



## **What It Takes to Collaborate.**

People work together all the time, yet it's difficult to make collaboration happen. To better understand collaboration at work, Herman Miller conducted research on four continents. The findings reaffirm that collaboration is dependent on corporate culture, technology, and the facility. Offering a variety of workspaces, providing vertical space for display, and improving wayfinding can all help people collaborate.

An IBM study found that “extensively collaborative” companies performed better than their peers, and companies that collaborated with external sources made more money than those that didn’t.

Collaboration used to be seen as a work style that was effective in special circumstances. No longer. It's rapidly becoming the norm, the way of handling not just the speed of change and changing business conditions, but the interplay of all those factors, which is the real challenge of doing business today. As IBM CEO Samuel Palmisano writes, “. . .events, threats and opportunities aren't just coming at us faster or with less predictability; they are converging and influencing each other to create entirely unique situations. These first-of-their kind developments require unprecedented degrees of creativity.”<sup>1</sup>

Google cultivates that creativity through an approach they call Innovation Time Off. Engineers are encouraged to spend 20 percent of their time developing their own ideas, which often requires recruiting and collaborating with colleagues.<sup>2</sup> At one time, half of newly launched products, including Gmail, Google News, and AdSense, originated in those collaborations.<sup>3</sup>

Not all companies are like Google, nor should they be, but the company illustrates what many studies show: There's a strong correlation between collaboration and corporate success. An IBM study found that “extensively collaborative” companies performed better than their peers, and companies that collaborated with external sources made more money than those that didn't.<sup>4</sup> An international study that Google commissioned with the Future Foundation found an 81 percent positive correlation between collaboration and innovation.<sup>5</sup>

Collaboration provides a competitive edge, and for that reason, companies are figuring out how to foster and support collaboration in a way that works for their specific company, given its corporate culture.

The best companies take a holistic approach to collaboration, understanding that there are many factors that influence collaboration, including technology, human resources policies, corporate culture, and the facility itself and how it's furnished, all of which also have an impact on employee productivity and satisfaction.

To learn more about the role of facilities in collaboration, Herman Miller conducted research at 15 companies (which had identified themselves as highly collaborative) in the U.S., U.K., India, and Australia. Time was spent at each site observing collaborations as they happened and keeping detailed logs of those collaborations. In all, over 700 hours of research were conducted and 2,900 collaborations were observed. Then researchers dissected the collaboration process, looking for disconnects between the process and the design of the facility. This paper is an overview of what Herman Miller and others have learned about collaboration, how facilities can better support it, and the other factors that influence collaboration.

### **Characteristics of a Collaborative Event**

In spite of technologies like FaceTime and WebEx, which allow people in remote locations to see each other and share documents as they talk, people still value

On average, collaborative events are short (34 percent lasted fewer than 15 minutes and 60 percent were done in under 30 minutes), consist of only two or three people, and use few tools.

place. That may change as the wave of digital natives (those who have grown up with technology) enter the workforce and Baby Boomers retire, but for now people of all generations overwhelmingly prefer face-to-face communication.<sup>6</sup> Heightened interaction and interconnectivity, better clarity, and an increase in efficiency are some of the reasons they still like to go to the office.

Furthermore, according to other researchers, getting to know team members in person paves the way to a better virtual working experience. Carsten Sorensen, a senior lecturer in IT and innovation at the London School of Economics, told *Director* magazine, "Some of the groundbreaking research within my field has shown that people who know each other quite well and who stay in touch, don't feel any different [using collaborative tools] than if they are in the same room."<sup>7</sup>

---

### Characteristics of Collaboration

As part of our research, almost 60 percent said their most recent collaborative event lasted 30 minutes or less and involved fewer than four people. When five or more people collaborate, the events were typically more formal, longer, and often occurred in an enclosed conference room. We observed several types of actions that characterize these events:

#### Information Exchange

Quick exchanges that answer who, what, where, and when questions.

#### Co-creation

Working with others to achieve some new outcome.

#### Social Interaction

Mutual interactions that form the basis for social relations.

#### Knowledge Transfer

One person tells another what they know, answering the how question.

#### Focus

Heads-down work that occurs with minimal distractions.

