

# Community

We Attract, Develop and Engage Great People.

HGA RESEARCH: Workplace Study

WHAT MATTERS MOST IN THE WORKPLACE



▲ **OOYALA** | CORPORATE HEADQUARTERS | Santa Clara, California

Cover Image:

◀ **SCHREIBER FOODS, INC.** | HOME OFFICE AND GLOBAL TECHNOLOGY CENTER | Green Bay, Wisconsin



# Data-Driven Design

HGA works closely with clients to develop comprehensive solutions that align with their unique philosophy, culture and vision. Our workplace design is informed by a variety of data sources, including past projects, academic design research literature, industry trend forecasts and project specific information. This workplace report is based on a 2015 mixed-method study involving both primary and secondary research methods. The study was designed to better understand two research questions:

- What are drivers of corporate real estate decisions?
- What design features are most important to workers?

## METHODOLOGY

### Workplace Survey

Clients, industry contacts, and real estate professional association members were invited to take a survey that was promoted via email invitation, social media and HGA's website.

### Survey demographics:

- 215 respondents
- Representation from all US regions, with a majority (69%) from the Midwest
- 21% of respondents are corporate real estate professionals
- 36% of respondents (not including corporate real estate professionals) make real estate decisions for their companies

### Literature review

Information was gathered from published peer-reviewed studies, research published by furniture manufacturers and industry trend forecast publications.

### Pre-design survey data analysis

A pre-design survey tool developed by HGA has been used in the programming phase for corporate clients for the past several years. The aggregate results from a total of 11 companies (2,303 total respondents) were analyzed for common trends and insights into the desired design features in the ideal/future workplace.





#1

Daylight, technology and thermal comfort are the most important factors in office environments.

These factors outrank all others, including acoustic privacy and collaborative spaces. However, the degree of importance varies depending on space type.

#2

Corporate decision makers and employees (mostly) want the same things.

The majority of elements in a work environment were ranked similarly by those who make corporate real estate decisions and those who do not.

#3

While SF/person is decreasing, employees are concerned about having adequate space.

Increased efficiency in the workplace must be balanced with productivity and workplace satisfaction in order to be a cost benefit.

# #1

## Daylight, technology and thermal comfort are the most important factors in office environments.

These factors outrank all others, including acoustic privacy and collaborative spaces. However, the degree of importance varies depending on space type.

### WHAT IS MOST IMPORTANT IN THE WORKPLACE?

Workers in the United States spend 90% of their time indoors<sup>1</sup>. The indoor office environment can play a significant role in the productivity, satisfaction and wellness of occupants. Design research has identified many factors that are considered critical to the workplace environment, such as quality lighting, access to daylight and views, and healthy indoor environmental quality. While designers should incorporate as many of these design elements as possible, prioritization is important as budget and space limitations will not allow for all elements to have equal importance. When asked “What is important to you in your workplace?”, **Daylight Access, Technology and Thermal Comfort** were ranked highest by respondents, followed by Acoustic Privacy and Private Spaces.

Fig. 1: WHAT IS IMPORTANT TO YOU IN YOUR WORKPLACE? (n=141)



When business leaders who make corporate real estate decisions were asked to identify the primary business drivers impacting their company’s workplace, technology rose to the top, followed by employee attraction and retention. With attraction and retention as a top concern, we can expect to see more emphasis on workplace design that meets the needs of employees.

While the top three needs are clear, how can design teams incorporate these needs into the overall design strategy? Office environments may not need daylight in all spaces to see improved employee satisfaction, nor is technology necessary everywhere, in all types. Employees are looking for easy, plug and play solutions to share their work digitally, either at their desks or in meeting spaces. Respondents from HGA’s pre-design surveys indicated that daylight is most important in the overall work areas. Coffee stations and conference rooms ranked far lower in importance (see Fig. 3). Data can inform design teams, allowing prioritization of the most important design features within each space type.

Fig. 2: WHAT ARE THE PRIMARY BUSINESS DRIVERS IMPACTING YOUR COMPANY’S WORKPLACE? (n=99)







▲ **ACCENTURE** | CORPORATE OFFICE | San Jose, California

Fig. 3: IMPORTANCE OF DAYLIGHT IN SPECIFIC SPACE TYPES (n=1,756)



Fig. 3 illustrates the value placed on daylight in workstations and reception areas, which were considered more important than other space types. Yet other data sources show that daylight is still important in some meeting rooms. One HGA client, a Fortune 50 company, found their meeting rooms with daylight to be far more utilized than those without.





