Immersive Planning

From Research to Realization:
An Experience-based Workplace

Knoll

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Executive Summary

The workplace today is a mass of blurred boundaries. Driven by changing workstyles, the experience economy and the influence of startup culture, the lines separating the worlds of work, life and play continue to fade.

As group-based work becomes the norm, and companies assemble networks of partners, a singular output emerges. Outcomes are emphasized over process. Group work dominates for good reason. Not only is it the demonstrated linchpin of creativity and productivity, but also it plays a key role in workers' happiness and satisfaction with their jobs, company and workplace.

Empowered workers move frequently throughout the day to their choice of workspace, using the tools they select and meeting with the team they need, at the time and place they prefer.

As mobility lifts limitations on where work is done, organizations are challenged to create engaging environments that draw workers to the office. In response, the workplace has taken on new life, functioning as a town square-like hub energized by the hum of the occupants. Elements of residential and hospitality design add welcomed comfort for employees who come together to collaborate, connect or need a place to relax, ideate, focus, socialize or otherwise engage. Reduced individual workspace footprints allow companies to provide a greater number of amenities and social spaces, while still maintaining a tight rein on real estate portfolio expenses.

An Experience-based Workplace

Changing dynamics call for a new, "Immersive" workplace planning approach that is as fluid as teams themselves. As workspaces become defined by an individual's actions rather than job function, the lines between space types diminish; enhancing interaction, inviting connected experiences and radiating a sense of hospitality at every exchange.

Comprised of three fundamental elements—Improvisational, Communal and Dimensional—the model cultivates an environment of dynamic flow, constant movement, meaningful interaction, creative group effort and innovation within a gracious and welcoming setting. (Figure 1)
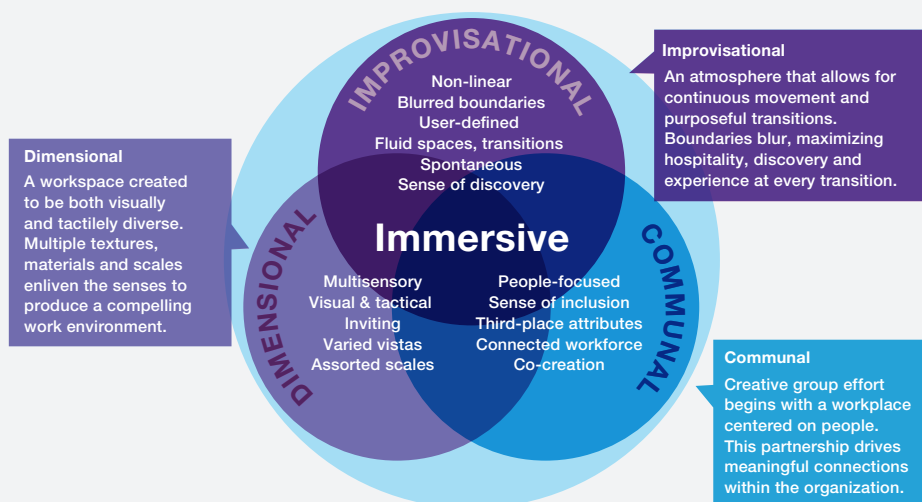
Key Takeaways

Our study revealed a workplace that is dramatically different than one of just a generation ago. Knoll found five significant factors that contribute to a new way of working and drive new thinking about the work environment.

1. Group-based work is the norm
2. Hospitality and residential influences enter the workplace
3. Despite new alternatives, office is still home base
4. Empowered by choice, employees make the workplace their own
5. Management of the real estate asset is tighter than ever

Based on our findings, we identified a new way to think about space. Defined as Immersive planning, the model not only blurs the lines between work, life and play, but also individuals and teams, primary workspaces and activity spaces, and owned and shared work areas and tools. Comfortable furnishings and fluid boundaries characterize this group-based workplace where the actions of the people themselves define the space. The result: an environment that creates a variety of experiences, transforming at a moment's notice and evolving with use.

About the Study

To better understand the rapidly evolving nature of work and the challenges organizations face today and in the future, Knoll undertook a series of studies.

Our goal: To identify trends of a business environment in flux, and to realize how forces of changing complexity, speed and style were transforming the workplace. We sought to learn how people are working today and the factors that influence the workers' experience to gain a clearer picture of the spaces and elements required to support and sustain modern work.

- A four-year longitudinal study began in 2012 with a baseline survey of 40 workplace executives across diverse industries and

Immersive Planning Embodies Three Main Attributes

IMPROVISATIONAL
Non-linear
Blurred boundaries
User-defined
Fluid spaces, transitions
Spontaneous
Sense of discovery

Improvisational
An atmosphere that allows for continuous movement and purposeful transitions. Boundaries blur, maximizing hospitality, discovery and experience at every transition.

Dimensional
A workspace created to be both visually and tactilely diverse. Multiple textures, materials and scales enliven the senses to produce a compelling work environment.

Immersive
DIMENSIONAL
Multisensory
Visual & tactical
Inviting
Varied vistas
Assorted scales

COMMUNAL
People-focused
Sense of inclusion
Third-place attributes
Connected workforce
Co-creation

Communal
Creative group effort begins with a workplace centered on people. This partnership drives meaningful connections within the organization.

Figure 1: Comprised of three fundamental elements—Improvisational, Communal and Dimensional—Immersive planning cultivates an environment in tune with today's group-based workstyle and an experiential workplace.

locations, and observation studies of their corporate workplaces to uncover work trends and ways organizations were planning and allocating space.

▸ In 2015 and 2016, we conducted a second phase of research, surveying 110 workplace executives worldwide. We also spoke at length with various workplace experts, interviewing some 40 workplace executives, real estate professionals, architects, designers, leading academics and workplace strategists across three continents.

▸ In early 2016, we performed a separate global study of more than 1,400 knowledge workers across 14 countries to determine the relationships of office features and design to work outcomes such as creativity, productivity, happiness, stress and satisfaction. In contrast to the phase one and phase two longitudinal study, in which we surveyed and spoke primarily to workplace executives and planners, this study was designed and conducted to survey the user experience. (See appendix, page 17, for more information on studies.)

This paper is the culmination of this multilayered research initiative and our opportunity to share our insights on a new way of workplace planning.

An Evolution is Underway

Modern advancements continue to accelerate, disrupt and otherwise rewrite how we connect, communicate and collaborate today. Additional challenges ensue from the unrelenting pace of business, forces of globalization, changing demographics and escalating economic, political, social and environmental pressures. The confluence of these changing dynamics gives rise to dramatic shifts in the way we work, profoundly impacting today's workplaces.

Changing Workstyles

As the highly process-driven, task-based workstyle of the 20th century has faded away, so too has the deskbound worker, hierarchical leadership and staid workplace model.

A spirit of collaboration characterizes the modern environment. Highly connected workers with multi-layered responsibilities work within self-directed cross-functional teams—
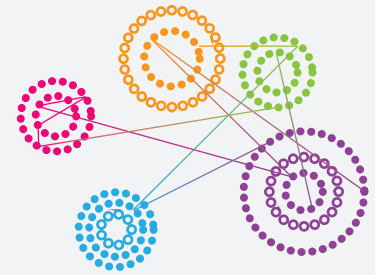
Workstyles Have Shifted

20th Century Workstyle
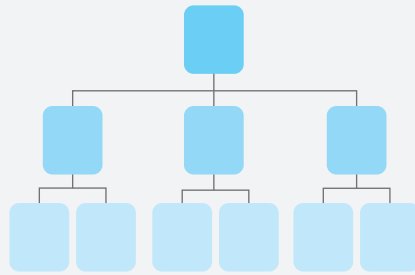
Linear flow/hierarchical structure

21st Century Workstyle

Complex flow/networked structure

Figure 2: The hierarchical structure and linear processes of the 20th century workplace have evolved into a highly complex, layered structure comprised of multifaceted networks and interconnected teams culled from a large, extended ecosystem.

meeting, ideating, relaxing and performing tasks and activities that keep them in motion throughout the day. (Figure 2)

Priorities have shifted as well. In the new economy, where knowledge and experience are highly valued, immediacy, information and innovation are the most highly prized currency.

The Experience Economy Has Arrived

Creating a holistic, engaging customer experience is one strategy companies use to differentiate their brands in a competitive global marketplace in which goods and services are highly commoditized. Eliciting a powerful sensory or cognitive response produces a lasting experience that builds greater loyalty.

Some firms are adopting the strategy of creating memorable experiences to keep their own employees engaged and happy. In the workplace-as-experience scenario, organizations address the physical, emotional, intellectual, virtual and aspirational elements of work in an approach that inspires and engages employees and is on point with their brand's mission.

Startup Culture Permeates Mainstream Corporate Environments

Inspired by the success of technology firms and creative agencies, established companies from myriad industries are reinventing their culture to model startups. They hope to foster a similar level of innovation and productivity to generate

the growth that will propel their firm to new levels of success and market leadership.

Introducing a more casual atmosphere, providing abundant choices for places to work, and integrating social spaces and a wealth of amenities are among the ways mainstream firms support engagement, teamwork and creativity.

There is no one office of the future. There is only change.

A New Way of Working

Our research revealed five significant factors that contribute to a new way of working and drive new thinking about the work environment.

1. Group-Based Work is the Norm

Networks Replace Hierarchies

To meet today's complex and changing business challenges calls for equally multifaceted networks of individuals and teams culled from a large, extended ecosystem. Sometimes referred to as a "flash team," the network could include internal employees, vendors, consultants, strategic alliance partners (suppliers, customers, even competitors) and "contingent" workers who work on a project basis. As a frequently fluid assemblage, the makeup of the team can adapt as the needs of a project evolve. Teams

may dissolve when the project is completed, and re-group with the same or different makeup for the next project.

