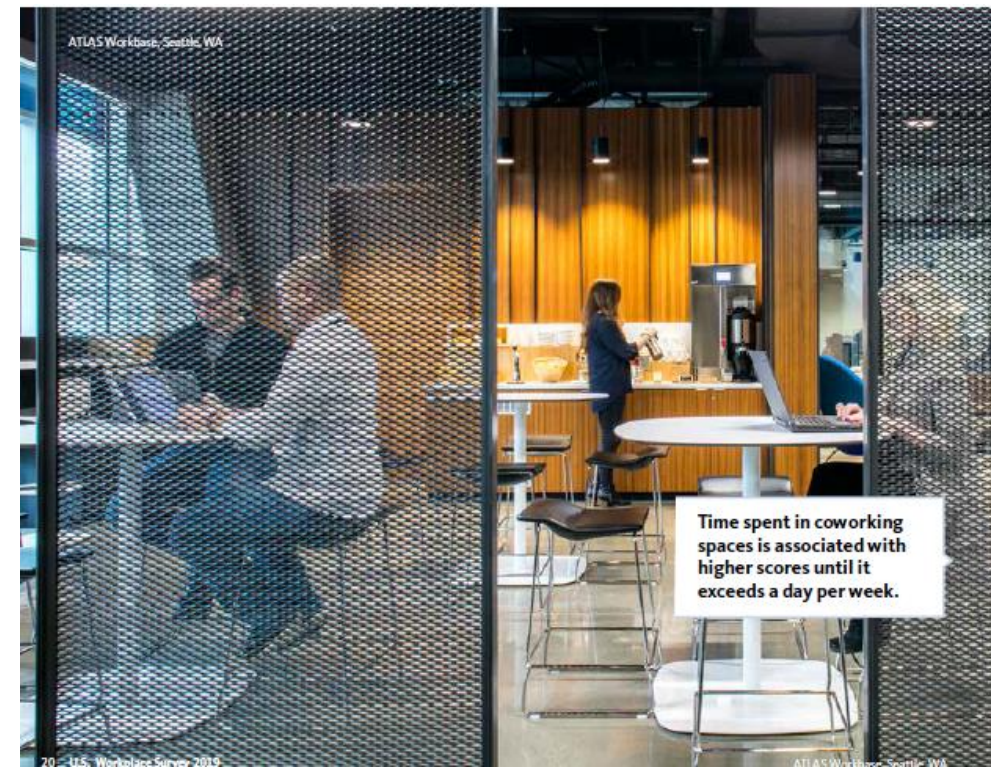
KEY FINDING 3: 14% of employees at large companies use coworking spaces

Fourteen percent of our respondents report using coworking space as part of their average workweek. These users tend to be young and male. Most are in manager positions or above, and an outsized portion work in the technology industry.

For the majority of these users, coworking appears to be part of their company's broader plan to facilitate autonomy and mobility instead of acting as their primary workspace— and our data suggests this is the right strategy. **Most of these respondents use a coworking space for less than one day per week, and spend more time in their company's own workplace than in a coworking space.**

In many ways, **coworking spaces function as another high-value amenity** — an alternative place to work and support activities not well supported by the desk.

Our data also suggests that **coworking utilization may have a negative relationship with the quality of people's primary workspaces**: people with better-designed collaborative areas spend less time working in coworking spaces.





Accession Innovation Hub, Tokyo. A diversity of space encourages people to choose how and where they work, socialize, and relax.

Collaboration is crucial

The need to connect is a big reason people choose to come to the office, so collaboration spaces are key elements of any workplace. Most companies are realizing that in-person, face-to-face collaboration is an important part of building their culture, and a competitive advantage. Our global Workplace Survey research shows that the right balance between focus and collaboration leads to greater innovation and higher performance overall.

As the nature of work evolves, collaboration is becoming more multidimensional and there's a renewed focus on different spaces that bring people together—from impromptu huddle rooms, to screen spaces, to maker labs. This doesn't mean just adding more meeting

THE NEED TO CONNECT IS A BIG REASON PEOPLE CHOOSE TO COME TO THE OFFICE.

rooms—it's about creating a range of flexible settings that allow people to collaborate more effectively, and equipping them with the right tools to get their work done.