# #2

## Corporate decision makers and employees (mostly) want the same things.

The majority of elements in a work environment were ranked similarly by those who make corporate real estate decisions and those who do not.

### WHAT MATTERS TO EMPLOYEES, ALSO MATTERS TO DECISION MAKERS

When asked “What is important to you in your workplace?” 13 out of 16 options were ranked similarly by corporate leaders who make real estate decisions for their companies, and employees who do not. Ranked from most to least important, these options include:

- ▶ Daylight Access
- ▶ Technology
- ▶ Thermal Comfort (Temperature, Air Quality)
- ▶ Acoustic Privacy
- ▶ Private Spaces
- ▶ Collaborative Spaces
- ▶ Aesthetics
- ▶ Quality Artificial Light
- ▶ Ability to Work Remotely
- ▶ Healthy Workplace (Fitness Center, Meditation Room, Healthy Food Access, etc.)
- ▶ Amenities (Fitness Center, Break Area, etc.)
- ▶ Sustainability
- ▶ Visual Privacy
- ▶ Access to Views
- ▶ Social Spaces
- ▶ Variety of Places to Work in Different Ways

Only three items were found to be significantly different between decision makers and other employees: **private spaces** ( $p=.03$ ), **aesthetics** ( $p=.02$ ) and **visual privacy** ( $p=.01$ )\*. Private spaces were more important to decision makers, with the greatest statistical significance compared to the other options. Yet visual privacy was less important to decision makers. Therefore according to survey respondents private spaces do not need to have visual privacy. Private spaces were often defined as “a

room where you can close a door” in open-ended responses to questions in HGA’s pre-design surveys. Decision-makers value private spaces more than other employees likely due to a higher likelihood of taking private phone calls and working on confidential matters. As workplace design incorporates more open office layouts, the need for privacy must be provided in other ways, such as phone rooms where private conversations can take place behind closed doors.

Design  
matters to  
decision makers

Aesthetics were more important to decision makers. This indicates that corporate decision makers understand the impact aesthetics and design can have on their employees, their clients and vendors, and their processes and productivity. Giving attention to the workplace environment can pay off—a Knoll study found that a \$100k investment in meeting spaces for a 1,000 employee facility could lead to retention of 3 employees and save the company \$750k in costs of replacing those employees<sup>1</sup>. Avoided costs to replace employees is only one measure of return on investment, as another study found that increasing satisfaction with the office environment also increases job performance<sup>2</sup>.

1 O’Neill, M. (2013). Design Features and Effective Work: ROI Models that Predict Retention and Revenue. Knoll Workplace Research.

2 Frontczak, M. (2013). Human Comfort and Self-Estimated Performance in Relation to Indoor Environmental Parameters and Building Features. (Ph.D. Thesis). Technical University of Denmark.

\* See page 12 for an explanation of p-value

# #3

While SF/person is decreasing, employees are concerned about having adequate space.

Increased efficiency in the workplace must be balanced with productivity and workplace satisfaction in order to be a cost benefit.

## DO EMPLOYEES HAVE ENOUGH SPACE TO DO THEIR JOBS EFFICIENTLY AND EFFECTIVELY?

For years, square footage per person has been steadily decreasing, a trend driven by tighter corporate margins, higher real estate costs, and goals of increased utilization and efficiency. Since mobile working is also on the rise—with 72.3% of the total U.S. workforce forecast to be mobile by 2020<sup>1</sup>—less space per person makes sense. Yet when employees are in the office, do they have enough space to do their jobs efficiently and effectively? When asked to identify the top three concerns regarding their company's corporate real estate, employees who do not make real estate decisions for their companies identified adequate space as a primary concern (see Fig. 4). Newmark Grubb Knight Frank warns against over-densification, reporting "a clear correlation between over-densification and a loss of productivity."<sup>2</sup> According to their findings, even a 2% loss of productivity offsets cost savings from over-densification.