This contingent model, which currently accounts for a relatively small (16%) portion of the workforce in our study, is expected to expand further, with contractors and temporary workers comprising an estimated 22% of the workforce within the next 5 years. (Figure 3)

A More Connected Workforce

Most companies we surveyed anticipate greater and broader connections throughout their organization as hierarchies flatten and leadership fans out to a greater number of individuals. Two-thirds of organizations predict increased connectivity (versus siloed departments) within their workforce over the next 5 years, and one-quarter feel leadership will further disperse among individuals across various levels and locations. (Figure 5)

Group-Based Work on the Rise

While we continue to experience the push and pull of individualism versus collectivism, our research suggests that organizations today are by and large group-oriented. As more and more mainstream companies adopt the group-based work model that has powered many startups to well-documented success, group work is increasingly becoming the standard across many industries. Companies report that more than half their firm's work is group-based, produced primarily by teams of 3 or more, with 5 to 8 the most popular size (Figure 4). Group-based work ratios continue to escalate, accounting for 40% of work in 2012 and expected to climb to 63% in 5 years. (Figure 6)

Companies estimate that employees currently spend 40% of their day in unstructured or informal group activities, and in 5 years it will encompass more than half their work day. (Figure 7)
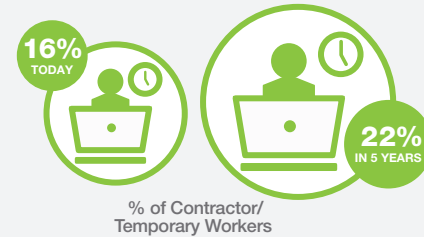
> *"Yesterday's hierarchy is not nearly as important as today's project structure."*
>
> —SETH GODIN

Group Workers are More Loyal, Satisfied, Creative and Productive

While numerous studies have documented that the work output from groups is more

The Contingent Workforce is on the Rise

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 3: Organizations expect that contractor and/or temporary workers will make up an increasingly larger share of their workforce in the future.
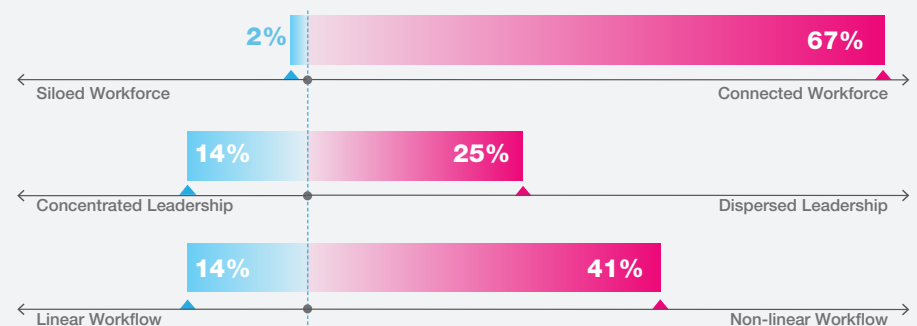
Most Teams are Medium-sized

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 4: Teams comprised of 5 to 8 members are the most common size.

Continued Shift Toward Connected, Flattened Organizations

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 5: Organizations predict a continued transition to a flatter structure over the next 5 years, forecasting a more connected organization, increasingly dispersed leadership and more complex work process and flow.

Group-based Work Continues to Escalate

% of Organizations' Work Classified as Group Work

Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 6: Working in teams has become the norm for most firms, with more than half of today's work considered group-based, and an even higher percentage expected in the future.

Time Spent in Informal, Unstructured Group Activities Will Increase

% of the Workforces' Time Spent in Informal, Unstructured Group Activities
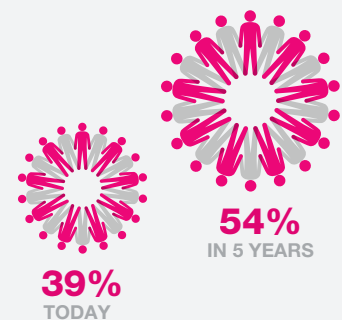
Source: 2015/2016 Knoll Workplace Executive Survey

Figure 7: With the expectation that an already significant proportion of group work will only increase over time, the majority of workplace professionals are planning their workplace strategies to provide for more informal and unstructured activities.

creative and innovative, our study revealed that from an individual standpoint, the group worker is more satisfied with both their company and physical workspace than their counterpart who spends less than half of their time in a group. (Figure 8)

Group workers are also 15% more likely to recommend their company as a great place to work, think about looking for a new job less often and relate levels of company pride 15% higher.

Additionally, group workers spend 17% more time generating new ideas and report higher numbers of productive hours in a day than people who spend a majority of time working solo. Group workers also felt satisfied with the level of their accomplishments each week more often.

Collaboration is Top Planning Priority

Our research revealed that companies acknowledge group work as the cornerstone of innovation success, and are planning their workplace strategies to provide for collaboration as well as attract and retain talent to the organization.

With an increasingly larger percentage of time devoted to group work, workplace executives named collaboration their top planning priority for organizations today and into the future. Executives reported prioritizing support work process/flow second, followed by attraction and retention, minimizing costs and maximizing space utilization. (Figure 9)

Group Workers are More Loyal, Satisfied, Innovative and Productive

Spend less than half of their time in group work

Spend more than half of their time in group work

Company Pride and Loyalty

Do you agree with each of the following statements? (% agree)

72% / 87%
I am proud to work for this company.

I would recommend my company as a great place to work.
66% / 81%

64% / 72%
I rarely think about looking for a job with a new company.

Company and Workplace Satisfaction

1=Highly Dissatisfied, 5=Highly Satisfied

Company: 3.6 / 3.9
Physical workplace: 3.5 / 3.8

Creativity

32% / 49%
% of time spent on new ideas
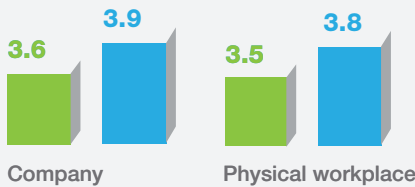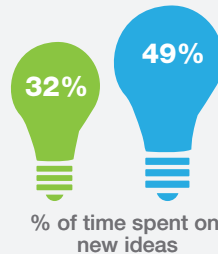
Productivity

Approximately how many productive hours do you have in a day?

8+ hours: 4% / 9%
6-8 hours: 57% / 60%
3-5 hours: 34% / 27%
1-2 hours: 5% / 4%
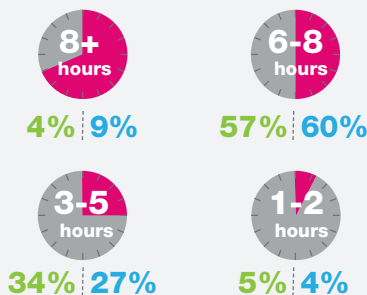
How many days a week do you finish the day feeling satisfied about what you accomplished?

5+ days: 7% / 11%
4-5 days: 49% / 60%
1-3 days: 44% / 29%
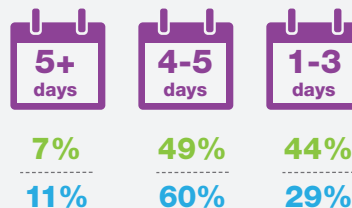
Source: 2016 Knoll Knowledge-worker Survey

Figure 8: People who worked in groups the majority of the time reported higher levels of company pride and satisfaction with their company and workplace, as well as greater creativity and daily productivity than workers who spent less than half of their time in group work.

> *"For us it's speed to market and the pace of change: How quickly can we adapt? How quickly can we respond?"*
>
> —TECHNOLOGY EXECUTIVE

Top Drivers for Workplace Planning

	2012	Today
1	Collaboration	Collaboration
2	Attraction/Retention	Support work process/flow
3	Maximize space utilization	Attraction/Retention
4	Cost	Cost
5	Support work process/flow	Maximize space utilization

Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 9: Current planning priorities shaped up remarkably similar to the drivers executives reported 4 years ago.

Informal Meeting Space Will Nearly Double

20% **39%**

TODAY · IN 5 YEARS

% of Informal Meeting Space
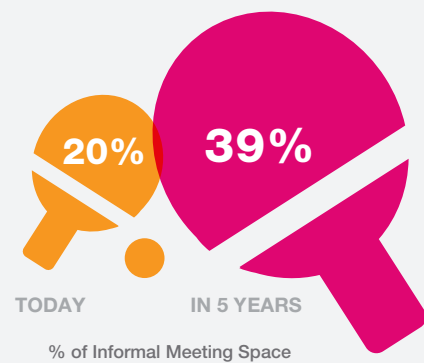
Source: 2015/2016 Knoll Workplace Executive Survey

Figure 10: Companies are allocating greater amounts of space for informal meetings today and expect the proportion of casual spaces will further expand in the next 5 years.

"People want to work and play in the same city. They don't want to own cars. They want to have all the amenities around them. People want to live and work in downtown, not 20 minutes outside town."

—FINANCIAL SERVICES FIRM LEADER

Delivering a Positive Workplace Experience

Describe a positive workplace experience.

inviting · comfortable · collaborative · bright · flexible · fun

honest, engaging and vibrant

Source: 2015/2016 Knoll Workplace Expert Interviews

Figure 12: In their quest to deliver a positive workplace experience, workplace executives honed in on a few particular attributes that describe these environments.

"If people have to spend a lot of time at work, we need to make sure they're as comfortable as possible and the office space is practical to support that."

—PHARMACEUTICAL EXECUTIVE

Casual Settings and Furnishings Predominate in the Future Workplace

3% Formal Atmosphere — 41% Informal Atmosphere

1% Static Architecture/Furnishings — 69% Adaptable Architecture/Furnishings

5% Assigned Workspace Allocations — 57% Unassigned Workspace Allocations

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 11: Workplace executives predict more relaxed standards in the future workplace, with a more informal atmosphere, even greater preponderance of adaptable architecture and furnishings and unassigned spaces within it.

2. Residential and Hospitality Influences Enter the Workplace

A Casual Atmosphere Prevails

Inspired by the relaxed environments of their founders' very recent college days, in which crews seamlessly shifted from work to play, technology startups were among the first companies to have offices that resembled rec rooms, garages, basements or other variations of living spaces.

While a ping pong table or hovercraft on-site in a former factory loft is not appropriate for every office, today most organizations do embrace a more casual workplace standard with an overall relaxed, open environment. Dress codes are becoming a thing of the past for all but the most traditional firms. Suites of formal meeting spaces are equally diminishing as greater numbers of companies devote an increasingly larger proportion of space to informal meeting areas. More than 40% of the workplace executives we surveyed anticipate their companies will transition to an even more informal environment in the next 5 years. In contrast, a scant 3% plan a move to a more formal atmosphere. To provide for the relaxed environments their people are seeking, firms are planning for more informal areas, rising to encompass nearly 40% of their meeting space in 5 years, up from today's 20%. (Figure 10)

Organizations had a similar outlook as far as furnishings within their interior environment. Nearly 70% of executives expect their company to install even more adaptable architecture and furnishings over the next 5 years; while less than 1% expect their interiors to become more static. (Figure 11)

Companies Embrace Residential, Hospitality Influences

As workforces are further distributed around the globe, and remote and flex work options take root and expand, enticing people into the office can become a challenge. To draw workers in, many organizations are turning to a more deliberate focus on design and programming to create a more hospitable and engaging experience.

Creating a warm, welcoming environment can mean anything from providing concierge services to stocking pantries with locally sourced fare. To bring a level of comfort one might experience at home or a boutique hotel, companies are adopting materials, lighting and finishes from non-office environments.

Workspaces are designed to "feel like an extension of home," said a real estate director. "We want people to feel super comfortable hanging at work," said one executive. Environments should evoke "a more comfortable, homey feeling" with "a design that's not so linear," another portfolio manager explained. "We don't expect people to sit at their desks all day," asserted another, explaining his firm's abundance of lounges and social spaces.

Design Matters

In their quest to deliver a positive workplace experience, workplace executives honed in on a few particular attributes that describe such environments. Most frequently mentioned traits were inviting, bright, flexible, comfortable, collaborative and fun. Also mentioned numerous times were: honest, engaging and vibrant. (Figure 12)

Workplace Flexibility and Choice Deliver More Satisfied Workers

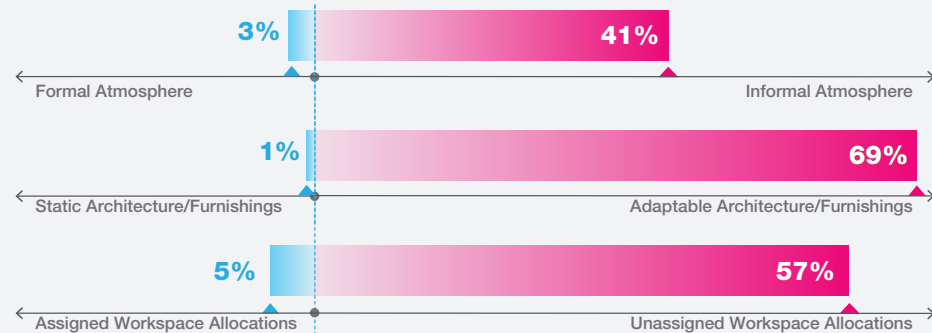| Do you agree with each of the following statements? (% agree)	🙁 Highly Dissatisfied	🙂 Highly Satisfied
The overall workplace design (look and feel) is pleasant	26%	88%
I have the right technology and tools to effectively get my work done and support teamwork	43%	88%
My task chair is comfortable	49%	86%
I have access to natural light and outdoor views near my workspace	44%	85%
I have adequate spaces available to me to use for scheduled/formal meetings	41%	83%
I have adequate spaces available to me to use for impromptu/casual meetings	33%	82%
I have access to communal spaces when I want to socialize with colleagues	37%	82%
The air quality/temperature in the area surrounding my workspace is acceptable	31%	82%
I have the amount of privacy required to get my work done	26%	80%
The overall workplace design supports the easy flow of work and ideas between me and my co-workers	33%	79%
I have access to quiet space for focused work and/or private conversations	22%	79%

Source: 2016 Knoll Knowledge-worker Survey

Figure 13: Employees provided with flexible options and empowered with the ability to choose many aspects of their work environment report higher levels of satisfaction.

Company Satisfaction and Workplace Satisfaction are Linked

Source: 2016 Knoll Knowledge-worker Survey

Figure 14: As workers' level of physical workplace satisfaction increased, satisfaction with their company also increased.

Workplace Executives Speak Out About Working In the Office versus Alternative Settings

Our interviews with workplace executives across various industries confirmed that while many organizations have variations of flex work, including work-at-home, co-working space and unlimited Paid Time Off (PTO), for the most part employees are encouraged to be in the office because of the nature of work.

"One of the reasons we changed the office environment around and made it more open is to encourage people to actually want to be here rather than work from home. We're trying to harbor a collaborative environment where people want to come to the site."

—Pharmaceutical Company Leader

"We see it of extreme value to have employees in the office. We've tried work at home, but the managers don't like it and the people don't like it, so we've gone away from it."

—Technology Company Executive

Our research of knowledge workers suggests workspaces that integrated the executives' most oft-mentioned factors—bright, flexible, inviting—were more successful in achieving high levels of worker satisfaction.

For example, 85% of highly satisfied workers said they have access to natural light and outdoor views near their primary workspace, but only 44% of highly dissatisfied workers could make that statement. More than 82% of highly satisfied workers felt they had access to communal spaces when they wanted to socialize with colleagues versus 37% of highly dissatisfied employees. When it came to flow, 79% of highly satisfied workers felt their workspaces supported the easy flow of work and ideas between co-workers, compared to a third of highly dissatisfied workers. (Figure 13)

Overall design was among the most definitive predictors of employee satisfaction. Nearly 90% of highly satisfied workers felt the look and feel of their workplace was pleasant, while barely a quarter of highly unsatisfied workers expressed comparable levels of satisfaction. Similarly, we found a clear link between satisfaction with the physical workplace and with the company (Figure 14). Workers who expressed high levels of satisfaction with their physical workplace also reported high levels

More Amenities = More Satisfied Workers

What types of amenities does your workplace offer?
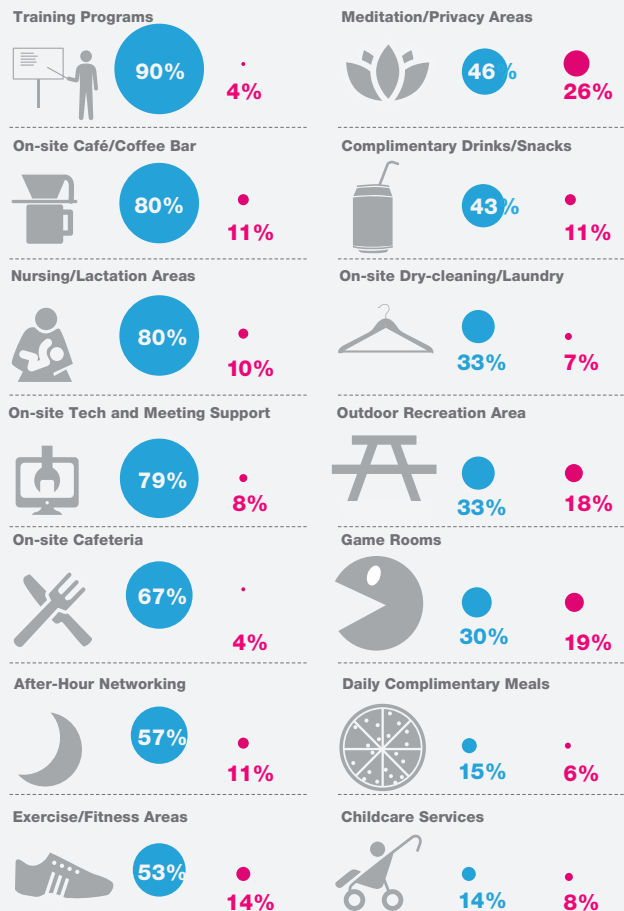
● Highly Dissatisfied ● Highly Satisfied

- On-site Cafeteria
- On-site Tech and Meeting Support
- On-site Café/Coffee Bar
- Training Programs
- Complimentary Drinks/Snacks
- Exercise/Fitness Areas
- Game Rooms
- Health and Wellness Services
- Outdoor Recreation Areas
- Complimentary Meals
- Nursing/Lactation Areas
- Meditation/Privacy Areas
- Childcare Services
- On-site Dry-cleaning/Laundry

% 0 10 20 30 40 50 60 70 80 90 100
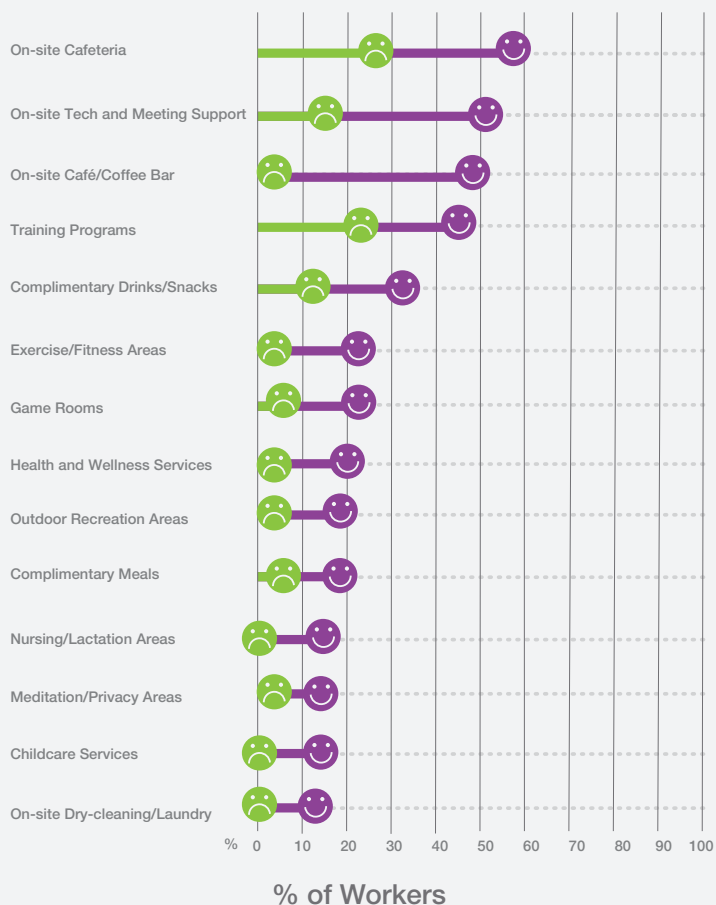
% of Workers

Figure 15: The Knoll study revealed a wide difference between the amount and type of amenities provided to highly satisfied workers as compared to highly dissatisfied.

Companies Provide New Levels of Amenities

● Provide now ● Plan to provide in 5 years

Amenity	Provide now	Plan in 5 years
Training Programs	90%	4%
Meditation/Privacy Areas	46%	26%
On-site Café/Coffee Bar	80%	11%
Complimentary Drinks/Snacks	43%	11%
Nursing/Lactation Areas	80%	10%
On-site Dry-cleaning/Laundry	33%	7%
On-site Tech and Meeting Support	79%	8%
Outdoor Recreation Area	33%	18%
On-site Cafeteria	67%	4%
Game Rooms	30%	19%
After-Hour Networking	57%	11%
Daily Complimentary Meals	15%	6%
Exercise/Fitness Areas	53%	14%
Childcare Services	14%	8%

Figure 16: Today's workplace features an unprecedented level of amenities. In the future, companies plan to provide even more wellness, relaxation and recreation-themed spaces, such as Meditation/Privacy Areas, Game Rooms and Outdoor Recreation Areas.

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of satisfaction with their company. In contrast, workers who were highly dissatisfied with their physical workplace also expressed high levels of dissatisfaction with their company. The relationships support the investment in the workplace not only as a recruitment and branding tool, but also as an invaluable means of achieving employee retention and high levels of worker satisfaction that contribute to good organizational outcomes.