People around the world rank team building as the most important attribute of great workplaces, according to our Workplace Surveys. In some cultures, the need for connection is fundamental. For example, Latin

Americans work with others more than they work alone—43% of an average workweek, according to Genesler's Latin America Workplace Survey in Germany, which is dominated by shared and group offices, workers are asking for more open, collaborative spaces. Genesler's Germany Workplace Survey found that three-quarters (74%) of respondents work in an enclosed office, but over half (51%) actually consider an open environment to be ideal.

CHOICE IN WHERE TO WORK IS AN IMPORTANT FACTOR IN WORKER SATISFACTION.

What percentage of workers around the globe say they have choice?



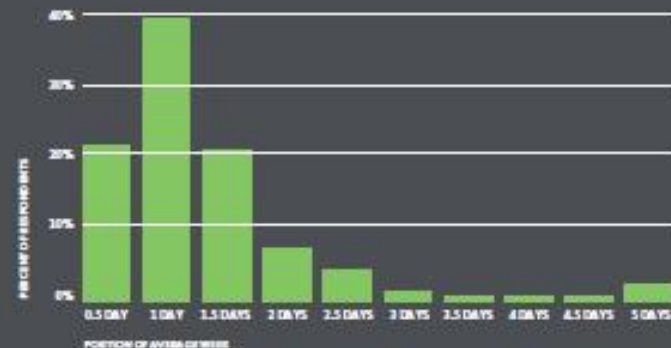
SOURCE: Genesler 2019 U.S. Workplace Survey

COWORKING SHOULD COMPLEMENT, RATHER THAN REPLACE, THE WORKPLACE

The Genesler Research Institute found that when large companies offer workers the option to use coworking, these spaces are associated with a better work experience and higher performance.

TIME SPENT IN COWORKING SPACES

The majority of coworking users from large companies use the spaces for one day a week or less.



SOURCE: Genesler 2019 U.S. Workplace Survey

Action steps to optimize people's performance:

Open environments should be private, too. Greater degrees of openness are associated with high performance; but noise, privacy, and the ability to focus remain key determinants of workplace effectiveness. A choice-based strategy that provides a variety of spaces and different types of enclosure can reconcile these needs.

Amenities aren't about escaping work—they're about optimizing it. People are working from everywhere—and greater mobility is associated with greater performance and engagement. The best amenity strategies prioritize anywhere-working, creating hybrid settings that deliver both an amenity and a workspace: work cafés, quiet/focus zones, and innovation hubs, among others.

Coworking is a supplement, not a replacement, for a great workplace experience. Coworking does not yet contend as a primary work setting—but as a high-value amenity it delivers. Our data shows distinct benefits from giving people access to coworking spaces; but the effect diminishes for those spending significant amounts of time coworking, and most still spend more time in the primary offices.



The U.S. workplace is on par, but not outperforming, its global peers.

The U.S. workplace has some of the highest effectiveness scores as measured by the WPI in any region we've studied recently. On other metrics, the workplace falls more toward the middle—people in the U.S. report less choice than those in the Middle East, Germany, and Asia.

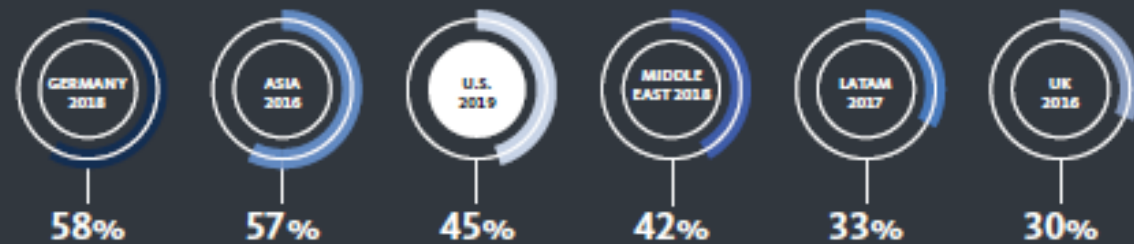
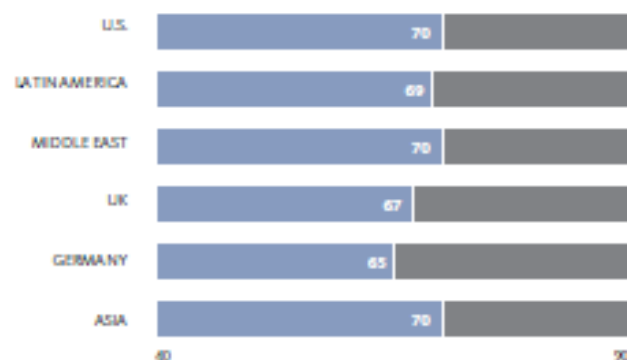
The physical nature of the workplace also varies substantially around the globe. While our "degrees of openness" variable is too new to compare across other global regions, we see wide variations

in the individual workspace in which most people sit in each country.