Fig. 4: DECREASE IN AVERAGE SF/PERSON



The average SF/person has decreased by more than 50% in the last 20 years. 40% of respondents to the CoreNet Global Corporate Real Estate 2020 survey indicated that they anticipated reaching less than 100 SF/person by 2017.

a 2% loss of productivity offsets cost savings from over-densification<sup>2</sup>

One driver of decreasing SF/person may be low utilization. CBRE reports the average utilization of office space to be only 48%.<sup>3</sup> In other words, workplace environments are half empty throughout the day. Employees often over-estimate how often they are at their desks. Observational data on one HGA project found workspaces to be empty 53% of the time, even though 76% of that company's pre-design survey respondents reported that they spend more than 30 hours per week at their workspaces. This pattern of exaggerated utilization persists across

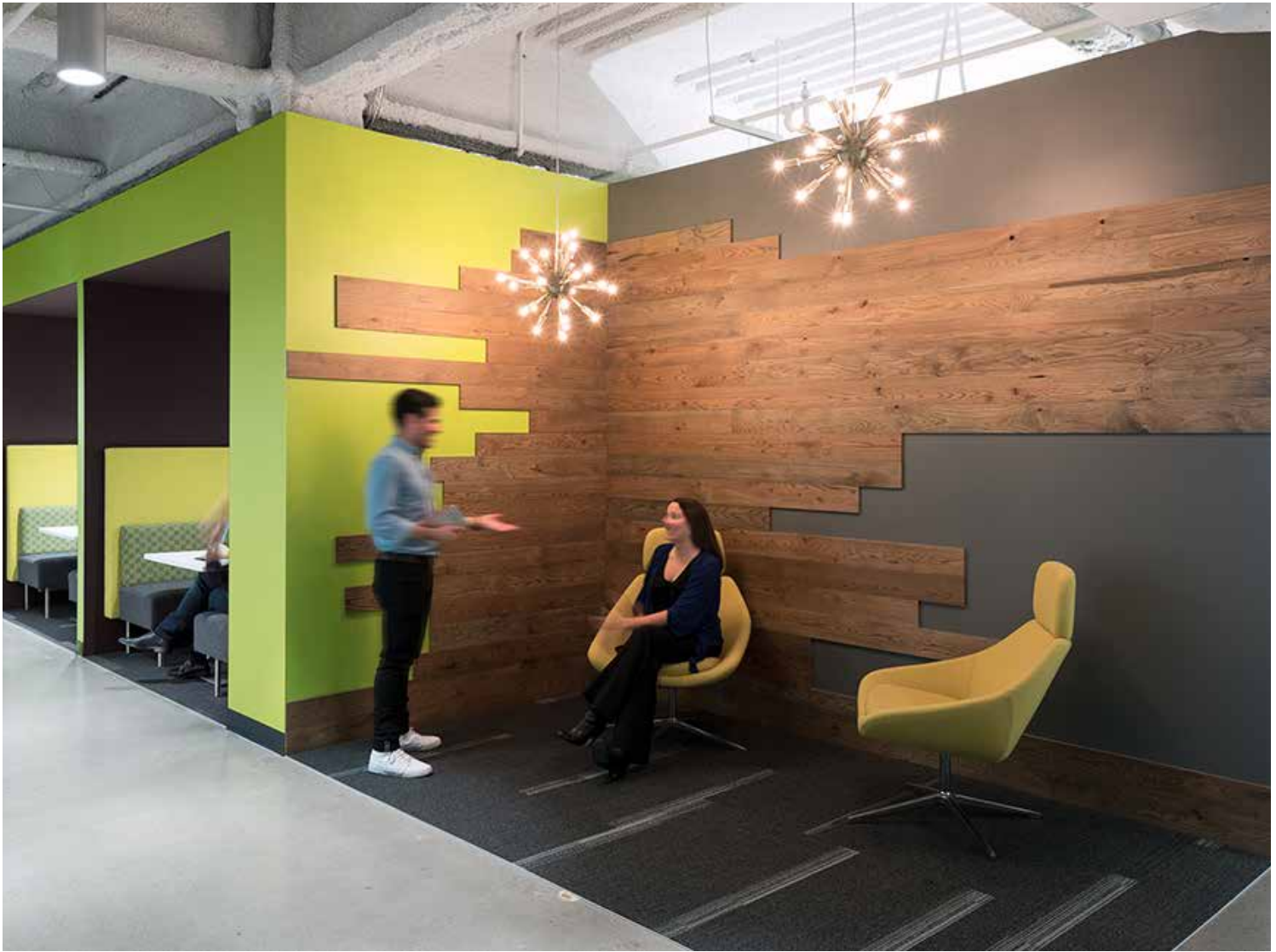


self-reported data in other HGA pre-design surveys as well. 73% of respondents from HGA's pre-design surveys (n=2,014) said they spend 30 hours per week at their workspace, a surprising number given CBRE's utilization findings. This bias is important to remember, as it may reveal a challenge in gaining employee buy-in when shifting to less personal