---

### Behavior: People Seek the Simple, Familiar, and Functional

The traditional sense of collaboration implies organization. Meetings scheduled, people invited, rooms reserved. But our research showed that collaboration is primarily spontaneous and sometimes even a little chaotic. It's quite often unplanned and undefined. On average, collaborative events are short (34 percent lasted fewer than 15 minutes and 60 percent were done in under 30 minutes), consist of only two or three people, and use few tools. Seventy percent of collaboration happens at the desk. People seek out meeting spaces when they need more privacy or different tools or because they are worried that the meeting will take long enough that it will constitute a real disruption to colleagues around them.

In short, when people want to collaborate, they seek out the simplest, most convenient solution. If their office has everything they need, they'll use it. If it's

not big enough or they need a certain kind of technology, they'll go to the nearest meeting space that has it—and where they know for sure the technology will work. They'll use conference rooms they don't like only as a last resort. Also, larger groups tend to be more structured and formal in their collaboration, meeting in enclosed spaces for longer periods of time and using more tools.

Across the continents included in our research (all of which were more culturally similar than different), we saw that collaboration is universal, just as work is universal. Similar jobs at different companies and in different countries are very similar in their work processes. For example, a project manager in Australia uses the same technology, uses comparable sheets of paper, has the same kind and number of meetings, and interacts with the same types of people as would a project manager in the U.S.

### **Technology: Tools in a Space Dictate Its Use**

Technology and other collaborative tools available in a space dictate what the room will be used for and drive how people interact while in the room. At one company included in our research that had multiple floors, people WebEx-ed into meetings even if they were onsite, just to save time. In order to accommodate this, rooms need to be equipped with the means to share content digitally. In fact, Herman Miller Performance Environment research shows that rooms with technology tools are used five times more often than rooms without. People are increasingly using flat screens as a collaborative tool, when they are available, rather than just for presentations.

That applies more broadly, as well. Cloud-based computing allows access to corporate applications and documents from any computer that has access to the Internet. When content can be pulled from the cloud anywhere, people will simply carry a small input device. They will expect ready access to displays and input devices in every room of the facility. The hospitality industry has already picked up on this; some hotels that cater to business travelers have networked TVs with external keyboards in every room or they've redesigned their lobbies into cafes for working, making them essentially business centers.

Paper is used in 65 percent of meetings, but three of the 15 sites in our research were reducing paper consumption through strategic, top-down initiatives, including training programs, teams dedicated to paper reduction, and installing multiple monitors to make it easier to compare documents on screen, rather than having to print them. It was interesting to note that in groups within a company, the approach to paper use could vary widely. In one company, a department on one floor was almost entirely paperless, while another department, located on a different floor, still used a lot of paper.

### **Design: Helping People Run into Each Other**

The offices of the companies that participated in the research show a trend toward more open and flexible office environments, especially in Australia and the U.K. Some companies are coring the middle of buildings, adding atriums, and lining

Research shows that rooms with technology tools are used five times more often than rooms without. People are increasingly using flat screens as a collaborative tool, rather than just for presentations.

One emerging trend is to provide multiple types of spaces for workers to choose from, because while open spaces improve communication, they aren't ideal for every kind of work activity.

walkways in these areas with amenities like coffee bars and bank machines. The intent is to pull people away from the elevator and get them out in the open, where spontaneous interaction might blossom into a serendipitous encounter.

Another thing we saw was that while community areas are easy to create, getting people to actually use the areas for collaboration is more difficult. For people to see them as truly useful, community spaces need to be convenient and equipped with the right tools. Furthermore, people must believe it's okay to actually use the spaces. They make that determination by watching others. Do their colleagues use community spaces? When and how? What about their manager? What about members of the C-suite?

### **Implications for Office Environment Design**

Work is constantly evolving. The global marketplace, complexity of problems, time to market, and other factors all point to an increased need for collaboration. The workplace must evolve, too, by supporting collaboration in the following ways.