The U.S. is comparatively the most enclosed and the most open of any region we've studied: 35 percent of respondents sit in individual, private offices; 42 percent sit in some sort of "open" environment. Shared and group office environments are comparatively rare in the U.S.; Germany, the Middle East, and Latin America are much more likely to use these settings at a large scale.

EFFECTIVENESS (WPI)

Effectiveness, as measured by the WPI score, by global region. Data is from most recent Workplace Survey in each country, conducted between 2016 and 2019.



People in the U.S. are less likely to work in shared environments than workers in other countries.

U.S. WORKERS ARE ONLY AVERAGE ON CHOICE

By global region, percentage of workers who report they have choice in where to work. Data is from most recent Workplace Survey in each country, conducted between 2016 and 2019.



SHARED ENVIRONMENTS ARE UNCOMMON IN THE U.S.

Type of individual work setting employees have, by global region. Data is from most recent Workplace Survey in each country, conducted between 2016 and 2019.

2005

UK WORKPLACE SURVEY

Employees see a clear link between the physical work environment and personal productivity.

2006

U.S. WORKPLACE SURVEY

The link is confirmed between the physical work environment and productivity in the minds of workers.

2008

U.S. & UK WORKPLACE SURVEYS

Research integrates new questions focused on experience to measure effectiveness and experience in tandem.

2012

WPI META ANALYSIS

Analysis of client survey data reveals the outsized impact of focus effectiveness on overall workplace performance.

2013

U.S. WORKPLACE SURVEY

Focus, balance, and choice in the workplace emerge as key drivers of satisfaction, performance, and innovation.

2016

U.S. WORKPLACE SURVEY

Findings connect workplace design directly to organizational innovation and an "innovation ecosystem."

2016-2019

GLOBAL WORKPLACE SURVEYS

Surveys conducted in the UK, Asia, Latin America, Germany, and the Middle East build a global database of workplace responders.

