



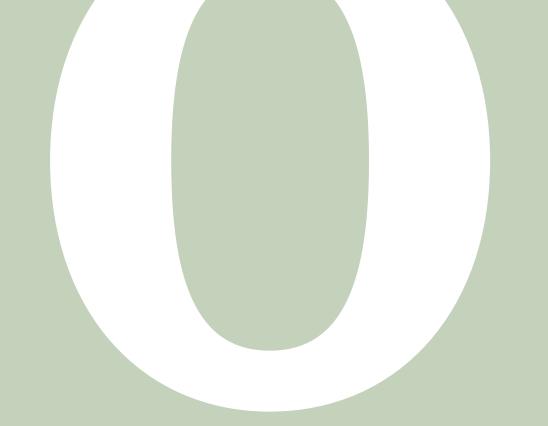
Written by: Steve Delfino

Fellow Collaborators: Penny Benda Susan Vanexe-Osborne Kay Sargent Laura Barski Scott Deugo Joe Regan Michael Vanderbyl

Francis Cauffman Contributors: John Campbell

Julia Leahy Jennifer Tidd Michael Bonomo Raquel Sachser





INTRODUCTION THE PATH ≥ PAR ΑD БМ

"TECHNOLOGY PROPOSES ITSELF AS THE ARCHITECT OF OUR INTIMACIES." Sherry turkle, alone together

A decade of technological change has fundamentally altered the way we experience and conduct our lives. In fact, one can hardly discuss business, politics or movies without also talking about the Internet, intranets, social networking or cloud computing. And tools like smartphones have become our constant companions. I just downloaded an app that shows me where to find an open parking space at the mall and oh, the time it has saved.

Without doubt, this is an interesting moment in the history of human affairs; a moment when technology promises to make life easier and allow us to connect with people we might not otherwise. For business, technology offers the potential for greater productivity and creativity and for those of us who work, it can free us from the constraints of time clocks and cubicles.

The promise of technology is great and the topic vital enough to inspire an onslaught of books, blogs and its own section in the newspaper along with such stalwarts as World News, Sports, Arts and Business. Technology inspires lively dialog and debate, suggesting it is easier to use than it is to understand its social, economic and environmental consequences. A decade ago, few could predict how thoroughgoing our embrace of technology would be.

By the way, the telephone was invented in 1876 and the first mobile cellular phone in 1981 (105 years later). The iPhone made its debut in 2007 (26 years after the cellphone), but already there have been five subsequent iterations and 350,000 apps, plus the birth of the iPhone's sibling, the iPad in 2010. That's how fast things change now.

ALWAYS CONNECTED, ALWAYS "ON'

Consider this: it's 10:30 at night and I'm still "at work" in my home office doing research for this paper. However, I was able to leave work early this afternoon to tie my son's skates for a hockey tryout—the most important thing in the world to a nine-year-old boy. Thanks to technology, I could be part of a conference call on my way to the tryout and approve a time-sensitive document. I had the freedom to fulfill my duties as an employee and a parent. In this case, my smartphone and laptop are a boon.

Yet, those same tools can derail my plans for some off-duty downtime, eroding my sense of privacy. I admit to being "connected" most of the time and ready to be engaged outside of traditional office hours. In this, I am not alone.

Since the moment you sat down to read this paper, has your mobile device alerted you to an incoming e-mail, text or Twitter message? Did you check the message or continue to read? The wizardry of new gadgets is stimulating and most of us are familiar with the impulse to check our phones every five minutes. Such frequent checking may be the result of a desire to connect—or the compelling nature of our incredibly capable technology.

Various research reports indicate that smartphone users check their phones frequently at work and during personal downtime—with many people checking their phone as often as every 10 or 15 minutes. Just as many keep their smartphones within arm's reach during sleep and even wake to see if texts or e-mails have arrived.

Certainly the desire to communicate and "connect" seems to be hardwired into what we call human nature.

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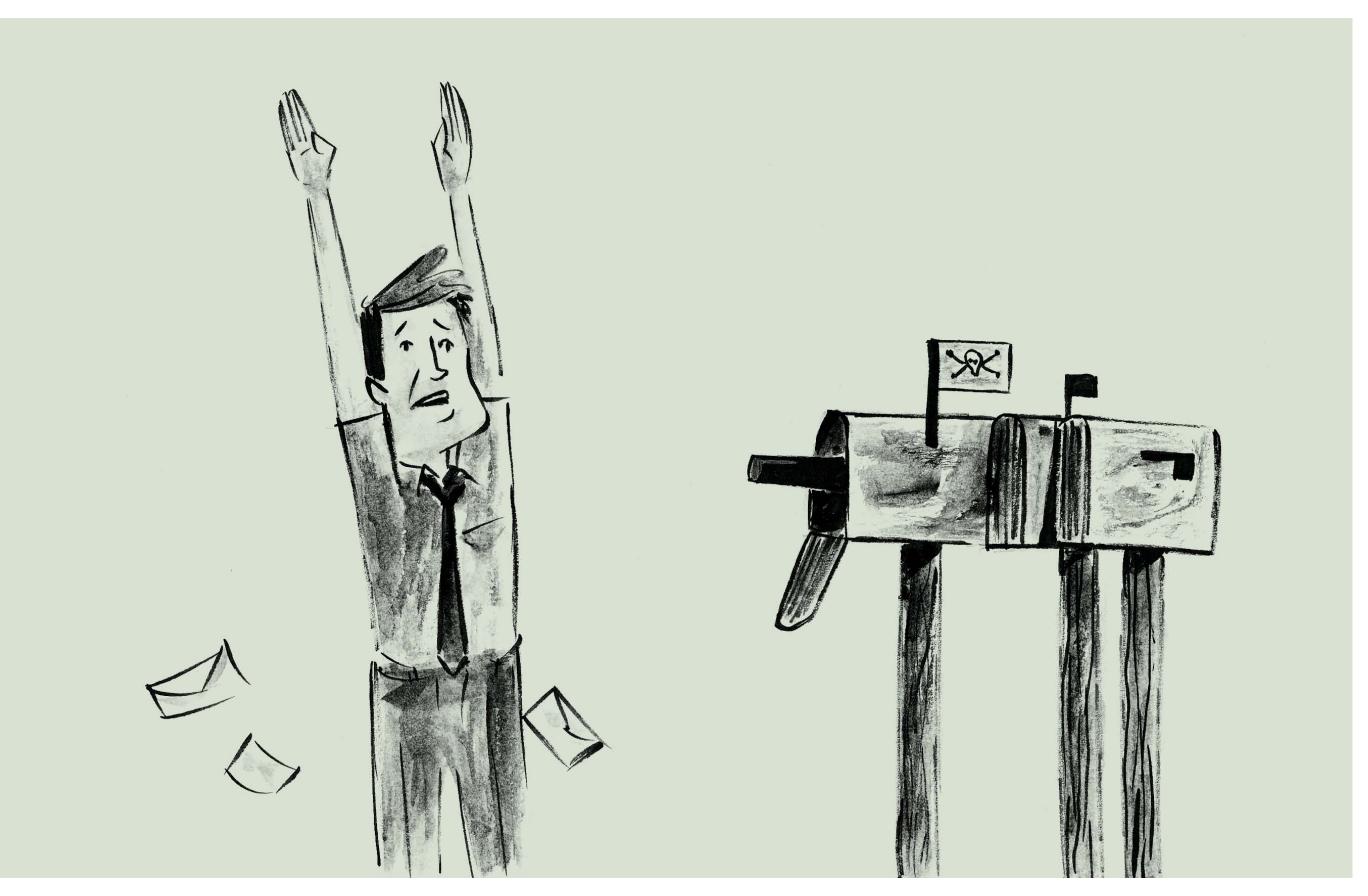
Crafting signs, symbols and stories has been part of human activity in every culture. Of course, the means of communication have radically changed and no doubt will continue to evolve as they have from Paleolithic cave paintings to hand lettering on parchment to Gutenberg's invention of the printing press to the laser printer; or from oral traditions and drummed messages to the invention of the radio, telephone and my iPhone 4.

The recent explosion in technology—and more specifically, mobile communication devices—has changed not only the opportunity for communication, but the scale, pace and pattern of communication. Never in history have people been able to contact almost anyone anywhere at any time. Equally, access to data is unprecedented. Today, one can delve into the archives of *The New York Times* or *The Guardian* via computer, contact researchers around the world and pull from online libraries and databases.

We've gained extraordinary new power to connect and communicate with people around the world 24/7. We can retrieve and deliver information in less than 140 characters. Our devices have become extensions of our lives and our personalities. But have we lost something in the transformation to a hyper-connected world?

The Mutiny

BRIAN'S MAILBOX DECIDED IT WOULD NOT SLIP INTO OBSOLES-CENCE WITHOUT A FIGHT.



LANDSCAPES TRANSFORMED

The working subtitle of this paper is "Phonebooths and Mailboxes," chosen because both were once a common element in the urban landscape. Both are now becoming obsolete or redundant due to the ubiquity of mobile phones and e-mail—superseded by new technology. I've always liked the bright red British telephone booth and the image of American college kids stuffing themselves into a booth as a prank. And once upon a time, people wrote lengthy letters and each day's post was an event of some importance. Happily, the iconic British phonebooth as much a symbol of Britain as fish and chips—is now finding new life as a charging station or connectivity booth or even a village "library kiosk."

In general, however, both the phonebooth and the mailbox represent a landscape and way of life now transformed by technology.

With the advent of "always on" gadgets, however, we can connect at any time with people anywhere, which has far-reaching implications for the way people work and the way companies do business. How will people work tomorrow and the day after?

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Why put pen to paper when you can text? Who needs a booth when your phone is in your pocket? And why drive into the office when you can email? Technology allows one to be connected to colleagues without ever seeing them—or does it?

DISCOVERING A NEW WORKFORCE PARADIGM

Our purpose here is to ask and potentially answer some questions about the communications technology that is so intimately woven into our lives—and its consequences for our life at work. At one time, most interactions were with people in the same building and exchanges took place synchronously either face-to-face or via telephone.

Is the office where we do our best thinking? Perhaps you have asked, "When and where did my last great idea come to me—in the office, on a run or just after midnight while working at home? I rarely hear, "It came to me in a meeting." But I often hear, "I couldn't wait to get back to the office to share it." Light bulb moments may not happen in the office, but perhaps that's where they come to life.

My last "big idea" came to me on a plane and that seems to happen more often than not. On a long flight, I enjoy hours of uninterrupted solitude. I receive no phone calls, e-mails or dropby visitors (except those bringing food and drink, who are welcome). It is a great place to think and reflect. Recently however, I boarded an Air Canada flight and to my horror saw an emblem on the outside of the plane that read. "Now Wi-Fienabled." Just as we spend less time "unplugged," we may be running out of places to think.

0.18

The question inevitably arises, if we can connect anywhere, anytime, is the office the best place to work?

NOMADS PEOPLE IN MOTION

As the shift from the Industrial Age to the Digital Age continues, work continues to evolve, as does the workplace, becoming ever more fluid and comprised of multiple formats animated by a variety of activities. The emerging office landscape reflects the mobility of people no longer tied to their desks and PCs; a workforce armed with devices that are changing how, when, where and with whom we work.

Mobility may be one of the most significant changes technology has wrought.

Orbit

JESSICA DECIDED TO UPGRADE THE DIAMETER OF HER PERSONAL SPACE WORKSTATION.



Today, work has become location-free and the workplace itself has become, to a greater or lesser extent, barrier-free as people have access to one another up and down and across the organization. And, as physical and temporal barriers to work have given way, so have the traditional hierarchical boundaries within organizations.

For those of us who have been working in the corporate environment for a while, there has been a noticeable shift from structure and the vertical coordination of skills to a "horizontal" process of collaboration by and through networks of continually evolving teams. And from formal scheduled meetings to facilitating collaboration wherever it may occur—within the office or among mobile or globally dispersed team members.

1.28

UNTETHERED: WAYS OF BEING MOBILE

No single term describes the ways that today's corporate nomads move fluidly within the office environment or between the established office and other work sites. Generally, "mobile work" is the ability of individuals enabled by technology to work freely within and outside the office. It may refer to those who are mobile outside a central place of work, communicating primarily by phone or laptop. On the other hand, mobile work also describes people who are present in the office, but who are free to choose the workspace that will best accomplish the task at hand.

Teleworkers or distance workers refers to employees who enjoy flexibility in work location and hours, working from home or another site for at least some part of the week. "Distributed work" is a term used to represent a workforce that is disbursed geographically over a wide area. A distributed workforce usually consists of virtual teams who work across time, space and organizational boundaries linked by webs of communication technologies. Each individual may be more or less mobile.

For the purposes of this paper, I will generally use the terms mobility and mobile work(ers), as I believe these best describe the shift in work practices—the use of technology to support work anywhere, at any time; company policies that allow for flexibility in work hours and locations; and also, high levels of ad hoc collaboration achieved both through faceto-face and virtual interaction. Up ahead: What road are we traveling? Given the technology available, it seems logical to pose the question: is the office itself on the way to becoming as redundant as a phonebooth or mailbox?

My argument is

"**no**."

1.33

Although people are working outside the office more often and for longer periods, the physical office space still performs important functions—and even young workers who are able to leverage the latest technologies with ease, remain eager to work with others face-to-face or elbow-to-elbow when provided with an attractive setting. In fact, as has been noted by other writers, Millennials are a tribal generation who learned to study in groups and for whom socializing is an important, even essential, part of work. The office will survive, albeit in different forms and for different reasons than in the past.

However, prior to exploring the emerging landscape of the office, I want to take a closer look at the phenomenon of mobility itself—its potential to change the way we work and to enhance not only our individual daily experience of work, but also more broadly, the promise of enhanced creativity. Can mobility move us towards key goals of sustainable development and greater innovation?



E-WORK CHANGE NON SI

Perhaps until recently, most of us—or at least, myself—assumed that mobile workers were to be found primarily at entrepreneurial high-tech companies that embrace a flexible management style in order to attract bright young engineers in the competitive technology sector. However, it appears that the adoption of mobility in one form or another is more pervasive, but less predictable, than many of us have believed.

Consider these words addressing workplace flexibility. "It's about attracting and retaining top talent in the workforce and empowering them to do their jobs, and judging their success by the results that they get—not by how many meetings they attend, or how much face time they log."

This is not the late Steve Jobs, or Cisco's John Chambers speaking. It is Barack Obama, President of the United States, in a 2010 speech at his Whitehouse Forum on Workplace Flexibility. Robert A. Peck, head of the Public Buildings Service, echoes the President's statement in a U.S. General Services Administration (GSA) report. "Mobility is a fact of life—how most people work today. They embrace it because it improves their performance." ^[3]

Adding weight to the statements above, these figures are cited in a study by the Telework Coalition, a non-profit educational and advocacy organization based in Washington, D.C:

- 89 of the top 100 U.S. companies offer telecommuting
- 58% of companies consider themselves a virtual workplace
- \bullet 67% of all workers use mobile and wireless computing $^{[4]}$

According to another survey, 600 executives from around the world reported in "VWork: Measuring the Benefits of Agility at Work," that 62.5% of large enterprises surveyed have already rolled out new ways of working and 59% of respondents report that they have the right tools to work effectively outside the workplace. ^[5]

Independent research from entities as diverse as the Bureau of Labor Statistics, Cisco and IDC, a "market intelligence firm," also indicates that mobility is no longer the exception to the rule. The IDC Mobile Worker Population Forecast predicts that the number of mobile workers worldwide will reach 1.19 billion by 2013 [note: "mobile workers" in the study included office-based, non-office-based and home-based mobile workers, a very broad definition]. ^[6]

Looking ahead, Lynda Gratton, Professor of Management Practice at the London Business School, describes how work will continue to evolve. "By 2025, we can expect that more than five billion people will be connected by mobile devices, the Internet 'Cloud' will deliver low-cost computing services, an increasing amount of work will be performed by robots and self-created content will...create an unprecedented amount of information in the world knowledge net." ^[7]

Given the above, there is little doubt that the business world is embracing mobility and that our work life will now be played out in diverse locations: corporate head offices, satellite offices, client/customer sites and remote office centers that lease space to "free radicals" and individuals from multiple companies. Outside the "real" office, people will work in the airport lounge or public library, the home office and the oft-used Starbucks example. For the record, I'd like to point out that no part of this paper was researched or written at a Starbucks.



MOBILITY \leq

ISE?

As one writer said about mobility: "The train has left the station." There seems to be no turning back and there appears to be minimal resistance even excitement—about the potential for greater mobility to support participation, productivity and ultimately, innovation. Mobility promises to be a win for all those involved—top-tier business leaders, IT managers, the workforce, the customer. The potential benefits most often cited are:

3.40

BUSINESS

- Potential for decrease in real estate/capital assets
- Access to a global pool of talent

02

PEOPLE

- Work/life balance
- Improved personal health & safety
- Increased ability to do focused work

03

WORKPLACE

- Promote interaction & collaboration
- Increase in productivity

04

ENVIRONMENTAL

- Decrease energy use
- Reduce emissions & carbon footprint

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Platformula For Success

THE OPEN FLOOR PLAN SHARED CHAIR POLICY. Ē SUCCESS OF ΤΗ Μ

BETTER FOR BUSINESS: MORE EFFICIENT USE OF SPACE

For a business trend to become common practice, it has to make money through innovation or save money—either by streamlining processes and making people more efficient or by lowering expenditures on buildings, furniture, equipment and so forth. In the 1950s, many companies adopted the new open plan because of its space-saving cost advantages, not because of the humanistic social benefits envisioned by the architects who had devised the open office landscape. Now, we find ourselves on a similar path, pursuing both humanistic and economic goals.

So, how does employee mobility lower costs? For one thing, we can plan offices to address the fact that

an employee who is in the office 50% of the time doesn't need a designated 48-square-foot space, but rather a well-designed space for when he or she actually lands. In some cases, that space can be shared so that it is in use 100% of the time—thus, maximizing real estate. The potential is certainly there to reduce the amount of leased space or capital expenditures—how well it can be realized is still to be seen.

It must be noted that we are not seeing a fire sale of office space as companies move to smaller spaces. Rather, the space afforded by trimming the size and number of workstations is now allocated to public spaces where people can naturally "collide" and interact. As much as offices were once planned for individuals, today's office is designed for groups, with lounges, coffee bars and multiple informal collaborative settings—a radical change in thinking and planning if not in the amount of floor space.

3.46

BETTER FOR BUSINESS: A LARGER POOL OF TALENT

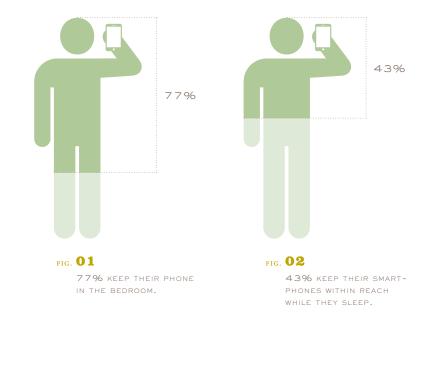
Rami Mazid, Vice President-IT, Global Client Services and Operations at Cisco, has suggested another business benefit of new communications technology. He points out that Cisco employees now collaborate with remote team members regardless of their location, providing the company with a much larger pool of talent. Cisco can tap the skills of the best engineers, designers and marketers from around the world, selecting those best suited to a specific project. ^[8]

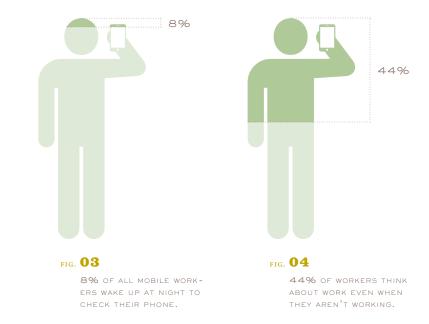
As an executive telecommuter, Mazid decides whether to work at his Cisco office or from home based on his calendar and work schedule for the day. When he is in the office, most of his team meetings are conducted online using WebEx to accommodate employees working from remote locations. Clearly, this VP is adept at leveraging advanced communication tools, including those that his company has developed, to meet new business challenges. ^[9] PEOPLE IN MOTION: HEALTHIER AND HAPPIER

An astute business professor once told me that, "High volumes hide all sins." And when times get tough, the real truth comes out. Working from home, job sharing and reduced hours came about in large part as a response to an economic downturn. But an interesting side-effect of flexible work programs was that people were more productive when they landed back in the office. Stress levels seemed to drop ...and performance improved.

My reading suggests that mobility and telecommuting do indeed have positive effects on employees, especially when it comes to achieving work/ life balance and managing the conflicting demands of work and family. And thanks to unified communications technologies, especially webbased tools and services that allow dispersed teams to work together and remote workers to collaborate effectively with colleagues back at the office, such alternatives are now available to employers and employees.

In 2010, researchers from Penn State analyzed 46 studies of telecommuting conducted over two decades and covering almost 13,000 employees. Their inquiry concluded that working from home has "favorable effects on perceived autonomy, work-family conflict, job satisfaction, performance, turnover intent, and stress." The only drawback seemed to be a slight fraying of the relationships between telecommuters and colleagues back at headquarters—largely because the latter group felt envious of those enjoying the perk of telecommuting. ^[10]





PEOPLE IN MOTION: MORE PRODUCTIVE

Managers often believe that telework will result in a loss of control and motivation, fearing that employees who work at home will fritter away the hours posting to Facebook or updating their personal blog. "How do I know that they are working if they aren't in the office?" But after reviewing hundreds of studies, Telework Research Network researchers conclude that telecommuting actually generates higher levels of productivity. Below are some of their findings:

3.50

• Best Buy, British Telecom, Dow Chemical and others show that teleworkers are 35-40% more productive. • Over two-thirds of employers report increased

productivity among their telecommuters.

05

• JDEdwards teleworkers are 20-25% more productive than their office counterparts.

)6

• American Express workers produced 43% more than their office-based counterparts.

03

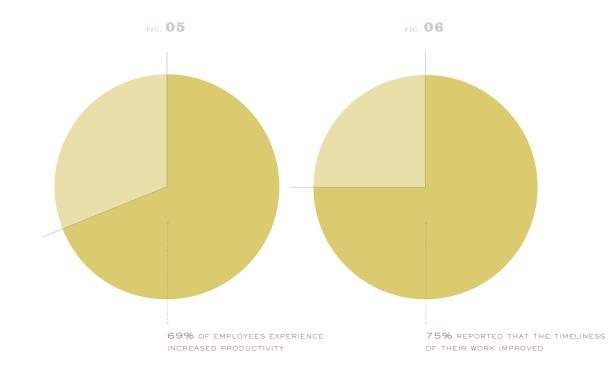
• Sun Microsystems' experience suggests that employees spend 60% of the commuting time they save performing work for the company.

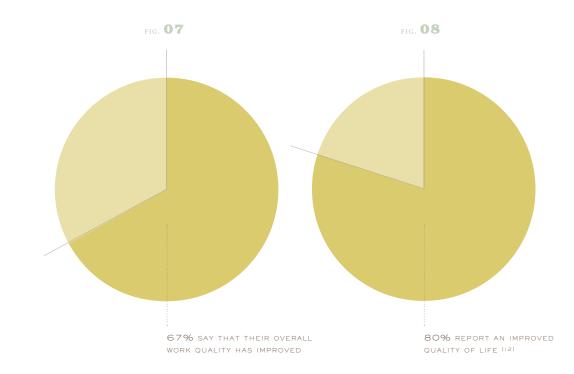
07

• Compaq increased productivity 15%-45%. [11]

04

• AT&T workers work five more hours at home than their office counterparts.





3.52

Cisco's Telework Survey presents a similar picture of the value or benefits of telecommuting (on average, Cisco employees telecommute two days per week):

- 69% of employees experience increased productivity
- \bullet 75% reported that the timeliness of their work improved
- 67% say that their overall work quality has improved
- 80% report an improved quality of life [12]

"Our main intent was to really evaluate the social, economic and environmental impacts associated with telecommuting," says Rami Mazid. "We sampled employees who have the flexibility and desire to telework to get the most up-to-date information, and the key conclusion is that employee productivity is much higher and collaboration is the same if not better when working remotely." ^[13]



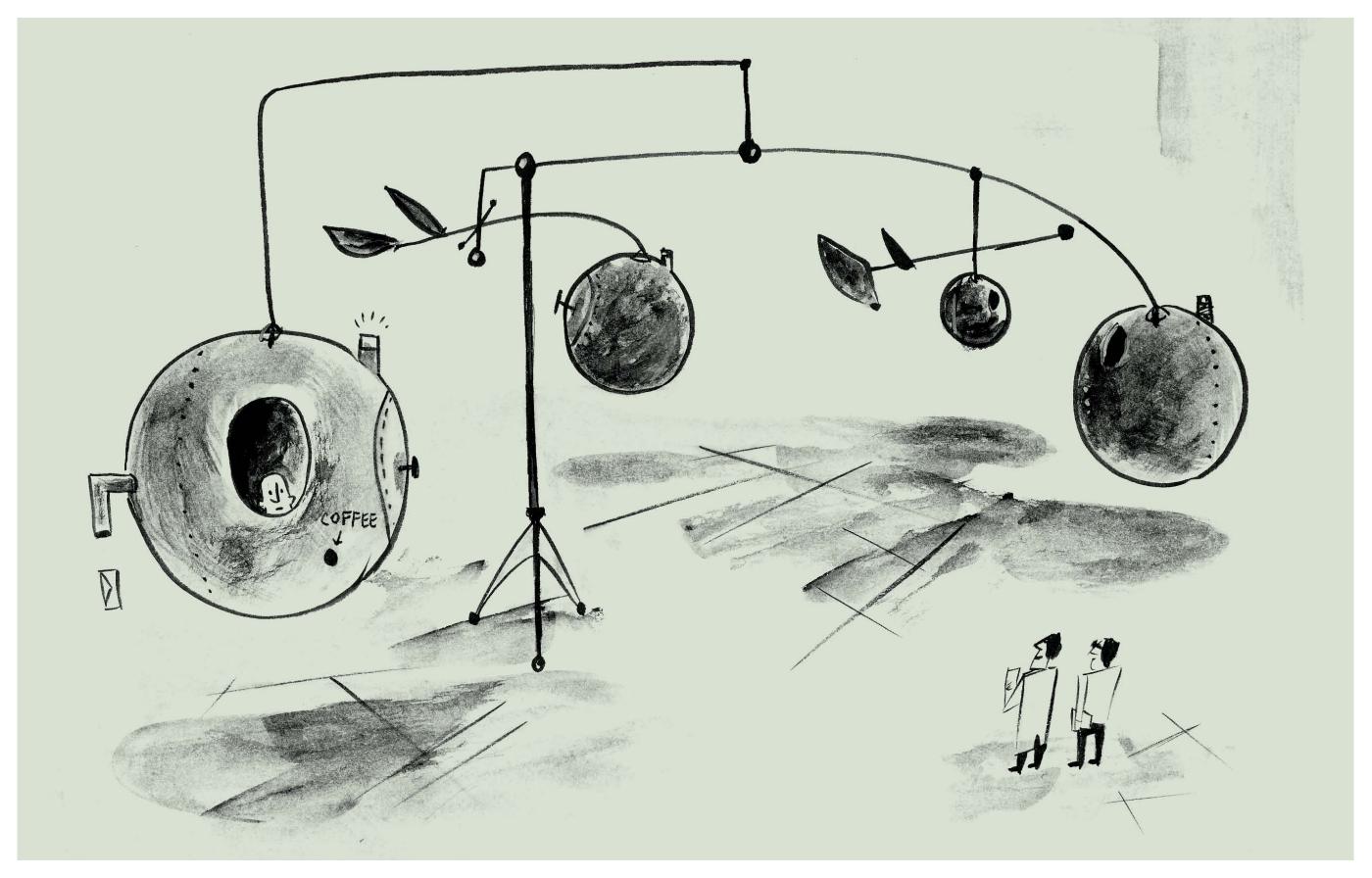
"Connected"

MR. BOWSER COULD ENGAGE HIS MASTER DURING TRADITIONAL OFFICE HOURS THANKS TO TECHNOLOGY.

As an interesting sidebar, while mobile technology offers greater freedom of a sort, it extends typical work hours-replacing the eight-hour day with an ad hoc 12-hour workday.

Internally Mobile

THE IN-MOTION WORKERS, WITH THE HELP OF R+D, MADE A PROMISING COMBINATION OF INNOVATION AND IDEATION THEY DUBBED COLLABORATIVE ISOLATION.



3.62

PEOPLE IN MOTION: A LONGER WORKDAY

It's been estimated that mobile workers work an additional 40% more than their static coworkers.

Cisco's 2009 Telework Survey cited above found that people do spend more time working when they telecommute. Of the time saved by not commuting, 60% was spent working more, while only 40% of the time saved was consumed by personal activities. Still, working longer hours, but with a chance to break for quiet time or a jog through the park, may be less stressful and contribute to health, productivity and job satisfaction.

Personal friend and colleague Kay Sargent, formerly a principal of IA Architects, now at Teknion, comments: "The notion that people work effectively for 8 hours straight is unrealistic. Have you ever heard someone say they are a 2 pm kind of person? Most people are morning or evening people and do their best work or thinking early or late." Mobility makes it possible for people to work when they are most effective, and to refresh when breaks are needed, rather than soldiering on as dictated by the eight-hour workday. PEOPLE IN MOTION: OUT OF SIGHT AND OUT OF CONTROL?

Tech companies such as Cisco, Citrix Online and eBay have embraced telework, but so have Booz Allen Hamilton and American Fidelity Assurance according to Fortune magazine. Others resist, often based on the assumption that employees have to be controlled—close at hand if not in the manager's direct line of sight. This assumption has not been proven in practice, but it has an analog in the employee who fears that, "out of sight is out of mind." Employees may feel that "face time" is essential for advancement. Or, if staff reductions are in the offing, that it makes sense to be present and accounted for if one is not to be among the first to go.

Our research indicates that while leading and managing remote teams or a mobile workforce may require a different managerial style—more like that of an orchestra conductor, a coach or an ambassador—that there is no inherent problem in keeping mobile workers on track. In fact, performance often improves.

MOBILITY AND THE ENVIRONMENT: SHRINKING OUR FOOTPRINT Having faced up (more or less) to the environmental effects of human industry and consumption, many of us have made changes in our daily habits to reduce our impact. We sort our trash. We use less paper. We turn off the lights, if not our computers. We buy "green" products or those that are produced locally and often display loyalty to companies with a responsible image. In both business and in government, promoting worker mobility is perceived as a part of environmental responsibility:

3.64

01

• In 1996, the U.S. Clean Air Act required companies with over 100 employees to encourage car pools, public transportation, shortened workweeks and telecommuting to reduce CO₂ emissions and improve air quality.

02

• In 1999, the National Air Quality and Telecommuting Act set up pilot "ecommute" programs in five metropolitan areas that ran from 2001 to 2004. In 2000, each Federal executive agency had to establish a policy under which eligible employees could participate in telework.



• In 2005, Congress threatened to withhold money from agencies that failed to provide telecommuting options to all eligible employees. ^[15] The U.S. Environmental Protection Agency has a number of programs that promote telecommuting as one way to improve the livability of cities and preserve the environment. The agency allows up to 30% of its employees to telecommute because the practice reduces auto emissions, energy use and traffic congestion.

Research conducted by Kate Lister and her colleagues at the Telework Research Network indicates that if the 40% of the U.S. population that holds telework-compatible jobs and wants to work from home did so just half of the time:

3.66

01

• The nation would save 280 million barrels of oil (37% of Gulf oil imports).

02

• The environment would realize the equivalent of taking nine million cars permanently off the road.



• National productivity would be increased by five-and-a-half-million man-years. ^[16]

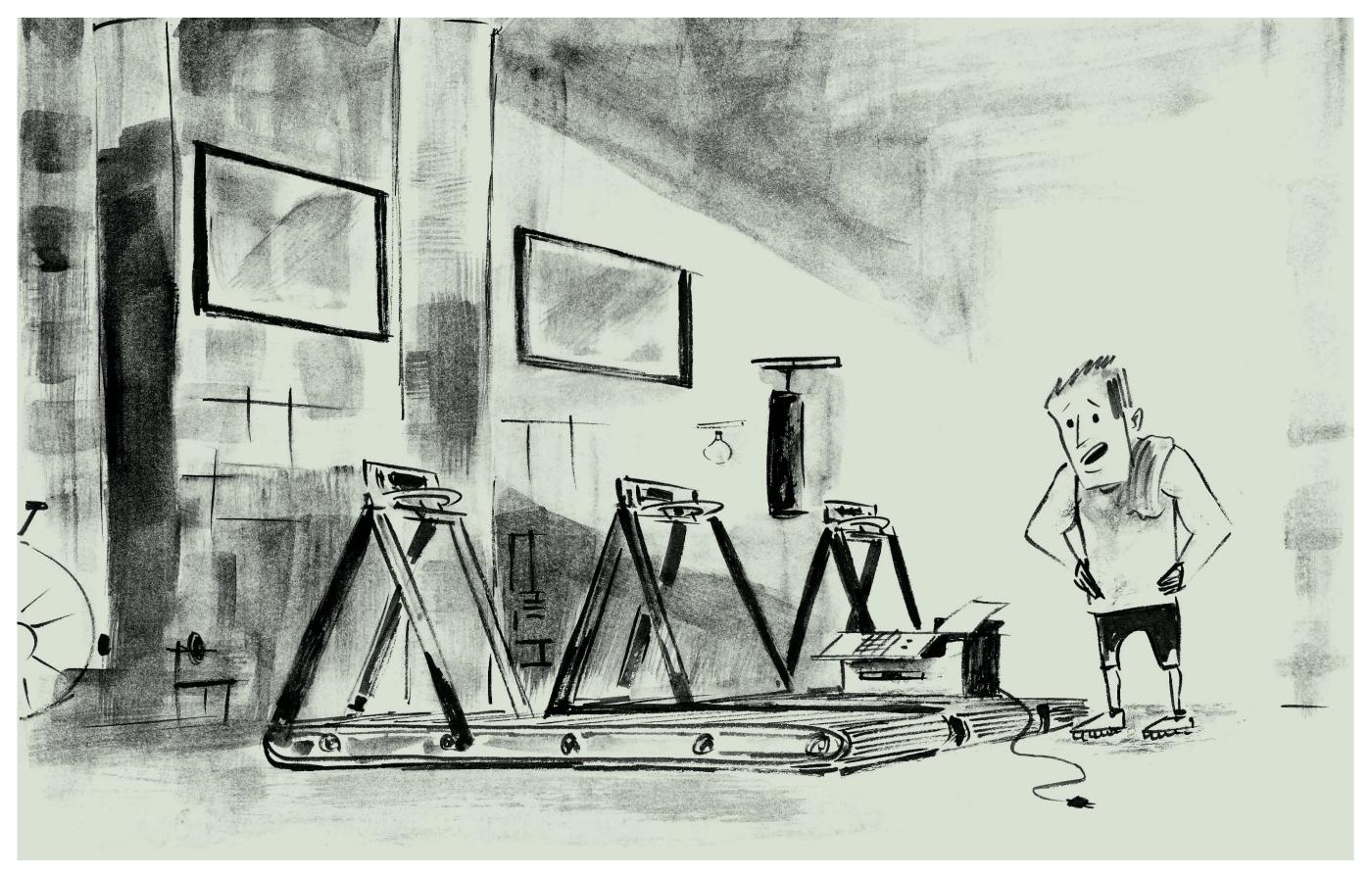
3.67

A joint study by the National Science Foundation and the Telework Exchange, based on responses from 87% of its employees, found that the NSF telework program reduces emissions by more than one million pounds and saves more than \$700,000 in commuting costs each year. Additionally, IT strategies that support mobility reduced operational energy consumption. All NSF employees are eligible to work remotely and 51% of them do so; 32% on a regular basis. ^[16]

Cisco Systems, too, reports that in 2008, Cisco teleworkers prevented approximately 47,320 metric tons of emissions from being released into the atmosphere. Cisco employees report savings of \$10.3 million per year in fuel costs due to telecommuting. ^[17]

Night Computer Classes 3.69

FAX MACHINE WAS MAKING PROGRESS WITH HIS PERSONAL TRAINER AND DETERMINED TO REMAIN COMPETITIVE IN THE NEW AGE.



Business and mobile workers

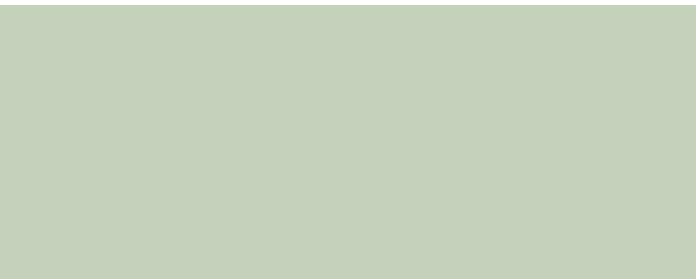
alike have found that telework

and other forms of mobility provide tangible benefits.

PEOPLE IN MOTION: A BETTER WAY TO WORK

Among companies in the vanguard of mobility, Cisco designs its offices with the remote worker in mind. Employees who work almost exclusively from home can opt out of having an assigned on-site office or workstation altogether, dropping in to the office for a day or an hour at a shared or touchdown space. ^[18]

Similarly, Johnson and Johnson's Flexwork program offers incentives to employees who opt to work remotely—and 23% do so. If employees "give us their workspace they get better technology, an internet allowance and access to space on site – anything they need." According to CNN Money, the family owned company has an incredibly low turnover rate of 2% and ranks #10 among Fortune's 100 Best Companies to Work For. Thus, mobility may also help companies retain great employees.



PRESENCE B UU'RE Z

Thus far, mobility seems like a boon to business and knowledge worker alike and we seem to be adapting rather quickly to the new freedom provided by technology. It wasn't long ago—prior to the iPhone and the BlackBerry—that one often had to rush back to the office to send or retrieve e-mails. Now, we can pick up messages wherever we happen to be—a great time saver. But what are the difficulties associated with straddling virtual and physical space?

If connectivity tears down walls, does it also build them?

4.76

If distance workers experience greater autonomy, do they also feel isolated and lonely? Do we still need the office and why?

THE POWER OF PRESENCE

Charles Handy, writing in the *Harvard Business Review*, has said, "Paradoxically, the more virtual the organization, the more its people need to meet in person." Handy, a respected specialist in organizational behavior and management, proposes that people come to the office to be part of larger groups and teams and need spaces for this to happen. They come to the office for stimulus and companionship and need spaces for this, too. ^[18]

Anthony F. Buono and Kenneth W. Kerber, writing for the *Advanced Management Journal*, address the problem of effective collaboration at a distance. Drawing from research by several groups, Buono reports that achieving alignment and commitment to the team's purpose is far more challenging for virtual teams, especially those that cannot meet face-to-face at the outset. In the absence of face-to-face communication, virtual teams may be prone to misunderstandings and conflict. Especially during team formation, personal contact and socializing help to build trust and aid the team's success. ^[19]

4.79

An interesting paradox arises. While companies can hire or retain the best people for a project regardless of location, there are questions about the effectiveness of teams that must rely wholly on technology to work together while apart.

The freedom, flexibility and agility provided by technology may promote the kind of diverse teams that produce innovation.

Reliance on technology to engage people in creative collaboration may also make it difficult to build shared identities and goals and thus impair motivation and personal performance.

THE PROBLEM OF VIRTUAL DISTANCE

Karen Sobel Lojeski and Richard R. Reilly, authors of *Uniting the Virtual Workforce*, also point out the costs of psychological distance that result when people interact mainly through electronic media. They coined the term "virtual distance" to refer to the "dis-connect" that occurs when people spend more time with computers than with each other. Communication filtered through technology presents significant challenges to effective collaboration and innovation.^[20]

As defined by Lojeski and Reilly, virtual distance refers to the lack of presence that occurs when people who work at a geographic distance must communicate via e-mail, phone or teleconference. However, it also denotes an associate just the other side of a corridor whom may never drop by your desk, but communicates by e-mail or text alone and thus creates a psychological gulf.

4.82

Equally, multi-tasking with an overload of input from too many sources—laptop, iPhone and worktable neighbor—can dilute attention and presence and thus create an interpersonal disconnect. Virtual distance inhibits establishing affinity or the sense of common purpose that holds a team together despite location, nationality or place in the organization.

These researchers note how misunderstandings can occur because of the loss of physical cues in electronic communication—eye contact, body language, intonation or the size of the pupil in another's eyes (indicating interest or engagement). Conversations are also less likely to be spontaneous, informal or "off problem," even when using media-rich tools for real-time exchanges. Participants in a teleconference discussion tend to stick to the agenda with less of the give-and-take that can lead to new ideas and insights.

Tactics

THE COMPANY'S FLYPAPER WALL UNITS PERHAPS FOCUSED TOO HEAVILY ON RETAINING TALENT FROM COMPETITORS.



Virtual teams must build trust differently.

4.89

BUILDING OR BREAKING TRUST

When you talk with workmates by the photocopier, meet for lunch or share a ride home, you can soon begin to assess his or her character. In a geographically distributed team, trust is measured primarily in terms of reliability. Ultimately, the key to being an effective member or leader of a virtual team is clear, consistent and effective communication. Achieving this can be tricky, leading some companies to provide training programs to develop the special skills required for electronic collaboration and leadership.

Few would deny that there's a big difference between gathering around a table and meeting via conference call or video conference. The lack of social presence leads to lower levels of engagement and, on top of that, interruptions from cell-phones or unexpected visitors create distractions that make it difficult to keep everyone's attention. The problem is more acute if people are phoning in from different time zones and hemispheres, with some fresh and alert and others attending at midnight after a long hard day.

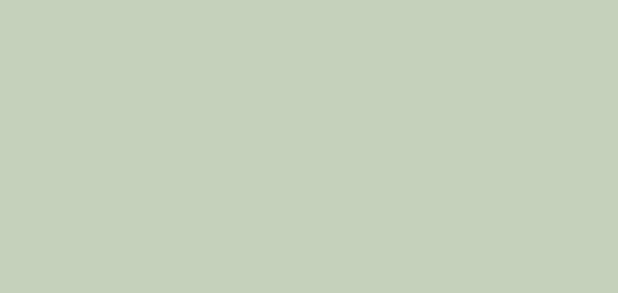
Whether collaborating in physical or digital space, misunderstandings and conflict can arise due to the diversity of complex multi-disciplinary teams whose members may have different cultural backgrounds, as well as differences in age, function and personality. In such cases, it is important to establish an operational structure and clear protocols for communication and the coordination—and to be sensitive to differences in language, customs, disciplines and other areas of difference.

Electronic communication has many advantages, not least among them that it can bring more good minds together to bear on important problems—

4.90

or foster discussion across a dispersed organization. Physicians can seek help from other specialists even if they are on the other side of the world. Writers can confer with editors without leaving their desk. Presentations can be made to business partners in the U.S., Europe and Japan simultaneously over Internet-based meeting platforms. You can be present anywhere even when you're not. So, who needs in-person consultations, meetings, mentoring or brainstorming?

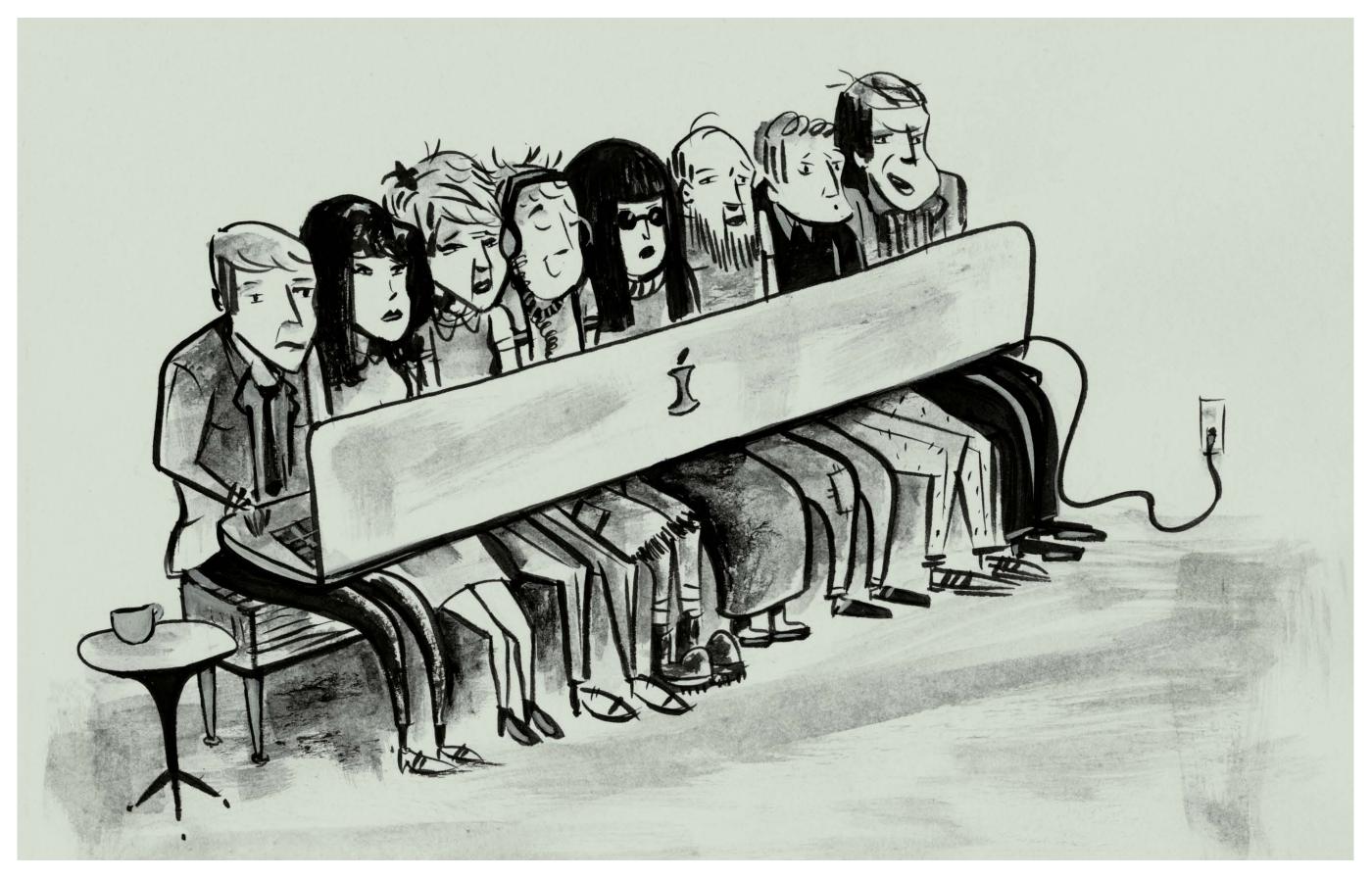
4.91



CONTACT ź

Single File Sharing

THERE WAS ALWAYS AT LEAST ONE PERSON AT THE COMMUNAL LAPTOP WHO TIPPED THE VOTE TOWARDS CAT VIDEOS.



Whenever I am asked if the office will disappear, I resort to one psychological fact. Human beings are social animals who need physical contact to thrive.

> Consider how important the handshake is upon being introduced in a business context. Or, how language conveys the importance of physical presence in idioms such as "let's get in touch" or "he failed to grasp the import of my remarks." One of the findings of a 10-year study by the MacArthur Foundation is that those who live longest are those who continually have interactions with people (outside physical/medical conditions) or meetings with larger organizational groups. ^[21]

5.99

In the middle of the workday, talking to a real, live person can give us a surge of energy. "In-person contact stimulates an emotional reaction," says Lawrence Honig, a neurologist at Columbia University, adding that hormones are higher when people are face-to-face. And research studies indicated that face-to-face contact stimulates the attention and pleasure neurotransmitter dopamine, as well as serotonin, a neurotransmitter that reduces fear and worry. People seem to be hard-wired to need other people. ^[22]

Edward M. Hallowell, a noted psychiatrist and author of *The Human Moment at Work* in the *Harvard Business Review* relates this story: A CEO in speaking about his business once said, "high tech requires high touch." He explained that every time his company made another part of its operations virtual—moving salespeople entirely into the field, for instance the company's culture suffered. So he had developed a policy that required all virtual teams to come into the office at least once a month for unstructured face time.

"It's like what happened when banks introduced ATMs," the CEO said. "Once people didn't know Alice behind the counter or any of the lending agents behind those glass walls...there was no familiarity, no trust." The CEO and Hallowell conclude that for a business to do well, you can't have tech, without contact—they have to work together. ^[23]

MOBILE WORKERS: SOCIAL BEINGS

As a parallel line of thought, the authors of *Distributed Work* note that communication is more than an exchange of data. Information exchange is indeed a key goal of communication, but by focusing exclusively on information, "we overlook the social processes that scaffold information exchange," as well as the context that frames it. Conducting interviews with people collaborating across organizational boundaries in 12 companies, workers talked about "the importance of shared bodily activities in facilitating social bonding and showing commitment: touching, eating and drinking together, engaging in mutually meaningful experiences in a common physical space, and 'showing up' in person." ^[24]

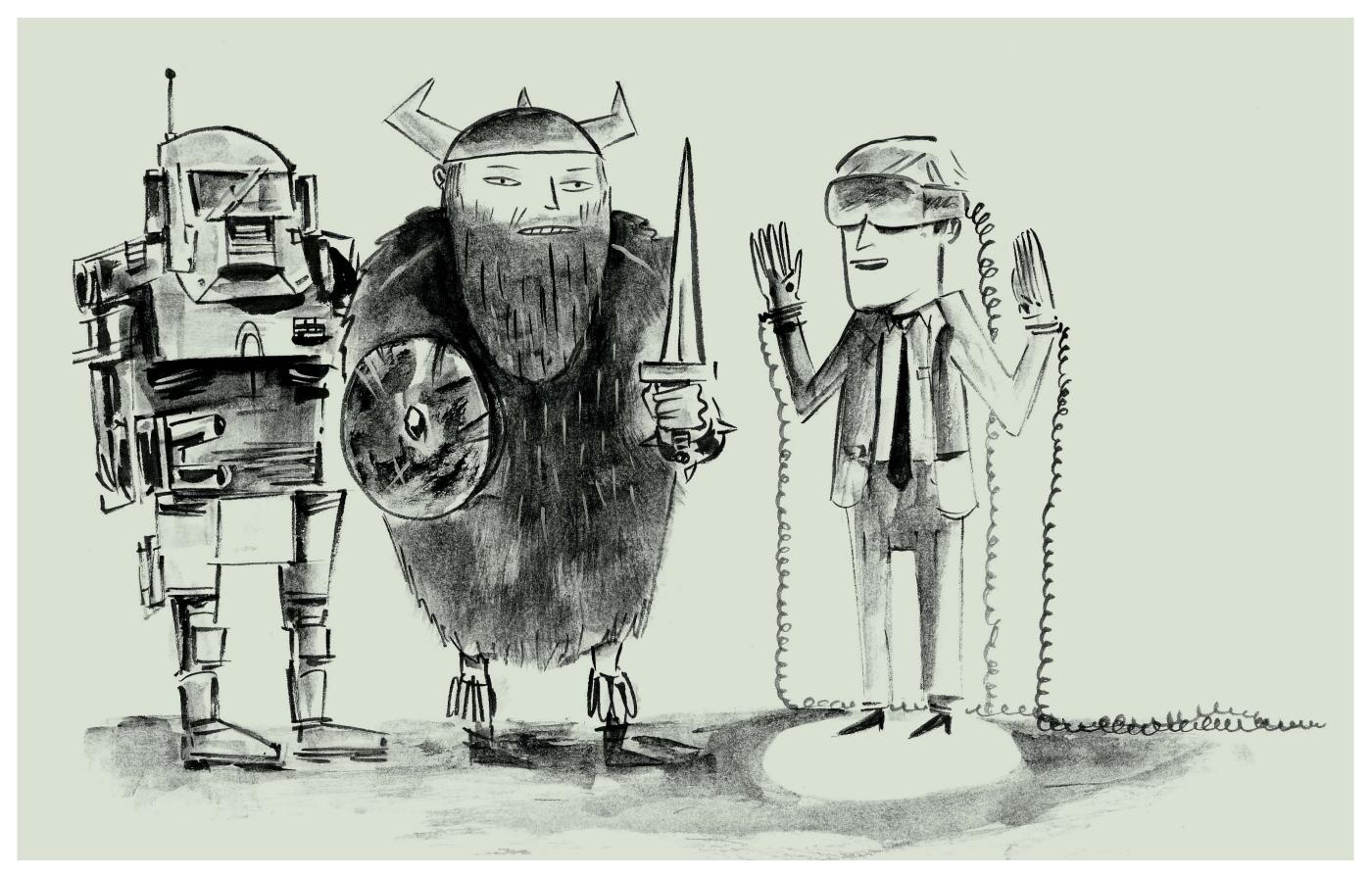
After all, what is more engaging? Watching a lecture on-screen or attending a lecture surrounded by people who respond to the speaker with laughter or comments? Perhaps making eye contact with the speaker? How does the physical proximity of the speaker affect the presentation? And how does talking with others over coffee afterwards enrich the experience and perhaps add something to the ideas presented?

Socializing is important as a foundation for collaboration, making a strong case for the office as a site of interaction. