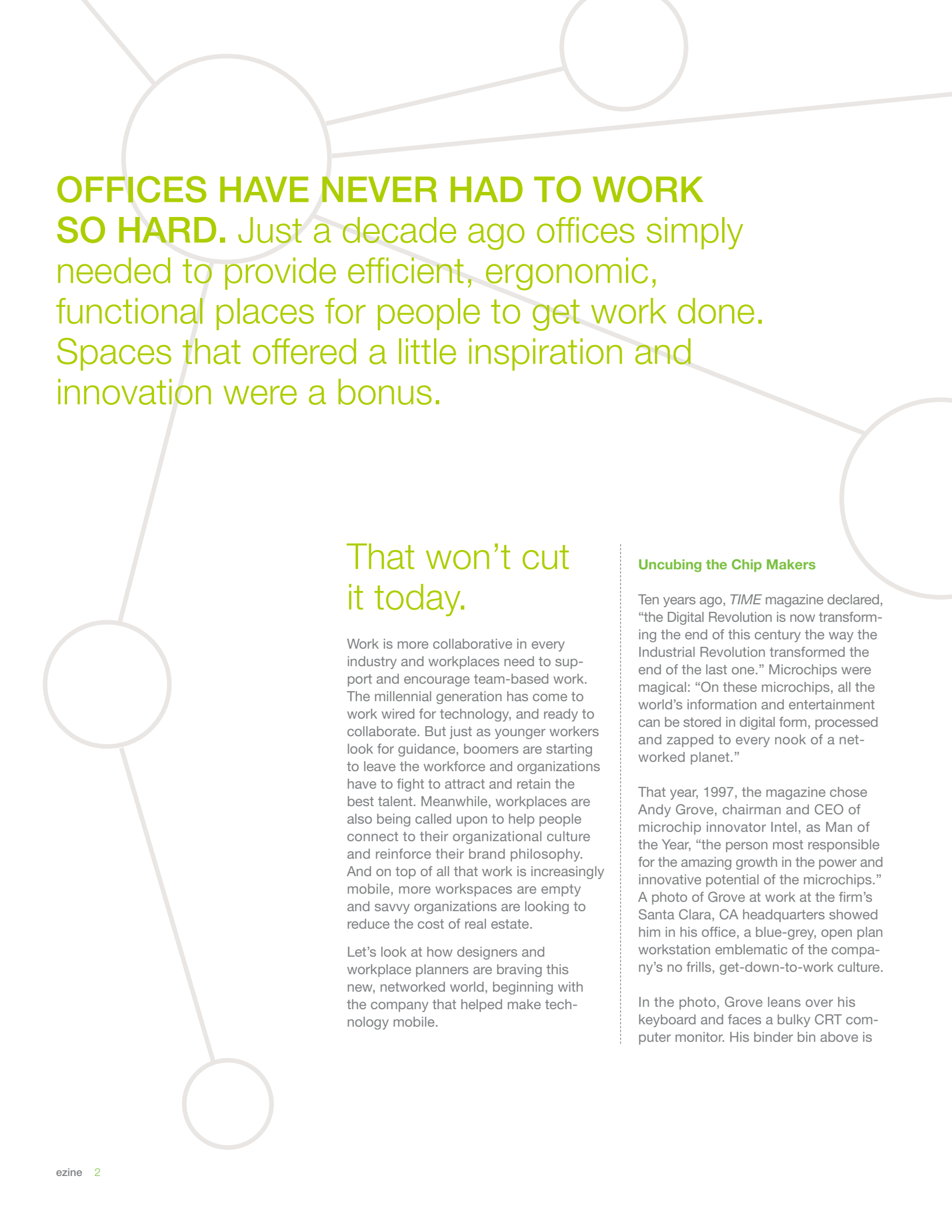


## **WORKSPACES** for a work-anywhere world



**OFFICES HAVE NEVER HAD TO WORK SO HARD.** Just a decade ago offices simply needed to provide efficient, ergonomic, functional places for people to get work done. Spaces that offered a little inspiration and innovation were a bonus.