2017

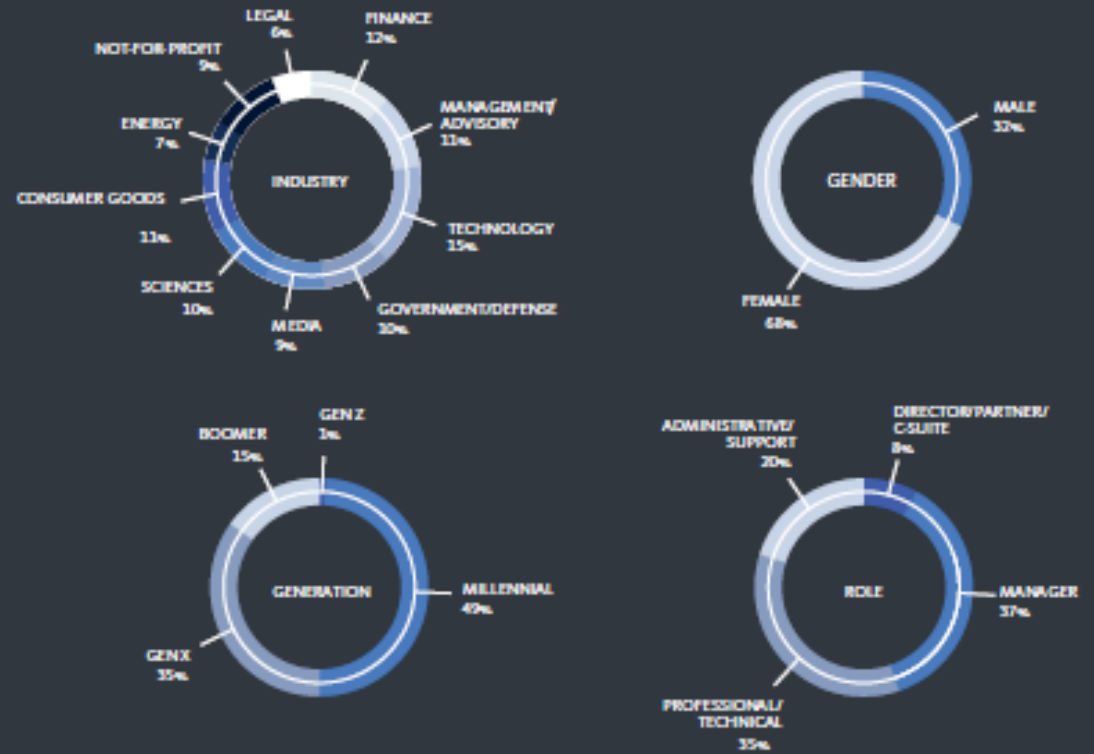
GENSLER EXPERIENCE INDEX


Research into the qualities of experience identifies emotional and behavioral drivers of experience at work.

2019

U.S. WORKPLACE SURVEY

Research integrates new questions focused on experience to measure effectiveness and experience in tandem.





Gensler

DESIGN FORECAST

CREATED BY THE GENSLER RESEARCH INSTITUTE

SHAPING THE FUTURE OF CITIES

HIGH-PERFORMING PEOPLE WANT HIGH-PERFORMANCE BUILDINGS

A high-performing, healthy workplace can boost engagement and productivity.

Access to fresh air and daylight, including outdoor work environments, can alleviate stress and other ailments.

Designing a NEURODIVERSE WORKPLACE

An investigation into how organizations can rethink their space to be more inclusive and to help an increasingly neurodiverse workforce thrive—and in the process gain a competitive advantage.



Strong contrast coupled with natural materials in Stryker's office in Burlington, Ontario, ground people in a sophisticated yet calming environment that feels secure. The styling and use of residential elements help people feel welcome.

Acoustic Quality

Impromptu meetings at a nearby space, mobile phone users who seem to believe the cone of silence really works, the continual pinging of technology—the everyday sounds of a typical workplace can make it hard for employees to focus. While it takes about 20 minutes to settle into a state of flow, workplace interruptions occur, on average, every seven minutes. At the other end of the acoustic range, an office space can actually be too quiet. Without low-level, ambient

background noise to absorb them, every murmur or cough intrudes.

Where neurotypical employees may find ambient noise—or the lack of it—counterproductive, employees who are especially sensitive or prone to distraction, such as those with autism or ADHD, can find it downright disabling. They may adapt by wearing headphones, seeking out their optimal environment for hyperfocus or using a sensory distraction they can control to mitigate the impact of others who they can't. Companies that depend on all their employees' ability to concentrate,

however, are increasingly prioritizing a comprehensive—and therefore more inclusive—approach to acoustic design.

Effective acoustic design for the workplace provides a variety of auditory settings in support of diverse activities, locates them appropriately relative to one another and specifies assemblies for acoustic comfort within spaces and acoustic separation between them. Acoustic design may also consider whether a sound masking or white noise system would further increase comfort.

Thermal Comfort

Along with acoustics, thermal comfort consistently ranks on workplace surveys as one of the top environmental irritants. Researchers have found that it has a significant impact on productivity.

Thermal comfort can vary with personal factors such as clothing, activity level and metabolism, as well as neurology. One solution to this variety is to provide individual temperature controls, such as an operable window or air diffuser, to enable workers to adjust their thermal environment to their liking. Estimates link individual temperature controls to productivity increases of as much as seven percent, depending on the nature of the task.⁹

Other elements of effective thermal design for the workplace include:

- Controlling solar gains in perimeter spaces so people beside the windows don't overheat.
- Improving the performance of the building envelope for even conditioning throughout the space.
- Decoupling heating and cooling zones from ventilation (with radiant systems, for example) for more effective and quieter conditioning.

- Designing thermally varied spaces, such as a naturally ventilated atrium or an outdoor patio, so people can choose a location that suits their thermal preference.

Lighting

Lighting offers another opportunity for inclusive design to make a difference. Measures can be as simple as replacing fluorescent fixtures (which can have a distracting flicker and buzz that are perceptible only to the neurodivergent) LED fixtures.

Lighting research conducted at the University of Toronto has suggested that bright lighting levels can intensify feelings, both positive and negative, and that dimming the lights can result in more rational decisions, a finding that some neurodiverse thinkers may already know from experience.¹⁰ Other studies have found that changing lighting color and intensity over the course of the day to mimic nature's diurnal changes can also help to reduce stress. Again, these benefits are likely to affect the neurodivergent as well as neurotypical employees.