space in the workplace. With the growth of mobile work, increased use of technology and a trend toward working wherever, whenever, time spent at a workspace can only be expected to decline in the future. Change management will be an important part of any design process that involves a transition from an environment with ample individual space to one that prioritizes shared and collaborative spaces.

1 IDC. (2015). IDC Forecasts U.S. Mobile Worker Population to Surpass 105 Million by 2020. <https://www.idc.com>

2 Newark Grubb Knight Frank. (2016). The Impact of Office Space on Employee Productivity and Implications for Occupancy Costs.

3 CBRE. (2013). Driving an Aggressive Occupancy Cost Reduction Program: A White Paper for Corporate Real Estate.



▲ **DOCUSIGN** | CORPORATE OFFICE | San Francisco, California

Fig. 5: TOP 3 CONCERNS REGARDING CORPORATE REAL ESTATE DECISIONS\* (n=98)  
 \*Note: Real estate advisors were asked for the top concerns of their clients. Other respondents answered for their own companies.

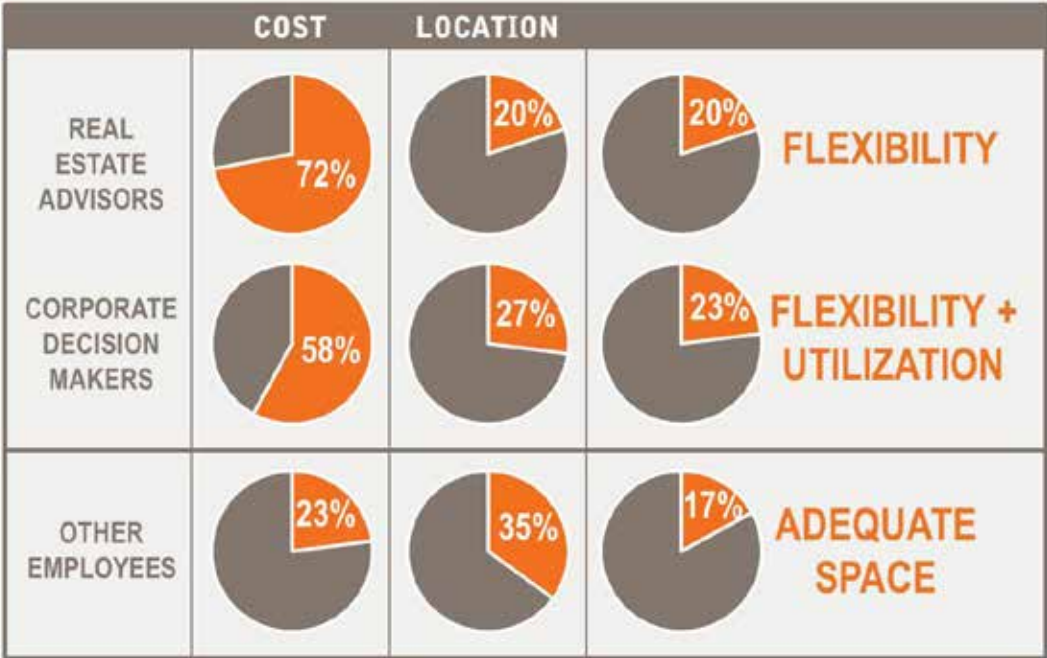


Fig. 4 illustrates the top 3 concerns that each demographic group identified in open-ended responses. 72% of real estate advisors identified cost as a key concern to their clients, 20% identified location, and so on.