## That won't cut it today.

Work is more collaborative in every industry and workplaces need to support and encourage team-based work. The millennial generation has come to work wired for technology, and ready to collaborate. But just as younger workers look for guidance, boomers are starting to leave the workforce and organizations have to fight to attract and retain the best talent. Meanwhile, workplaces are also being called upon to help people connect to their organizational culture and reinforce their brand philosophy. And on top of all that work is increasingly mobile, more workspaces are empty and savvy organizations are looking to reduce the cost of real estate.


Let's look at how designers and workplace planners are braving this new, networked world, beginning with the company that helped make technology mobile.

### Uncubing the Chip Makers

Ten years ago, *TIME* magazine declared, "the Digital Revolution is now transforming the end of this century the way the Industrial Revolution transformed the end of the last one." Microchips were magical: "On these microchips, all the world's information and entertainment can be stored in digital form, processed and zapped to every nook of a networked planet."

That year, 1997, the magazine chose Andy Grove, chairman and CEO of microchip innovator Intel, as Man of the Year, "the person most responsible for the amazing growth in the power and innovative potential of the microchips." A photo of Grove at work at the firm's Santa Clara, CA headquarters showed him in his office, a blue-grey, open plan workstation emblematic of the company's no frills, get-down-to-work culture.

In the photo, Grove leans over his keyboard and faces a bulky CRT computer monitor. His binder bin above is



filled with paper trays. Two more paper file organizers sit on the work surface. His workspace was not unique; for years, everyone at Intel has worked in a 9 X 8 cubicle like Grove's. But now some offices at Intel are changing, becoming more open, collaborative, and connected, according to Neil Tunmore, director of corporate services, and responsible for Intel facilities worldwide. Intel's own internal research showed workers wanted spaces more conducive to collaboration, innovation, and teamwork. In the Steelcase Workplace Satisfaction Survey, now in its fifth year and with cumulative responses from over 15,000 people, the most important work satisfaction issues are *connections*:

- access to people who are relevant to their job (98% say this is important)
- access to the right technology and tools (97%)
- access to information (99%)

*Business Week* says 82% of white collar workers collaborate with co-workers. Yet making connections is tough in many offices. Conference rooms are few, distant, and often booked. Project teams lack dedicated space and scramble for a place to work. In and around many workstations, where quick consultations are essential to knowledge work, a place for a guest to perch is hard to find. Meanwhile, facilities managers look around the office and find many workstations empty: do we need all these dedicated workstations?

### Smaller...

"The overarching conversation is around what workers need to be successful in the organization," says Lew Epstein, director of advance marketing for Steelcase, and a consultant who helps companies sort through their workplace

needs. "From our point of view, collaboration is essential for the organization to be more productive and more innovative. Productivity is important no matter what your output is: a service, a dinner served on a table, or a widget of any kind. The other key to maintaining a lead in a highly competitive and complex world is to be innovative, because that's the only way to differentiate yourself."

"Teaming is a word every client uses, but there are different teams and different ways they work, so their space requirements are different, too," says David Meckley, principal at Huntsman Architectural Group, San Francisco. "If someone has a specific task and passes that work on to someone else

who does a specific task, they won't need access to team spaces. More typically you find people who work on five projects at once and need to work together with others, and they obviously need more collaborative space."

To find space for collaboration, real estate managers are often squeezing the workstation footprint. A survey by architectural firm HOK found a median of 48 sq. ft. for open workstations. Many designers are specifying 6 X 6 workspaces. Tunmore speaks for many facility managers: "For me, it's how to get more people in the same space without feeling like they have a smaller space."

"It's a huge driver, but it's not always explicitly stated," says Lori Walker, principal at NBBJ, Seattle. "It depends on who you're talking to. It may be more easily stated by the facility manager, but not often by the top management of

the organization. Most clients talk about making the space more effective, and less about 'let's get more people in here.' "But individual works paces are getting smaller, across the board."

### ...But Friendlier

Designers are responding with different space planning approaches, such as using lower panel heights to give workers better sight lines, easier communication with others, and more access to natural light. More workstations are shared. Hotelling—providing workstations anyone can use—suffices for more workers.