> *"We are moving away from one-size-fits all and instead offering something they can make their own."*
>
> —TECHNOLOGY COMPANY EXECUTIVE

Companies Planning Expanded Amenities for Their Workforce

Whether it's a growing focus on wellness, an effort toward recruitment and retention or a combination, companies are integrating new levels of amenities into their workspaces.

In some cases employers provide a broad suite of amenities within a campus setting; other times, organizations take advantage of their urban location with multiple services and conveniences in close proximity. But whatever the location, amenities were found to definitively have a positive effect on employees.

Our research showed a correlation between the amount and type of amenities provided and levels of the satisfaction of workers (Figure 15). Currently the most universally provided

amenities are Training Programs (90%), On-site Café/Coffee Bar (80%), Nursing/Lactation Areas (80%) and On-site Tech/Meeting Support (79%). (Figure 16)

Amenities planned for the near future skew strongly toward wellness, relaxation and recreation. The top three cited perks companies plan to offer within 5 years are Meditation/Privacy Areas (26%), Game Rooms (19%) and Outdoor Recreation (18%).

For many companies we spoke with, the city was the ultimate amenity. Establishing or relocating to city locations from suburban spaces was a key strategy firms employed to recruit young talent who tend to cluster in dense urban areas, creating high concentrations of educated knowledge workers.

Highly Satisfied Works Have More Networking and Idea-sharing Opportunities

My company often provides events to promote networking and the sharing of ideas among colleagues.

Highly Dissatisfied

- Strongly agree **0%**
- Agree **11%**
- Neutral **11%**
- Disagree **22%**
- Strongly disagree **56%**

Highly Satisfied

- Strongly agree **20%**
- Agree **43%**
- Neutral **20%**
- Disagree **8%**
- Strongly disagree **9%**
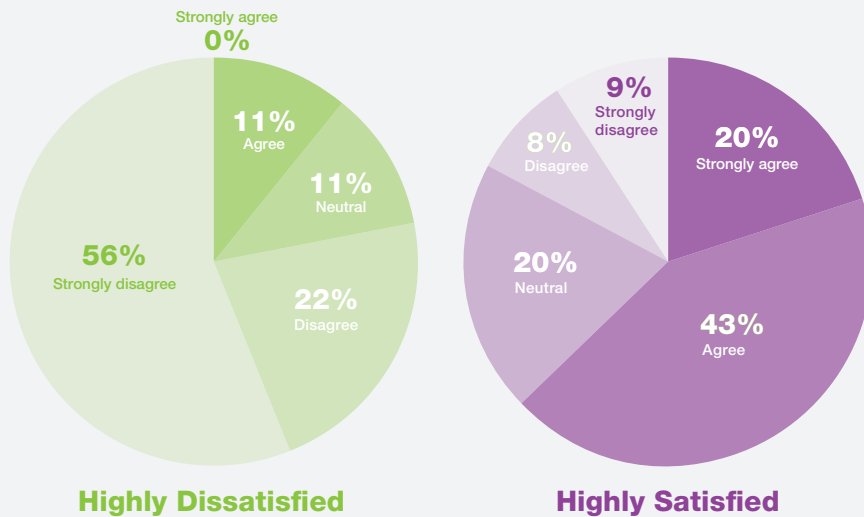
Source: 2016 Knoll Knowledge-worker Survey

Figure 17: Company-sponsored programming helps build cohesion and can raise employee satisfaction levels. In the Knoll study, highly satisfied workers were shown to have more networking and idea-sharing opportunities than less satisfied employees.

Most People Work in the Office the Majority of the Time

Legend: 2012, Today

- 5 or more days: **70%** (2012), **63%** (Today)
- 3-4 days: **14%** (2012), **23%** (Today)
- 1-2 days: **11%** (2012), **10%** (Today)
- 0 days (totally remote): **5%** (2012), **4%** (Today)

% of the Workforce that Works in the Office

Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 18: While numerous options for off-site work exist, the Knoll study showed that most employees worked in the workplace the better part of the week. Workplace executives reported that 96% of the workforce was in the office at least 1-2 days per week and 86% was in 3 or more days a week.

3. Despite Alternatives, the Office is Still Home Base

The Building as the Social Network

The concept of the workplace is being reinvented. In order to encourage employees to work on-site when they have other options, companies are providing compelling environments that draw workers together with the goal of building engagement and community.
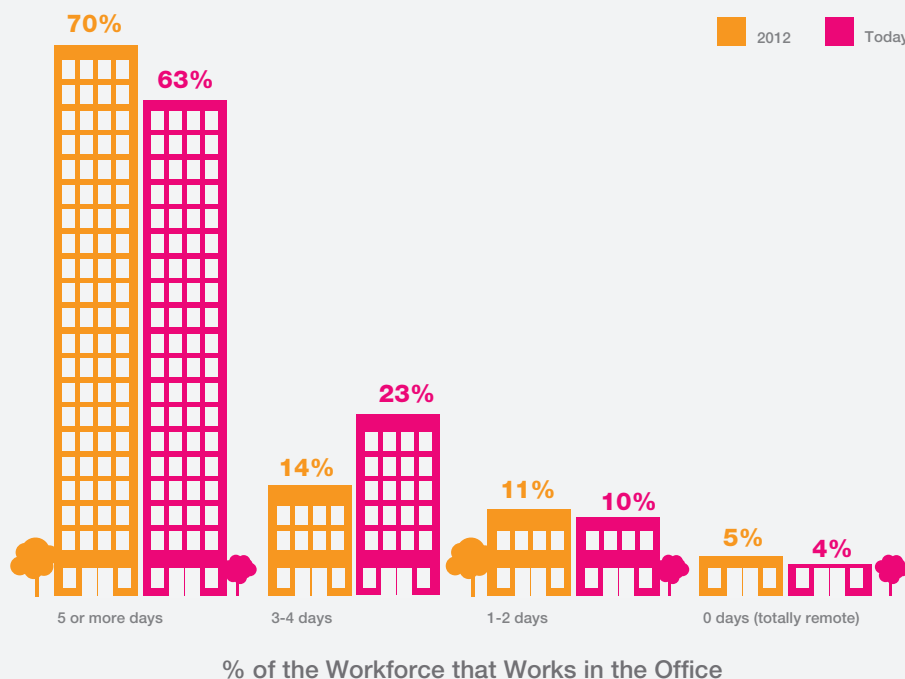
With its welcoming environment, plethora of social spaces and bottomless coffee and snacks, the office functions as the hub of the company. Much like town squares that buzz with energy and function as a central meeting place, the office is where the workforce gathers to work, share and connect, even when they have other options.

Engagement is very much by design. In addition to workplace features that encourage random collisions and support collaboration and cross-pollination, companies sponsor and/or present programming to build a cohesive community. Currently, 57% of companies provide after-hour networking, with 11% planning to provide such activities in the next 5 years. Our research found such efforts to be productive, as highly satisfied workers were shown to have more networking and idea-sharing opportunities than less satisfied employees. (Figure 17)

Most People Work in the Office the Majority of Their Workweek

Despite mobility and other workspace options, for most workers, the office is still home base for getting work done. In fact, according to our research, 96% of the workforce is reported to be in the office at

"We are introducing some pilots for reflection spaces where there is no Wi-Fi connection, no mobile connection. You go there to sit and think. We are trying to get people to move around in and outside the workplace environment for free thoughts. We are encouraging people to leave the building to go for a walk and then come back again. We are creating some walking trails with a new headquarters building."

—PHARMACEUTICAL COMPANY LEADER

least 1-2 days per week and 86% of the workforce is in the office 3 or more days per week. (Figure 18, page 8)

For group-based workers in particular, it's a simple reality. "Work happens at work because the nature of work is so collaborative," said an executive at a financial services firm.

Remote working certainly exists, and for many companies, is part of a strategy to reduce the real estate footprint. However, it is not universally suitable and often best left to select jobs and functions, according to a veteran real estate manager.

Many companies have scaled back their work-at-home policies, finding that on-site attendance is vital for the nature of their collaborative work. However, firms often maintain a degree of flexibility in their work options by offering flex work and/or unlimited or non-tracked Paid Time Off (PTO) days instead of capped sick and vacation time.

4. Empowered by Choice, Employees Make the Workplace their Own

An Abundance of Choices Creates Empowering Workplace

For knowledge workers, progress and success are measured differently than earlier eras. Discovery-driven businesses manage the project, not the person. Outcomes are emphasized over process. The rate of failure is

Workers Value the Ability to Choose Workplace Features

Do you agree with each of the following statements? (% agree)	Highly Dissatisfied	Highly Satisfied
I am able to display personal items at my workspace	32%	86%
I am able to configure and adapt my workspace	37%	81%
I have access to a variety of types of individual and group spaces	29%	69%
I have the ability to choose where I work	23%	46%

Source: 2016 Knoll Knowledge-worker Survey

Figure 19: Being able to choose one's workspace and customize it to individual expectations was found to be significant and correlated with higher levels of satisfaction.

less important than the cost of failure, which can be recouped with a single financially successful project and/or transferable knowledge and capabilities for the next endeavor.

Such internally focused standards and benchmarks are supported in an office setting that is equally empowering—where self-managed employees and the extended project team have wide discretion on the spaces, technology, tools and collaborators they need and can choose where, when and how they like to work.

Our workplace study indicated that highly satisfied workers have more control and choices in their work environment (Figure 19). For example, 46% of highly satisfied workers reported they were able to choose where they work each day. In contrast, 23% of highly dissatisfied workers had choice. Distinctions were even greater relative to personalizing workspaces: 81% of highly satisfied workers

felt they were able to adapt their primary workspace to meet daily needs compared to only 37% of highly dissatisfied workers. Providing a choice of types of individual and group spaces for different activities aligned with satisfaction levels as well: 69% of highly satisfied workers felt they had such options versus just 29% of highly dissatisfied workers.

Personal Touches Matter

Being able to personalize one's primary workspace was shown to be taken very seriously by workers. Eighty-six percent of highly satisfied workers were able to display memorabilia, photos and awards at their workspace, compared to 32% of highly dissatisfied workers.

One real estate manager shared his company's experience when they moved to an open office setting that did not accommodate personal items. Follow up

A Wide Range of Collaborative Technologies are Being Utilized

90%	90%	84%	83%	74%	67%	67%	48%	36%	3%
Audio conferencing	Video conferencing	Web conferencing	Voice over IP telephone services	Instant messaging	Document sharing software	Wired collaborative screen sharing	Wireless collaborative screen sharing	Interactive whiteboards	Other
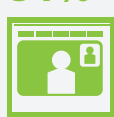
Source: 2015/2016 Knoll Workplace Executive Survey

Figure 20: Organizations use a variety of collaborative technologies to support group work and connect globally distributed networks of workers and locations.