While location was in the top three concerns for all three groups, it was far more important for the employee group than the other two groups. Further study would be required to identify the reasons behind this surprise result.





▲ **BUSH FOUNDATION** | CORPORATE OFFICE | Saint Paul, Minnesota

Office environments must balance efficiency with adequate space as required by job function. While employees will continue to work remotely and at locations outside of the office, the work environment must still support their needs. “Adequate space” will have different meanings depending on the industry and the person. For mobile workers, this may simply mean locations in the office where they can work at a moment’s notice, without having to reserve a room or find an open space.

Clearly, a one-size-fits-all approach is not sufficient when determining square footage per person. Worker satisfaction and productivity could suffer if efficiency is the only driver of corporate real estate decisions. Space decisions must also respond to specific job function needs in order to best support the worker and their productivity.

## RESEARCH TERMINOLOGY

### p-value

Example:  $p=0.02$

The p-value is a convenient test for detecting statistical significance of differences in variables of interest between sample groups. It is the probability of observing results as or more extreme in future research. A p-value less than 0.05 is considered significant and estimates that less than 5% of future research samples would demonstrate these same results.

### n

Example:  $n=1,730$

n indicates the number of respondents who answered a given question.



# What's Next...

As real estate and workplace strategies evolve, data plays a growing role in decision-making. While our research shows broad agreement about the role that daylight, technology and thermal comfort can play in employee wellness and recruitment, the trend toward less space per employee should be carefully considered. This study did not explore the benefits of reducing individual workspace size (such as increased shared space for collaboration)—that would be an important next step to weigh the pros and cons of decreased personal space.

Understanding workplace data will help designers, real estate professionals and business leaders create better workplaces by making concrete connections between business performance in terms of employee wellness, productivity and financial results, and the supporting strategies for real estate, workplace and facility design.

Firm-wide, HGA continues to explore these questions through primary and secondary research. While data-driven design has been part of our practice for over 60 years, we have placed a new emphasis on collecting and analyzing data from our projects and applying those lessons learned in the field. In addition, we are building our knowledge-base by encouraging team members to take the Evidence-Based Design Accreditation and Certification (EDAC) exam, and have taken on the EDAC Advocacy Firm Challenge to certify 25 percent of our company by spring 2016. By doing so, team members will be able to further inform design decisions with Evidence-Based Design (EBD) concepts, guided by proven links between design characteristics and improved outcomes, such as increased worker satisfaction or improved retention rates.

Stay tuned for what's next from HGA in workplace research as we continue to use empirical evidence from project data and primary research studies to help our clients understand how design can best support their ever-evolving needs.







Workplace Study Contributors:

Ariane Laxo, EDAC, CID  
Sarah Brown, Assoc. AIA  
Debra Barnes, CID  
Dave Paeper, AIA, CID  
Win Roney, AIA

**MINNEAPOLIS**

420 North 5th Street, Ste 100  
Minneapolis, Minnesota 55401  
**Debra Barnes, IIDA**  
DBarnes@hga.com  
612.758.4203

**MILWAUKEE**

333 East Erie Street  
Milwaukee, Wisconsin 53202  
**John Chapman, AIA**  
JChapman@hga.com  
414.278.3390

**ROCHESTER**

202 1st Avenue SW, Ste 200  
Rochester, Minnesota 55902  
**Hal Henderson, AIA**  
HHenderson@hga.com  
507.281.8601

**WASHINGTON, DC**

44 Canal Center Plaza, Ste 100  
Alexandria, Virginia 22314  
**Kevin Farquhar, AIA**  
KFarquhar@hga.com  
703.317.6030

**SACRAMENTO**

1200 R Street, Suite 100  
Sacramento, California, 95811  
**John Justus, AIA**  
JJustus@hga.com  
916.787.5125

**SAN FRANCISCO**

170 Maiden Lane, 5th Floor  
San Francisco, California 94108  
**Melissa Pesci**  
MPesci@hga.com  
415.814.6950

**SAN JOSE**

96 North 2nd Street  
San Jose, California 95113  
**Win Roney, AIA**  
WRoney@hga.com  
408.213.8204

**LOS ANGELES**

1918 Main St, Third Floor  
Santa Monica, California 90405  
**Alyssa Scholz**  
AScholz@hga.com  
310.557.7659