"We found that 60% of workstations were empty at any given time of the

## SHOULD WE BE SURPRISED that people aren't always at their desks?

day," says Tunmore. "A lot of them went to the cafeteria. The place was jammed. They needed to work together but couldn't find enough conference rooms or common spaces, so that's where they went to work." When technology enables mobile work but success requires more collaboration, "should we be surprised they weren't at their desks?" he wonders.

Using detailed research about worker needs, Tunmore worked with the San Jose office of Gensler to design two new workplaces: a 90,000 sq. ft. space in California for workers in sales, marketing, planning, legal, and HR; and a 40,000 sq. ft. space in Oregon for software engineers.

Dedicated workstations shrunk by a third, down to 8 X 6. Panels dropped from 65" high to 52". Instead of worksurface along three panels, a 6'

height-adjustable desk fits along one wall. Storage is more limited now, but Tunmore figures there's less need for paper storage in today's digital workplace. "The days of getting paper in your in-box are practically gone. I received a paper letter the other day from someone who wanted to do business, and I said, 'Wow! I actually got a letter!'"

When everything you need to work on a project will fit on a USB drive the size of a stick of gum, "we don't need as much desk space or storage today," says Tunmore. About 30% of the workers travel a lot or spend most of their day in meetings, so they don't have dedicated workspaces. Instead they use an on-demand space with a 120-degree desk, mobile ped, low screen, and a task chair.

Meeting rooms are handled differently now, too. Instead of enclosed conference rooms that are booked in advance, Tunmore provided rooms with floor-to-ceiling glass fronts and doors that keep the space open and welcoming. The rooms can't be booked, and all-day meetings are prohibited. Sizes vary from two-and four-person rooms to larger conference spaces.

The space saved on smaller and fewer dedicated workstations allowed Intel to create "community zones" with a variety of interactive spaces. High and low worksurfaces, large monitors for displaying laptop content, whiteboards, and a variety of seating are available. "These are in the middle of the space and they're more informal. People can work on their own, meet with others,

their team, whoever they need to." The two spaces have only been open a few months, but Tunmore knows how well they're working. "The feedback's been pretty much the same in both areas. Collaboration and teamwork has massively improved. Collaboration measures have tripled.

"There have been some issues with perceived productivity. A number of employees who have their cubes close to the collaborative zone find it too noisy. I'm not surprised because it's so popular it creates peripheral noise." They're working with employees to develop solutions for more visual and acoustical privacy for some workers.

Epstein says it's not unusual to have to fine tune this blend of spaces. "We can reduce audible and visual distraction with the right space planning, products, and materials. The key is you want small team spaces close enough to individual workstations that people will use them, but far enough away to not be distracting."

Tunmore's group asked workers to rate their overall satisfaction with the new workplace. "Three-quarters of the group said 'don't ever take me back to the old space.'" Other groups at Intel have asked for new spaces, and the company plans to design any new facilities much like the two new ones opened in January, but the scale of the organization limits wholesale changes.

The incentive is there, though. "We're getting a lot of feedback that people have been surprised in the increase in camaraderie. They're seeing more people, they're talking more. I think that will have a big impact on our organization."

### Here There Is No 'My Space'

Seeing more of colleagues, collaborating more often: those are hardly the image

At Intel, collaborative workspaces have dramatically improved collaboration and teamwork.



Workers can be choosy about where they work: **IN LESS THAN 5 YEARS** the U.S. Will face a shortage of 10 million knowledge workers.

of an R&D lab. Yet at the University of Michigan, Ann Arbor, MI, the new lab spaces in the Life Sciences Institute (LSI) were designed specifically to support collaborative work.

LSI medical director Alan Saltiel says that's how research innovation happens today. New tools and technology have created a huge shift in what's possible, but also a new challenge. "How will we entice investigators to communicate across their diverse areas of expertise and training, to cooperate in ways that provide true synergy?" he writes in his welcoming letter on the LSI web site.

LSI is "a hub for collaboration" and "a dynamic environment that brings together scientists from different disciplines, and encourages them to look for important problems that will benefit from a multidisciplinary approach."

The six-story, 230,000 sq. ft. facility houses 20–30 principal investigators and their research teams (450 people), and includes core scientific facilities and office space. Imagine the shape of a football field to visualize LSI's interior layout, says operations manager Cathy Andrews. "Faculty offices are in the end zones. Labs run the length of the field. On each side of the building is one long lab area. Lab benches and desks run along the windows. The interior of the building houses shared equipment rooms and conference spaces."

The building's design (SmithGroup and Desman Associates in association with Venturi, Scott Brown and Associates, Inc.) is based on collaborative meeting spaces and shared facilities. "Here there is no

'my space,'" says Andrews. "It's LSI space and we work together."

Group work "happens in the labs because they're all working right next to each other. At the end of every floor there's a kitchen and interactive area with seating, tables, and whiteboards that people use all the time." Many lab teams have staff working in other lab areas.

Faculty are recruited based in part on how open they are to the idea of collaborative work. "It's sometimes an adjustment for new people, but in general we have people who like to collaborate."

The strategy offers practical benefits: no one research project has to foot the bill for shared equipment, accommodating new team members is easier when the space and the teams are flexible, and "when funding gets tight for a project, a lab can be reduced in size and the flexibility allows that to happen easily. We can utilize our space in the best ways."

### Space That Attracts

Professional services firm PricewaterhouseCoopers designed for collaboration and more in their new Dublin, Ireland headquarters. Spaces for planned and impromptu collaboration are available throughout the building that serves 2,000 employees. PwC underscores a team approach in its advertising. "2,000 Minds @ One" speaks to the company's breadth of talent, the scale of the firm, the company's culture, and how they do business.

But the workplace also works hard to attract and retain talent. Daylight floods the building's nine floors, which house a restaurant, coffee shop, fitness center, private enclaves to support mentoring, and more ways to nurture knowledge workers. The workplace is the main theme in PwC's recruiting brochure.

The Life Sciences Institute at the University of Michigan was built specifically as "a hub for collaboration."



A big reason companies are working so hard at finding and keeping talent is the advent of the Millennial generation. According to the Steelcase Workplace Satisfaction Survey, our youngest colleagues arrive at the office with unique space requirements: easy access to coworkers to support their natural inclinations to collaborate; a strong need for mentors and space to support those relationships; and a desire for physical comfort in the workplace.

The research shows they are less bothered by audio and noise distractions than workers of other ages. Epstein believes one reason is “young people are more comfortable working in closer proximity than workers have in the past.” That’s good news for companies hoping to fit more people in less space. The bad news: by 2012 we’ll face a shortage of 10 million knowledge workers. Young workers can afford to be choosy about where they work.

“You have to look at the issue holistically: the best salary and benefits, the best tools, the best space. You have to watch real estate costs, but you can’t just squeeze people and think you can retain them,” says Epstein.

“The best compensation for that reduced footprint may be in the form of a well-appointed, great small space, complemented by a great space for small teams, the right tools, and the right connections to people, information, and technology.”

Even with the right space, workers often need to “learn” how to use team spaces, and how to work more collaboratively. “Part of the design process is that it’s very collaborative. A lot of times I feel we help teach our clients how to collaborate in the process of working with them. It’s one of the things people love about a design project. It’s a whole

new way of working for some clients,” says Walker.

“Permission is probably one of the strongest and most unrealized aspects of teaming space,” says Meckley. “We try to make spaces intuitive, but you can create lovely teaming spaces and no one uses them because no one told them how to use them, and that it’s okay to use them. Management has to tell them, and management has to use them, too.”

### What Is Your Space Saying?

Collaboration, connection, space that attracts and retains, often in a smaller footprint. The final component of the new workplace is the sum of its parts: the overall message the space sends about the organization and its business. Workplace design that expresses the company’s culture is often called “branding,” though not all designers like the term.

“I hate the word ‘branding’ because it’s really expressing the culture of the organization. It’s way beyond brand. A lot of marketing people say ‘let’s just use our colors and get our swoopy logo all over the place,’ but that’s not what it’s about,” says Walker.