Offices Have High Levels of Mobility

Movement Frequency

Rarely 2%
Very often 14%
Sometimes 38%
Quite Often 46%

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 21: Mobilized by technology and portability, 98% of workplace leaders report their workforce moves within their work environment throughout the day. Nearly 60% say their workforce moves quite or very often, shifting from setting to setting as the day goes on.
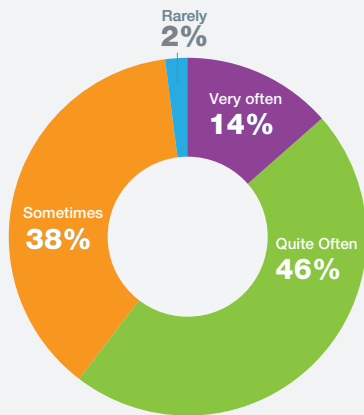
research revealed the pushback was not about the open office, but rather eliminating the space to display personal items.

"After we moved people into an open plan, 55% said they would not want to go back into an office room if they could," he recalled. "We started to look at the reasons why the other 45% wanted to go back. It was actually some pretty small [personalization] things on the top of their list," he recalled, which turned out to be easy to fix.
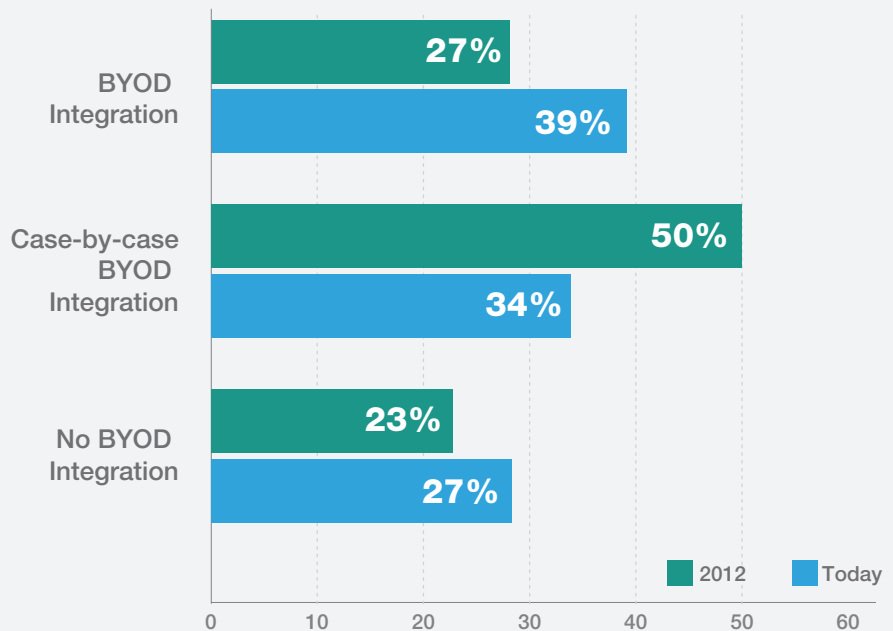
Mobility is the Norm

As the desk-bound worker surrounded by equipment goes by the wayside, replaced by cloud-based storage, portable computing, smartphones and headsets, mobility becomes the default workstyle.

Our survey confirmed that offices have high levels of mobility within the workspace, with 98% of workplace leaders saying their workforce moves at least occasionally throughout the day to different locations. Nearly 60% report their workforce moves quite or very often depending on the type of work they're doing and with whom they're doing it. (Figure 21)

To support individual mobility, organizations are deploying smaller and more user-personalized technology devices. Choices are

Bring Your Own Device (BYOD) Policies are on the Rise

BYOD Integration — 27% (2012), 39% (Today)
Case-by-case BYOD Integration — 50% (2012), 34% (Today)
No BYOD Integration — 23% (2012), 27% (Today)

Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 22: To support high levels of mobility within the workplace, companies are increasingly leaving decision-making to the individual when it comes to personal technology. More companies have adopted a Bring Your Own Device (BYOD) approach in the last 4 years, though others evaluate on a case-by-case basis.

Organizations are Deploying Smaller and More Personalized Technology Devices

2012   Today

Laptop — 100% (2012), 97% (Today)
Tablet — 25% (2012), 37% (Today)
Desktop — 80% (2012), 70% (Today)
Other — 4% (Today)
Smartphone — 75% (2012), 62% (Today)
None — 0% (Today)
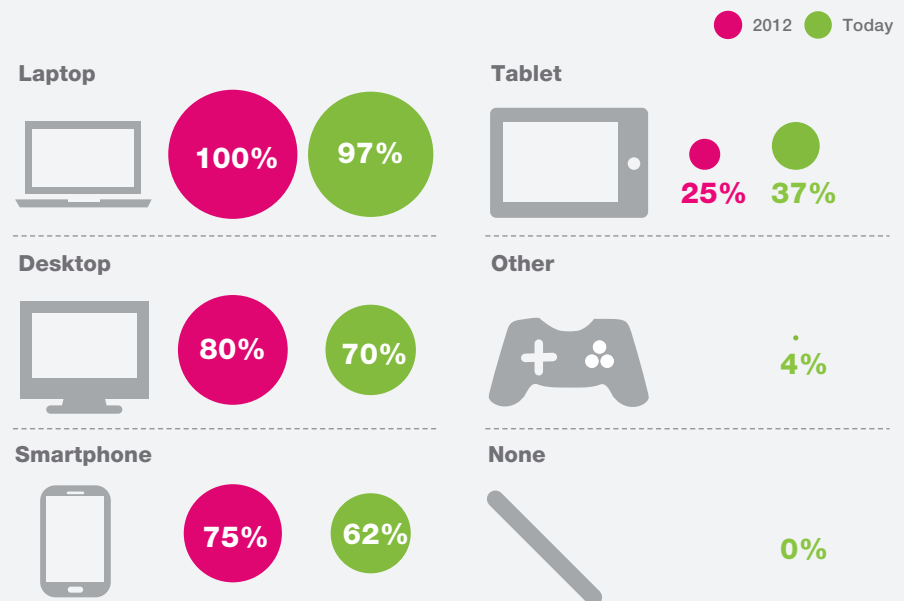
Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 23: Office mobility is supported by greater adaptation of small devices such as tablets, and a decline in desktop and laptop use. Smartphones provided by employers show a decline over the last 4 years, likely offset by growth in the number of firms that allow employees to provide their own phone.

often left to the individual, and Bring Your Own Device (BYOD) is becoming widely adopted by 39% of enterprises (Figure 22, page 10). Sizes range from XS to XXL for devices from hand-held smartphones to large displays. (Figure 23, page 10)

To facilitate group work and support connectivity across an increasingly mobile and distributed network, organizations are employing a wide range of collaborative technologies to connect workers, customers, markets, locations and/or support group work. (Figure 20, page 9)

For some companies, technology integration is seamless. Other organizations struggle with reliability, ease of use and future planning.

5. Management of the Real Estate Asset is Tighter than Ever

As Shared Activities Grow, Ratio of Individual Spaces Shrink

With properties increasingly distributed globally, changing cities and a fast-moving business climate, the job of a real estate portfolio manager is complex and demanding. As the company's second-largest overhead expense, real estate commands close oversight and scrutiny at the C-suite level.

One way companies achieve cost savings is by shifting greater proportions of the workforce into more open and progressive settings that require lower capital and operating costs and may also better suit the modern workstyle. Norms vary by country and industry, but overall workplace planning ratios continue to shift. Currently 64% of the workforce is in the open plan, expected to rise to 78% over the next 5 years. (Figure 24)

As emphasis on group work grows, less work is done at dedicated primary spaces. With less need for traditional storage and large electronics, primary workspaces can be reduced, freeing up square footage for shared activities that support group work.

Pressured by cost containment mandates, many organizations have abandoned the one-to-one model of people-to-desk ratio. Informed by space utilization studies that show on a typical day, desks are in use only about half of the time, efficiency and greater densification is an increasingly employed workplace strategy. Where usable square feet (USF) per employee targets are at 156 square-feet-per-person today, organizations expect to lower them to 125 square-feet-per-person over the next half decade. (Figure 25)

In that same time, 57% of companies in our study foresee introducing more unassigned seating over the next 5 years (Figure 11, page 5). What's more, the number of workers in unassigned workspaces is expected to nearly triple, encompassing 32% of the workforce, up from 11% today. We spoke to numerous companies who were testing, planning or rolling out hot desking or other variations of unassigned seating.
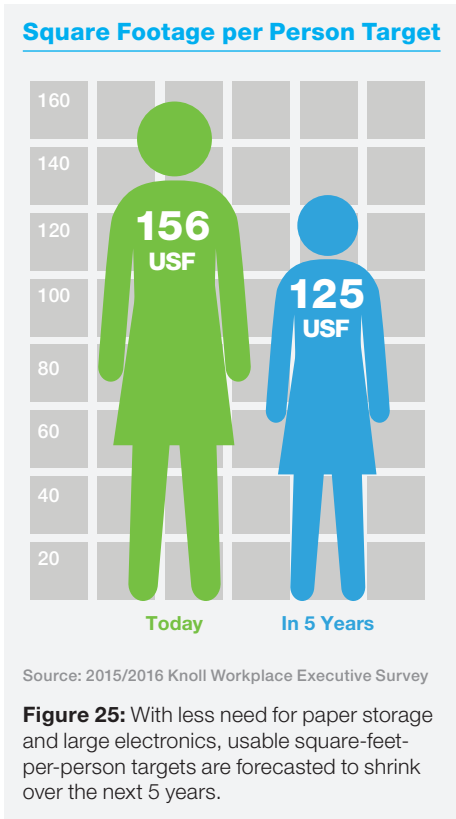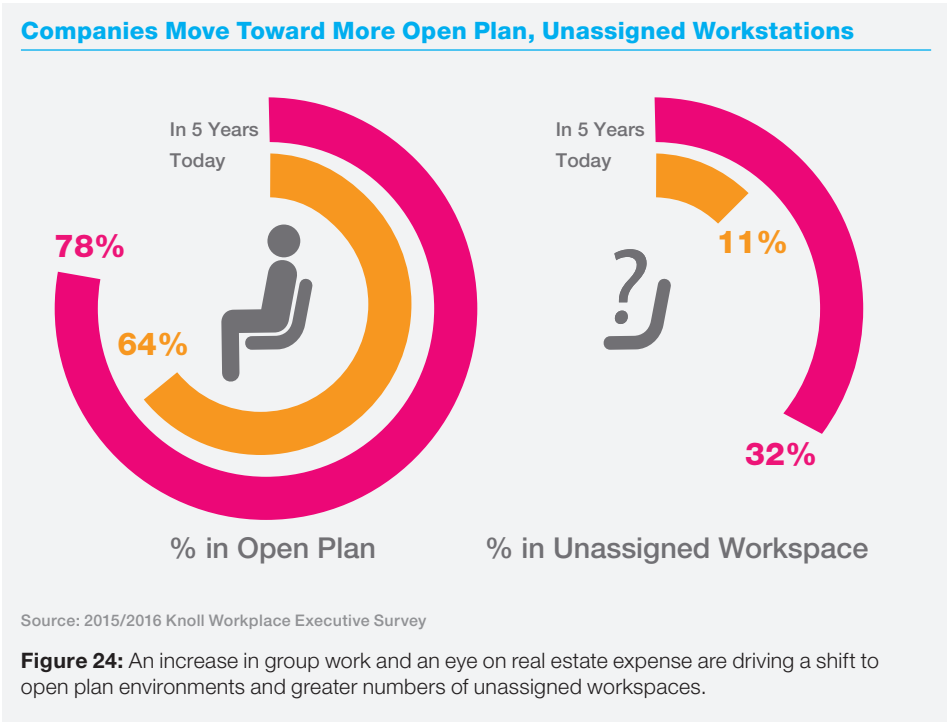
Deployment tactics are not limited to primary spaces. Meeting room utilization often tracks below 60%, yet due to imperfect reservation and tracking systems, people often feel they cannot find a place to meet.

Reflecting a move to more shared-use spaces, efficiency metrics are changing as well. Instead of calculating cost per square foot or cost per person, a focus on group work makes square feet per work group more meaningful.

Workers Create Their Own Privacy

Despite increasing numbers of focus rooms and enclosed spaces, many companies struggle with providing sufficient privacy and noise control. In many cases, workers take it upon themselves to find privacy. Among the solutions reported were wearing headphones, signaling focus (for one company wearing hoodies was the designated norm), and working outside when possible. (Figure 26, Page 12)

Finding the proper mix of private spaces remains a difficult balancing act. "It's trying to understand where the sweet spot is so

Companies Move Toward More Open Plan, Unassigned Workstations

78% **64%**
In 5 Years / Today
% in Open Plan

11% **32%**
In 5 Years / Today
% in Unassigned Workspace

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 24: An increase in group work and an eye on real estate expense are driving a shift to open plan environments and greater numbers of unassigned workspaces.

Square Footage per Person Target

156 USF
125 USF
Today / In 5 Years

Source: 2015/2016 Knoll Workplace Executive Survey

Figure 25: With less need for paper storage and large electronics, usable square-feet-per-person targets are forecasted to shrink over the next 5 years.

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Immersive Planning Page 11

you can actually still get enough people to gather and to be effective, to be collaborative, without the noise becoming so great that they can't do a day's work," explained one pharmaceutical executive." We don't know what that formula is, but we are doing a lot of work to try and study and understand where we should be with that."

"A lot of that is about noise control, which is also about etiquette. It's not just about building design; it's how people behave in spaces," he added.

An Experience Based Approach: Immersive Planning

Our studies showed the majority of companies identify with a group-based culture and that collaboration is the leading driver of workplace planning strategies. Organizations are focusing efforts and adjusting planning ratios to support more shared activities. Research also confirmed that a casual atmosphere is standard in most workplaces and that tougher economic benchmarks drive real estate and planning decisions.
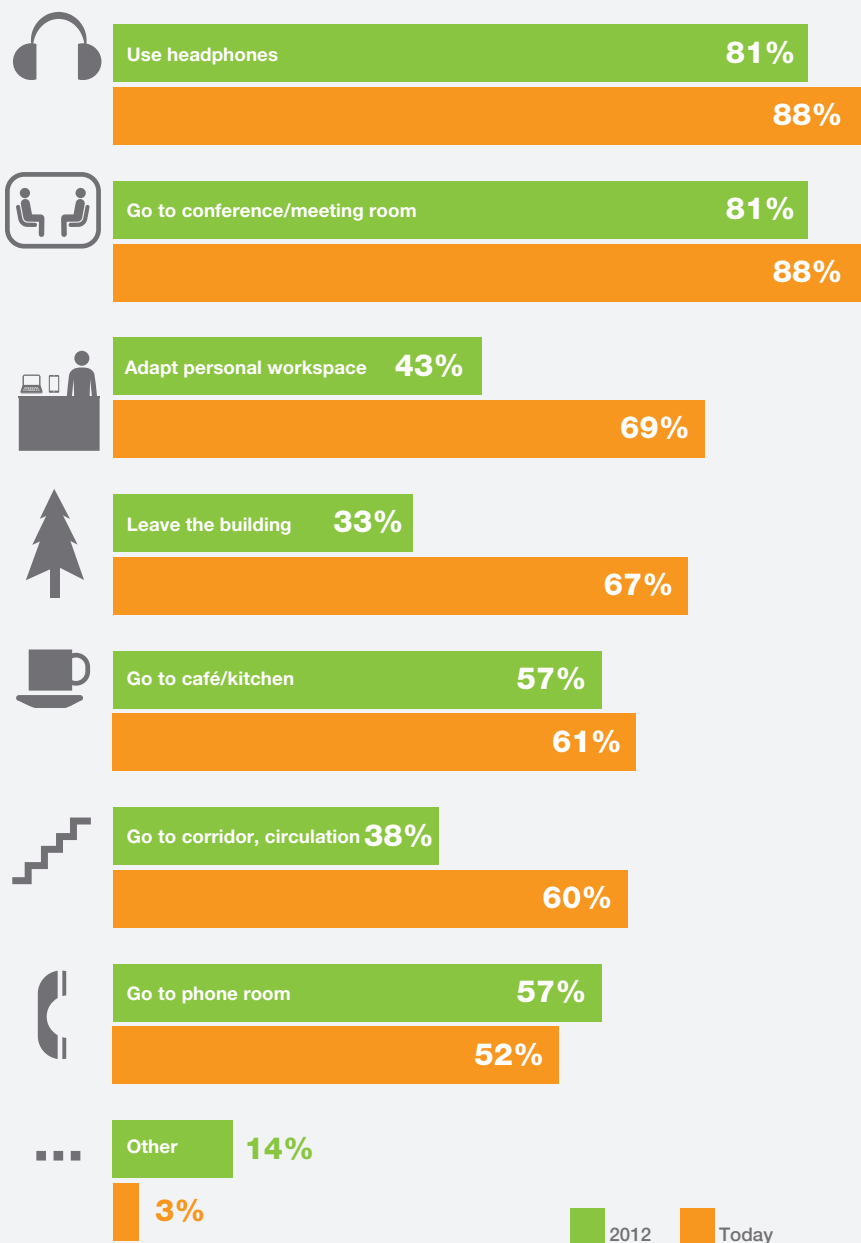
Clearly priorities have changed as the workplace has evolved. (Figure 27, page 13)

Based on the aggregate of our findings, Knoll has identified a new way to think about space. Defined as Immersive planning, the model serves a modern workplace in which boundaries blur not just between work, life and play, but also individuals and teams, primary workspaces and activity spaces, and owned and shared work areas and tools.

Rooted in research, Immersive planning takes insights from startup culture, hospitality and co-working to solve challenges organizations face in a virtual, mobile world: appealing to new talent, supporting group-based knowledge work and justifying a physical existence when on-site attendance is not always necessary to get work done.

Immersive planning is a concept that uses the interior space as a flexible platform for change, a hospitable place that attracts employees when their presence is critical and provides comfortable and engaging space options. It creates a variety of experiences in a workspace where the actions of the people themselves define the space.

Workers Take it Upon Themselves to Create Privacy

Use headphones **81%** / **88%**

Go to conference/meeting room **81%** / **88%**

Adapt personal workspace **43%** / **69%**

Leave the building **33%** / **67%**

Go to café/kitchen **57%** / **61%**

Go to corridor, circulation **38%** / **60%**

Go to phone room **57%** / **52%**

Other **14%** / **3%**

2012 / Today

Sources: 2012 and 2015/2016 Knoll Workplace Executive Survey

Figure 26: People use a variety of means to find a quiet space, from making accommodations in their own workspace to finding alternate locations within and outside the office.

Shifting from Activity to Experience-based Environments

Immersive planning diverges from a proportional, activity-based planning model designed to support work tasks and functions. Instead, it draws from a holistic point of view, in which workplace architecture, furnishings and people are linked and the design of the total environment outshines any one particular work element. It favors a people-centered focus that embraces a range of social and creative work experiences.

In contrast to discrete, well-defined spaces, Immersive planning delivers a more amorphous environment. Unprescribed paths, fluid boundaries and inviting furnishings empower users

The Workplace as an Experience

Office as a Building						
Employer provides tools on-site: phone, files, computer	Workers commute to site; physical presence expected	Connected by real estate	Location to get work done	Office as 2nd place: work site	Company sets work hours, locations	Architecture prescribes space

Workplace as an Experience						
Employees choose mobile devices: phone, laptop, tablet	People flow in and out; remote, virtual connections possible	Connected by social networks, cloud computing	An environment to foster culture, brand, community	Office as 3rd place: hub, town square, neighborhood	Workers decide when, how, where to work	Actions of people define space

Figure 27: Changing workstyles and the influence of startup culture have reshaped the role of the workplace from a static building to a highly interactive experience.

to shape their own experiences from their personal perspective.

Collaboration, Mobility Drive Shift to Communally Owned Spaces

As work and the workplace have changed, so too have planning strategies. Independent planning focused on individual spaces— private offices and high-wall cubicles—and its successor, activity-based planning, balanced primary workspaces for individuals with a variety of dedicated activity spaces to suit groups. In all cases, primary workspaces and activity spaces are proportionally planned to create a combination of distinct spaces.

Immersive planning abandons defined primary workspaces and activity spaces to suit a highly mobile workforce that spends more than half its day in group work and away from a primary work location. Recognizing that primary and activity spaces can be one and the same in the collaborative, group-based office, Immersive planning invites connected experiences where people own and share all spaces equally.

In essence, nothing is owned individually, but everything is shared communally.

With increasing numbers of companies moving to a greater proportion of unassigned spaces, and our research forecasting an even higher

volume in the near future, Immersive is a model in tune with a rapidly evolving workplace.

The Workplace Becomes the Third Place

As the workplace sheds its former structured, productivity-focused existence, it increasingly takes on the relaxing elements of home and interactive nature of the "third place": community spaces that encompass cafés, coffee shops, parks, bookstores, bars, hair salons and other public hangouts that provide the conversation, meet-ups, friendships, companionship and humor that nurture and sustain society.

In our research, we heard from many workplace executives that their goal was to create a warm, welcoming environment for their employees. Furthermore, our research concluded that employees are happier and more creative and productive when they are in an inspiring workspace that they are empowered to make their own.