More comprehensively, workplace-wide access to daylight can result in increased physical well-being,

improved mental and emotional health, and increased productivity and happiness for all workers. The evidence for our need for daylight is so compelling that several countries have enacted laws requiring workplace access to daylight. Some studies suggest that the benefits start to kick in with a minimum of four hours of light per day, whether from natural or artificial sources.

Several design standards offer guidance on daylight for workplaces. LEED's Daylight credit, for example, requires specified glare-free daylight illuminance levels for 75 percent of regularly occupied spaces. The WELL Building Standard sets a baseline of 95 percent of building inhabitants sitting within 15 feet of the perimeter, with a fallback requirement for appropriate electrical illumination. Ultimately, the opportunity for staff to tailor lighting to their preferences may be one of the most effective ways to get this key aspect of workplace productivity and well-being right—and to enhance autonomy and comfort for all.

"The tube in fluorescent lighting vibrates, which results in a buzzing sound that only those with hypersensitive vestibular sensory processing disorder can hear. Every person with autism spectrum disorder is impacted by vestibular sensory processing."

— Gearoid Kearney, CEO, myAccessHub

WHAT EMPLOYEES WANT MOST

- Many windows to the outside
- Private, quiet spaces to work
- Natural lighting
- Free snacks and drinks
- Ergonomic desks and chairs



WINDOWS,
NATURAL
LIGHT



QUIET,
PRIVATE
SPACE



FREE
SNACKS &
DRINKS

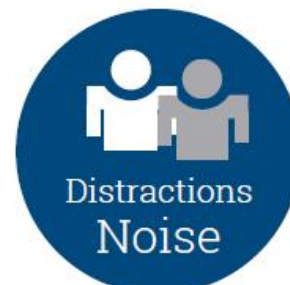


In an open office, focus rooms or even small conference rooms can be a great way to give employees lots of natural light and an as-needed, quiet place to work.



TOP COMPLAINTS

Too many distractions is the No. 1 complaint of Denver top performers – and conversations by nearby co-workers is the top distraction.



57%

Stuffy

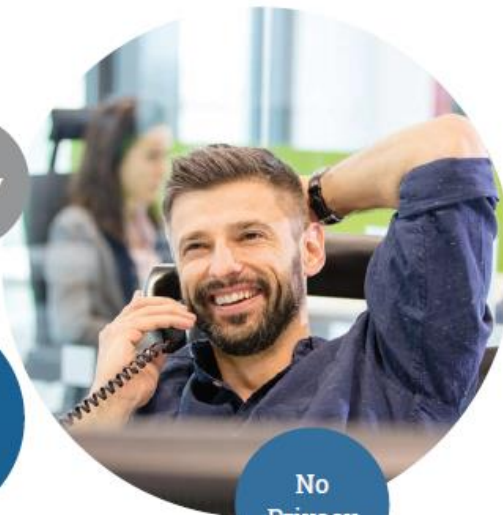
14%

TOO
COLD

30%

No
Privacy

17%



Too many distractions

95% of Denver employees say office distractions negatively affect their productivity. Men are 25% more likely than women to become distracted at work.

Too cold

Arguments about the temperature setting happen in 63% of Denver offices. Women are more likely to complain about the office being too cold, but both genders list it as a top complaint.

No place for private conversation

Finding a place to have a private phone call or personal conversation is a major challenge for many workers.

While Denver's top performers do just that...perform, they're as bothered by work interruptions as anyone else. Find ways to help minimize talking distractions and use that as a recruiting tool.



2018

IMPACT DESIGN^{by}

RESILIENCE STRATEGIES
SHAPING THE FUTURE
OF CITIES

Google RESEARCH INSTITUTE

Re-using buildings doesn't mean sacrificing efficiency improvements. The best case scenario is often optimizing a building's mechanical systems while maintaining its existing structure.

Globally, there is a large stock of older buildings built under codes with lesser performance requirements, and the current retrofit rate in both the domestic and commercial building sectors is low.

The opportunity is particularly great as renovating existing buildings delivers positive environmental, economic, and social outcomes.

Environmental benefits are the most direct and immediate result of building refurbishment. These come via energy savings and reductions in CO₂ from more efficient systems; the preservation of existing materials; and the use of retrofit opportunities to also improve building resilience against climate change impacts such as overheating, increased rainfall and flooding.