“It’s that first impression, especially when you’re trying to attract new talent. You want to express who you are, stand out from the competition. It’s an emotional feeling you’re trying to create, and a way to express the company’s personality and values,” says Meckley.

Walker uses her own firm’s workspace as an example. “Seattle is our biggest office and many times when we’re hiring people they come here to meet more of the people. We moved into a new office two years ago, and some candidates experience it and say ‘I don’t want to

work in that other location, I want to come to work in Seattle.’ That’s how strong the space is at communicating what we’re about and how we work. It’s amazing how a workplace can impact recruiting like that.”

Meckley agrees. “We’re a modern architectural firm that does clean, modern spaces, but we’re also personable, friendly, and welcoming. That’s very much our personality and our staff. We create good, clean spaces, but we’re not impersonal, and our office space demonstrates that.”



“2,000 Minds @ One” is more than just a slogan at PricewaterhouseCoopers’ new Dublin headquarters. The building helps the firm attract and retain talent in an extremely competitive industry...

A&D firms have long used their workplaces to represent their work and their organizations, of course, and other professional service firms have done the same. When the client walks in the door, wood paneling in a law firm and funky shapes and colors in an advertising agency are long-standing triggers for specific messages: wood equals tradition and experience, funky equals innovative.

Designers say more companies are realizing that the workplace speaks volumes about a company, and they're showing more concern for what it's saying. "It creates a lot of great opportunity for people in the design profession," says Walker. "There's more awareness on the part of business that you do have to express who you are, you do need to differentiate yourselves, and space is one of the ways you can do it."

### The Way It Works Now

After all, everyone is watching and evaluating. Management, staff, clients, suppliers—even the people who tour your office tell others about it. After comedian Conan O'Brien visited Intel headquarters last May, he joked that their workplace "makes people feel that they are all basically the same, that there is no individuality, there is no hope." Now, Tunmore's team and Gensler are making "Intel inside" a more inspiring, more effective workplace.

Today's workplace must be a collaborative environment that extracts the most value from the space, attracts and retains great talent, and reflects the aspirations of the organization. Get those things right, performance improves, workers are more effective and more efficient, innovation is nurtured, and other good stuff happens. Get those things wrong and... well, what's the point of a new workplace anyway?

## WORKSPACE FOR A NETWORKED WORLD.

**We may be mobile, global, and wireless, but we still need connections beyond the virtual. We need spaces to connect in person with others. What are those places like? Architects, designers, and facility managers tell us those space often include:**

- 1. Smaller workstations**—rising real estate costs drive smaller workstations, but smaller technology, smarter work tools, and the need for less paper storage help smaller space feel larger, as do...
- 2. Lower panels** that let in more light, provide better sight lines to others, and help open up the conversation.
- 3. More spaces for collaboration** which are easier to fit in when less space is devoted to dedicated workstations; these on-demand spaces are often out in the open, sometimes behind glass walls and doors, and may hold just two to six people; key is proximity: close enough to individual workstations so they're used, far enough away so they don't distract.
- 4. Impromptu meeting places** may include a café, of course, but also niches in the hallway, a couple of chairs and table amid a workstation cluster, a stand-up worksurface along the window or on top of a row of files: creativity doesn't keep a schedule or a fixed address.
- 5. Easier connections to technology & tools**—Wi-Fi, sure, but also simpler ways to present information and share it (think portable whiteboards and easier hookups to monitors, power, and data).
- 6. Head-down space**—sometimes you need a place where you can focus on a task, have a private conversation or phone call, or just distance yourself from interruptions.
- 7. Organizational identity**—from ways a team can display work in progress to using the space as a metaphor for the organization (this is who we are and how we work).
- 8. Places for mentoring**—millennials are joining the workforce and boomers are starting to leave, so quiet places (e.g. a private enclave, a meeting space off to the side, etc.) help people share expertise and experience, further the organizational culture, preserve institutional memory, and encourage more collaboration.

**360:** Designed to inspire and inform Architects and Designers, 360 explores the latest in workplace research, insights, and trends.