The ambiance of the third place is the foundation of the experience-based workplace, enhanced with the best of hospitality and linked with modern-day creative culture. Immersive planning offers the lively buzz of a neighborhood café, as well as a productive setting in which to work, create, innovate and socialize.

Predictably Unpredictable

An Immersive workplace addresses a world in which every workday can be different and every interaction holds potential. The ad hoc flow of people and projects, occurrences and interactions—sometimes planned, sometimes spontaneous—happens throughout the workday, in rhythms ranging from fits and spurts to rivers of activity that ebb and flow into pools of quiet.

Immersive planning connects people to each other and the organization by creating spaces for shared work and social activity. And through both stationary and movable elements, it offers choice and flexibility to meet changing needs.

Instead of fixed walls that separate linear work processes, spaces use adaptable, open-ended architecture to support a non-linear workflow and an equally multi-faceted team drawn from many levels, experiences and backgrounds. Rather than disconnected individual areas, the workspace in an Immersive space is unified, allowing work and social interactions to take place in a range of intermingled, multifunction spaces.

Attributes of Immersive Planning

1. Immersive Planning is IMPROVISATIONAL

In a workplace in which group work and mobility are norms and informality reigns, Immersive planning embodies the fluid nature of how work, people and information move throughout the workday. Boundaries and transitions are sinuous and ever-changing.

Environments respond to rather than prescribe individual movement. Architectural elements act to ground the environment, while transformable features offer a setting that allows people to seamlessly and purposefully transition from space to space—enabling their individual actions to shape the space and their experience.

Immersive environments transition at a moment's notice and evolve with use. Undefined circulation paths and ambiguous edges facilitate subtle transition from gathering areas to refuge spaces, inviting connection and enhancing interaction along the way.

Formality and definition give way to a series of discrete personal and communal experiences, connected seamlessly in a singular setting. Immersive workplaces allow space to be easily reorganized around varied interactions throughout the course of a day.

2. Immersive Planning is COMMUNAL

Communal expresses the sense of inclusion, culture and connections within an organization.

Centered on the human element, Immersive planning fosters the co-creation and connections that drive inventiveness and collaborative problem-solving and development of new information, ideas and resources.

A communal environment creates chances for cross-functional information sharing, interpersonal feedback and communication across the organization, regardless of position or title, leading to more informed and better decision-making.

A welcoming atmosphere provides people a feeling of belonging—caring about their work, their colleagues and the organization at large.

Connected spaces and workers promote a sense of sharing and inclusion in an environment where little formal ownership of specific elements exists, resulting in teams

that not only thrive, but generate ever higher levels of creativity and productivity.

3. Immersive Planning is DIMENSIONAL

Inspired by innovations in hospitality, public space and entertainment design, Immersive planning transforms work into a multisensory experience that engages multiple touch points.

Relaxed furnishings create a welcoming hospitality-style setting that invites personal and communal engagement. Diverse visual and tactile elements in multiple textures, materials and scales enliven the senses to produce a compelling work environment where people want to be—even if they don't have to be.

Realizing Immersive Planning

An Immersive workplace puts people in control of their own experiences. Inviting spaces, like a good hotel or coffee shop, hinge on ambiance and social experience—important components of work. Optimizing the needs of not only teams but individuals alike, discrete spaces for focused work intermix with areas that facilitate conversation, collaboration and social activity.

In light of our findings, below are a number of planning principles to consider when designing for an Immersive environment:

Promote Continuous Movement, Fluid Transitions

Workflow can proceed unconstrained when spaces are designed with continuous movement in mind. To support a free flow of information and people requires highly adaptable and flexible spaces that support a continuous state of motion.

Integrating thoughtful transitional space between shared spaces further supports an uninterrupted flow of people and ideas. Interstitial spaces can encourage informal discourse between colleagues, or even continuation of a discussion or brainstorming meeting.

Variations in scale, height and materials not only create varied vistas, but present options for ad hoc use selected by users. Screens and lightweight storage elements can demarcate pathways, but can also cordon off a more private meeting space. Bleacher-style seating can host quick drop-in chats or can be rearranged and assembled en masse for an impromptu all-hands meeting.

New Ways of Working Present New Workplace Challenges

While new workstyles, organizational progressions and changing real estate priorities provide many opportunities to re-envision the workplace, they also present some challenges. Our interviewees described experiencing hurdles such as:

▸ **Providing flexibility and agility while maintaining design standards.** "By the time we catch up, the organization has changed. It's a challenge to be adaptable, flexible and create purpose-built space but not generic space. You need to adapt as changes happen when you're growing as fast as we are."

▸ **Managing expectations.** "Our employees bring a huge variety of experience and are much more design-aware than previous generations. They expect their employer to provide the same great experience they would receive in a hotel or restaurant."

▸ **Planning unpredictability.** "Within teams we have moving issues because we don't know where people are going to land when we're designing space and we are not able to predict things."

▸ **Keeping up with pace of change.** "The desire to move lots of people as the organization changes gets expensive after a while. If we can eliminate some of that we're ahead of the curve. When we have to move 600 people, it's a monumental exercise. It's like planning a little war."

▸ **Finding ratios that meet standards of cost, functionality and comfort.** "Challenges we have going forward are to try and get more out of each building. We are increasing the densification of buildings and are finding satisfaction levels are dropping. When you shoehorn people into a location, people will become less and less satisfied."

Leverage Lessons from Startup Culture

The live network that is today's workforce relies on connecting people to each other and the organization. As startups have shown, creating a sense of community and delivering an engaging, energetic environment that supports group-based work and community-building is not only a strong recruiting tool, but is proven to nurture creativity and innovation, as well as propel business.

Creating spaces for shared work and activity is the crux of Immersive planning. Spaces should support collaboration and group work in varied forms for teams that connect and disengage from project to project. Integrating programming and community-building events and activities can further spur opportunities for social interactions.

Inviting and generous amenities provide relaxation and comfort so employees make the office the work place of choice when team members have alternatives. They can also engender loyalty, foster community and produce greater levels of employee happiness and satisfaction.

Draw Influence from Co-working Settings

As startup culture has shown how prioritizing people leads to superior outcomes, the rampant success and widespread global expansion of co-working spaces has had significant impact on workplace thinking as well.

Designed to inspire engagement and individual productivity, co-working spaces typically embrace mobile working styles, a culture of expected flexibility in terms of when and where you can work, and factor in socializing as part of the creative process.

An Immersive Workplace

This prototypical office plan, along with some planning strategies, is an example of how Immersive planning can support group-based work and create an experience-centered work environment.

1. Open pathways invite occupants to discover the space and provide easy flow from gathering areas to refuge spaces.

2. Familiar forms of the third spaces (upholstered lounge, counter-height surfaces) offer a range of different horizons, scales and sceneries.

3. Table-based work settings and an arrangement of diverse seat options give users the ability to define how they want to work.

4. Implied and literal borders create discreet experiences for individuals or groups.

5. Large gathering spaces, with space to spread out, the ability to reconfigure and access to power and wi-fi, provide individuals the option to work "alone together" or "together together."

6. A café can not only provide access to refreshments, it can also work as the heart of the office community, offering places to retreat and focus as well as socialize.

Legend:
- Primary
- Refuge
- Enclave
- Team Meeting
- Assembly
- Community

Often structured as a hosted, concierge-style facility, co-working spaces illustrate the power of serendipitous encounters that lead to connections and innovative ideas and collaboration. They often offer programming and provide tools to create strong relationships among members that lead to cross-pollination and new opportunities.

With a transient day population from a broad range of industries and functions, co-working spaces are often furnished with a bevy of worktables and lounge-style work and social areas to accommodate individuals and teams with varied requirements and workstyles that change from day to day.

They also provide members the types of space they need to do the type of work they need, whether it's a café with just enough background buzz to get a bit of quiet work done, a spacious setting to work together or independently, a focus room for concentration or a team suite for creative collaboration.

Exhibit Hospitality-style Environments

Inspirations from hospitality environments can be adapted to create a holistic and satisfying workplace experience that is authentic to the organization.

Previously associated primarily with luxury hotels, the concierge concept has extended to the workplace. At some offices, a host, often created from a combined facilities management and IT support function, provides a one-stop shop for all support needs—from travel to technology and personal shopping, dry-cleaning and bicycle repair.

Express Company Brand and Culture

Expressing the brand via the physical workplace is an opportunity to reinforce company mission and culture. For companies with multiple locations, it is also a way to offer consistency across locations, much like a branded hotel experience, in which a organized operating model visually and operationally delivers a reliable experience, regardless of location.

Leading hotels have also perfected the art of providing personalized experiences based on the needs, attitudes and behaviors of their customers, and the workplace can learn from this model. Likewise, work environments can gain inspiration from the "residential vibe" and welcoming environment hotels shape utilizing elements of the home and the third place.

Conclusion

As organizations everywhere are challenged to keep pace in a more complex business environment, they are seeking out new ways to heighten innovation, build employee camaraderie and support the ever-changing needs of their global workforce. The workplace must stay in stride. A work environment designed to support people, the flow of information, promote creativity and enhance a company culture can help a company solve challenging business problems and remain competitive in the marketplace.

Rising from the blurred boundaries that are today's world is a planning approach that is fluid enough to adapt to fluctuating teams and project-based work. An experience-based workplace supports workers by offering them choice and mobility in where they want to work and allowing them to adapt the space they need.

Immersive planning sets the foundation and allows workers to define their own path, as they transition through an inviting environment inspired by the warmth of hospitality, creating diverse experiences and enhancing interaction along the way.

Definitions and Terms

All-hands Meeting: An organization wide business meeting in which an executive report is made to employees and other stake holders. All-hands meetings keep large groups of people up-to-date on important events and milestones.

Contingent Worker: A provisional employee hired on a non-permanent basis for a specific short project or job and paid by contract or according to hours worked without benefits typically available to regular employees. (Also known as freelancers, independent professionals, temporary contract workers, independent contractors or consultants.)

Co-working: A style of work that involves a shared working environment. Unlike in a typical office environment, those co-working are usually not employed by the same organization.

Flash Teams: Modular and elastic team structures that can be replicated and recombined. Flash teams are designed to be dynamic so that both the members and structure of the team can adapt as the needs of a project evolve.

Group-based Work: Work that is performed within a multifaceted network of individuals and teams culled from a large, extended ecosystem.

Highly Satisfied Workers: Workers who expressed high levels of satisfaction with both their company and workplace.

Highly Dissatisfied Workers: Workers who expressed high levels of dissatisfaction with both their company and workplace.
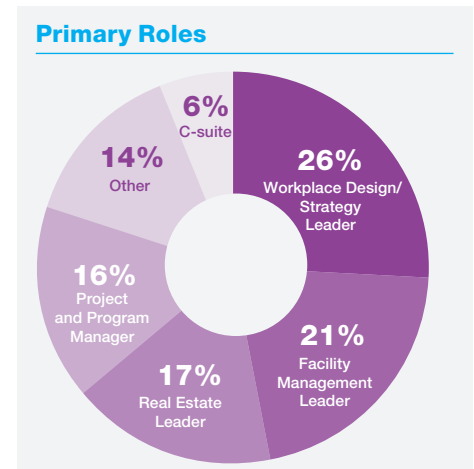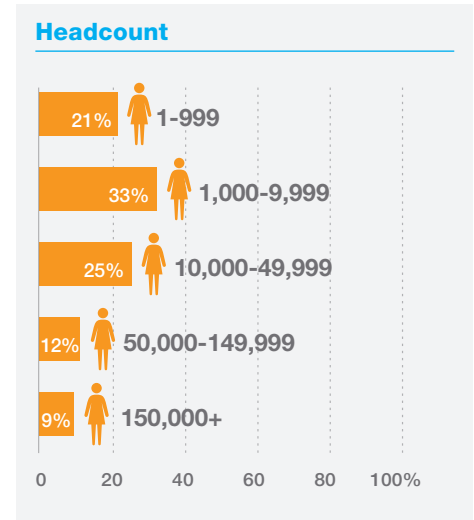
Third Place: The social surroundings separate from the two usual social environments of home ("first place") and the workplace ("second place"). Examples of third places, include cafés, clubs and parks.
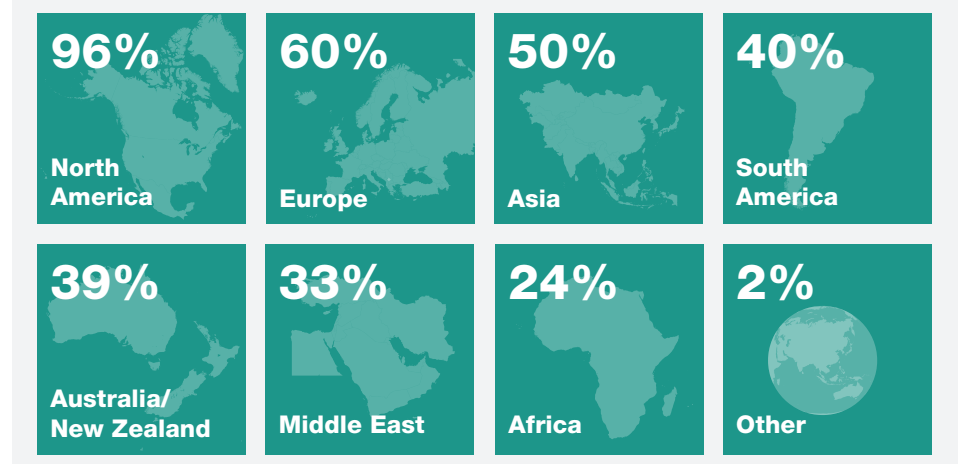
Appendix

In this section, we describe the characteristics of participants in both the workplace executive and knowledge-worker surveys conducted by Knoll.

2015/2016 Knoll Workplace Executive Survey Participants

The figures for the Knoll workplace executive survey are results from leaders of 110 organizations. Participants from the baseline 2012 survey, as well as a mix of Knoll and non-Knoll clients, were included in this study.

Industry

Misc. (Communications, Hospitality, Insurance, Non-profit, Other) **23%**

Education **4%**

Technology **16%**

Pharma/Biotech **4%**

Consulting (Accounting, Professional Services, Legal) **15%**

Construction **2%**

Financial **12%**

Government **2%**

Retail/Consumer **8%**

Aerospace/Automotive **2%**

Energy/Utilities **6%**

Manufacturing/ Industrial **1%**

Healthcare **5%**

Headcount

- 21% 1-999
- 33% 1,000-9,999
- 25% 10,000-49,999
- 12% 50,000-149,999
- 9% 150,000+

0 20 40 60 80 100%

Primary Roles

- 6% C-suite
- 14% Other
- 26% Workplace Design/ Strategy Leader
- 16% Project and Program Manager
- 21% Facility Management Leader
- 17% Real Estate Leader

Corporate Locations

- **96%** North America
- **60%** Europe
- **50%** Asia
- **40%** South America
- **39%** Australia/ New Zealand
- **33%** Middle East
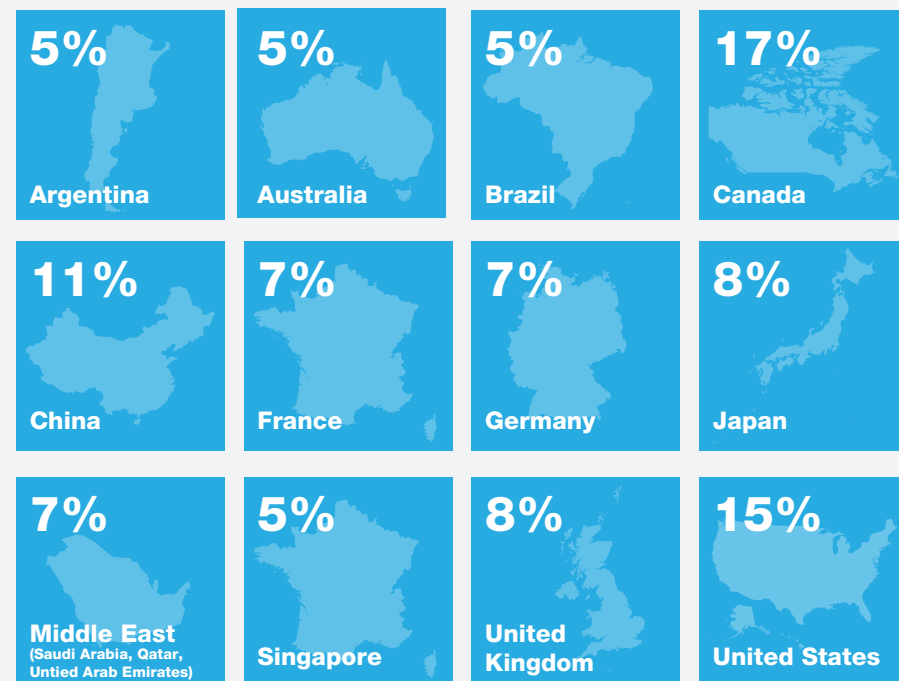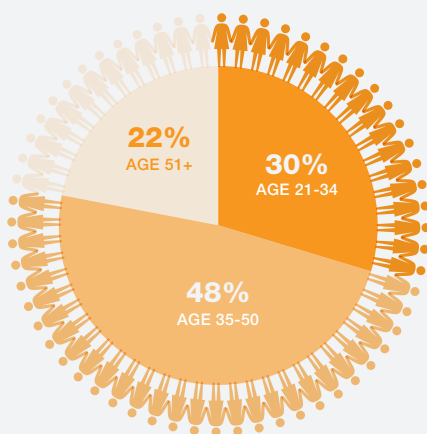- **24%** Africa
- **2%** Other

2016 Knoll Knowledge-worker Survey Participants

The figures for the Knoll knowledge-worker survey are the results from 1,419 full-time workers across 14 countries.
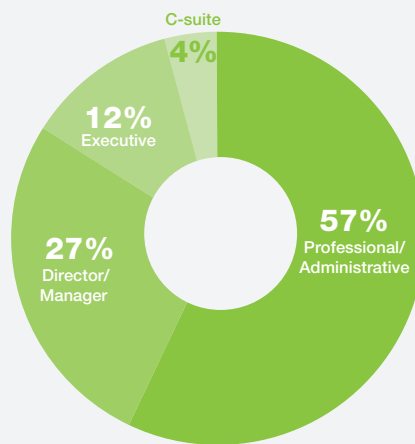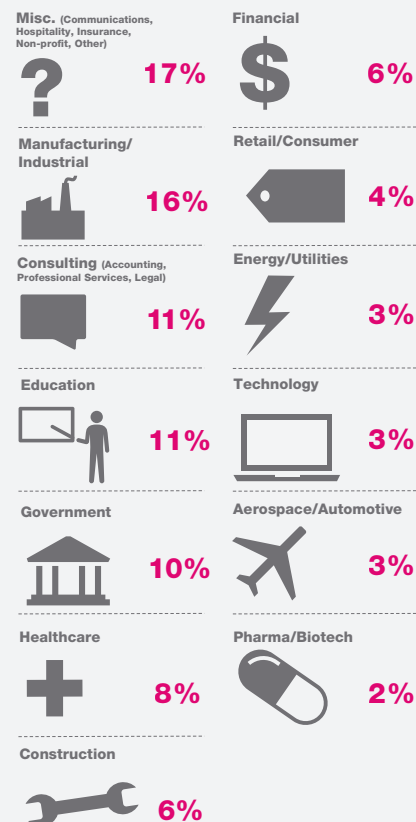
Locations

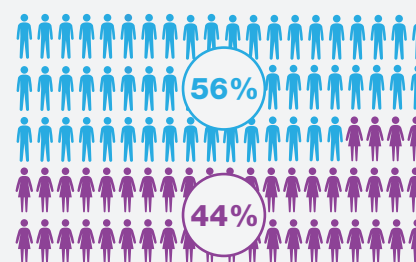|			
5% Argentina	**5%** Australia	**5%** Brazil	**17%** Canada
11% China	**7%** France	**7%** Germany	**8%** Japan
7% Middle East (Saudi Arabia, Qatar, Untied Arab Emirates)	**5%** Singapore	**8%** United Kingdom	**15%** United States

Industry

Misc. (Communications, Hospitality, Insurance, Non-profit, Other) **17%**

Financial **6%**

Manufacturing/Industrial **16%**

Retail/Consumer **4%**

Consulting (Accounting, Professional Services, Legal) **11%**

Energy/Utilities **3%**

Education **11%**

Technology **3%**

Government **10%**

Aerospace/Automotive **3%**

Healthcare **8%**

Pharma/Biotech **2%**

Construction **6%**

Age Demographic

- **22%** AGE 51+
- **30%** AGE 21-34
- **48%** AGE 35-50

Job Position

- **4%** C-suite
- **12%** Executive
- **27%** Director/Manager
- **57%** Professional/Administrative

Gender

- **56%**
- **44%**

Through research, Knoll explores the connection between workspace design and human behavior, health and performance, and the quality of the user experience. We share and apply what we learn to inform product development and help our customers shape their work environments. To learn more about this topic or other research resources Knoll can provide, visit www.knoll.com/research