#### **Offer a Variety of Workspaces**

One emerging trend is to provide multiple types of spaces for workers to choose from, depending on their needs, because while open spaces improve communication, they aren't ideal for every kind of work activity. Smaller rooms and alcoves a little off the beaten path can provide a person with the peace and quiet needed to synthesize a large amount of information and write a report. And there's still a need for rooms where a person can make a phone call without being overheard. Privacy includes the ability to control the access others have to you. "Though it may seem counterintuitive, research shows that informal interactions won't flourish if people can't avoid interacting when they wish to," write Anne-Laure Fayard and John Weeks in the *Harvard Business Review*.<sup>8</sup>

Project rooms that teams can use for months, conference rooms equipped with the latest remote conferencing tools, and areas of benching, where people can do heads-down work but also easily confer with each other support the various needs people have when collaborating. When planning rooms for collaboration, proximity is important. The companies in our research that had centrally located collaborative spaces, like coffee bars, had the right idea. They understood the draw of social spaces that were close by. Finally, collaborative spaces that aren't wired for technology or are missing tools won't get used. Driven by the desire to get work done rather than spin their wheels, people will cram into a small space with tools before they'll use a big space without tools.

#### **Decrease Individual Space; Increase Collaborative Space**

When good collaborative spaces are available and convenient, individual workstations are used less. Herman Miller's research shows that workstations

People must feel they have permission to linger in informal collaborative areas and that comes from watching how other people, especially managers and executives, use or ignore those areas.

are not occupied 60 percent of the time, across industries, and private offices are unoccupied 77 percent of the time.<sup>9</sup> Knowing that, some companies, especially in the U.K., are reducing the amount of floor space dedicated to assigned workstations and increasing collaborative space. Free address within home zones—unassigned workstations within a department or project area—is a way of using space more effectively while still giving people a sense of place and rootedness.

### **Provide Vertical Space for Display**

Environments can also support collaboration by providing more vertical display space for people to tack up schedules, sketches, mind maps, lists, and other work-related artifacts so they can easily share and refer to them. This space has shrunk as offices have gotten smaller. Shorter walls have less tackable surface. Although information can be stored on computers, we found that people still like physical artifacts. They want to have the physical artifact, and we saw that in order to have it, people will improvise to create their own vertical space by tacking things onto Gatorboard or foam core and carrying the boards around with them.

### **Make Wayfinding Easier**

The larger the facility or campus, the more of an issue wayfinding becomes. One of the participants in our research had more than 12 buildings on one campus. In the absence of good wayfinding, people fell back on the traditional (but not very effective) “Does anyone know where Mary Johnson in Building Four sits?” It’s difficult for people to collaborate when they can’t find each other. This goes beyond color-coding floors and may include creating facility-specific smartphone apps that help people find each other or using an existing application like Foursquare.

### **Beyond Design: Corporate Culture Is Formidable**

Regardless of how beautiful and functional collaborative spaces are, people won’t use them unless the culture approves. People must feel they have permission to linger in informal collaborative areas and that comes from watching how other people, especially managers and executives, use or ignore those areas. In our research, we saw people enter café areas that were included in the design specifically to foster collaboration, get coffee, and then leave. The copy room is a natural hotbed of informal collaboration, although no one ever intended it to be. That’s because the combination of having to make copies and having to wait your turn to use the machine gives people permission to linger and interact.<sup>10</sup>

Many companies are encouraging collaboration, generally. But some leading edge companies (including IBM, Citibank, and Kaiser Permanente) are becoming “collaborative enterprises” by incorporating collaboration in specific ways at the process level and “harnessing knowledge workers’ creativity in a flexible—but also highly manageable—fashion.”<sup>11</sup> One division that was particularly rigorous in creating “collaborative communities” saw error rates fall 75 percent over six years and a 10

Although many organizations see collaboration as a worthy goal in and of itself, progressive companies see it as a stepping-stone to something bigger and even more valuable—“co-creation” with customers and vendors.

percent annual increase in productivity. That kind of success depends on four things: developing and building a shared purpose, cultivating an ethic of contribution, developing processes that enable people to work together in flexible but disciplined projects, and creating an infrastructure in which collaboration is valued and rewarded.<sup>12</sup>

Although many organizations see collaboration as a worthy goal in and of itself, progressive companies see it as a stepping-stone to something bigger and even more valuable—“co-creation” with customers and vendors. A survey of chief executives around the world shows that companies are collaborating with customers at “unprecedented” levels.<sup>13</sup> Technology is making that easier, but the office may be the ideal place to forge long-term relationships by providing a place for people to collaborate in person and build trust before moving those collaborations into digital space.

## Conclusion

Although collaboration can happen anywhere, it's not something that's easy to make happen in organizations. It's dependent on culture: What kind of behavior is allowed and rewarded inside the organization? It's dependent on the layout and design of the facility: Is there a place close by that's somewhat private? And it's dependent on technology: Are spaces equipped with the tools needed to get the work done?

Brian Green, senior researcher at Herman Miller and the person who led the research on collaboration, likens fostering collaborative behavior to the process of mixing music on a soundboard. “Sometimes, the organization is culturally supportive of collaboration but space is an obstacle, and there aren't enough group spaces to meet the demand,” says Green. “Or maybe the space is ideal for collaboration but it never gets used. In that case, maybe the corporate culture needs some adjusting. The mixing of the factors matters far more than any individual factor.”

## Notes

- <sup>1</sup> Samuel Palmisano, in the introduction to IBM's “Capitalizing on Complexity: Insights from the Global Chief Executive Officer Study,” May, 2010, p. 5.
- <sup>2</sup> Bharat Mediratt, as told to Julie Beck, “The Google Way: Give Engineers Room,” *The New York Times*, October 21, 2007, <<http://www.nytimes.com/2007/10/21/jobs/21pre.html?ex=1350619200&en=f4b2cd9d18f162bb&ei=5124&partner=permalink&expd=permalink>> (accessed May 2, 2012).
- <sup>3</sup> Wikipedia, <http://en.wikipedia.org/wiki/Google#Employees> (accessed May 2, 2012).
- <sup>4</sup> IBM, “Using collaboration to enable the innovators in your organization,” <<http://www-935.ibm.com/services/us/imc/html/collaboration.html>> (accessed May 2, 2012).
- <sup>5</sup> Jeff Davis, “Google: Innovation at the Pace of 100%”, p. 2, <[www.arzika.com/Davis.pdf](http://www.arzika.com/Davis.pdf)> (accessed May 2, 2012).
- <sup>6</sup> Deloitte, “Gen-Yers, Baby Boomers & Technology: Worlds Apart?” 2008, p. 2 <[http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us\\_consulting\\_GenYersBabyBoomersandTechnology\\_092908\(1\).pdf](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_consulting_GenYersBabyBoomersandTechnology_092908(1).pdf)> (accessed May 3, 2012).
- <sup>7</sup> David Winward, “Pulling together,” *Director* magazine, May 2010, <[http://www.director.co.uk/ONLINE/2010/06\\_10\\_Google\\_collaboration.html](http://www.director.co.uk/ONLINE/2010/06_10_Google_collaboration.html)> (accessed May 3, 2012).

- <sup>8</sup> Anne-Laure Fayard and John Weeks, "Who Moved my Cube?," *Harvard Business Review*, July, 2011, <<http://hbr.org/2011/07/who-moved-my-cube/ar/pr>> (accessed May 3, 2012).
- <sup>9</sup> Herman Miller, Making Real Estate Work Harder: Aggregated Data, Trends, and Examples," <<http://www.hermanmiller.com/research/topics/all-topics/workstations-empty-60-percent-of-the-time.html>> (accessed May 3, 2012).
- <sup>10</sup> Fayard and Weeks, "Who Moved my Cube?"
- <sup>11</sup> Paul Adler, Charles Heckscher, and Laurence Prusak, "Building a Collaborative Enterprise," *Harvard Business Review*, July, 2011. <<http://www.hbr.org/2011/07/building-a-collaborative-enterprise/ar/pr>> (accessed May 3, 2012).
- <sup>12</sup> Adler, Heckscher, and Prusak, "Building a Collaborative Enterprise."
- <sup>13</sup> IBM, "Capitalizing on Complexity," p.41.

© 2012 Herman Miller, Inc. Zeeland, Michigan

®  **HermanMiller** is among the registered trademarks of Herman Miller, Inc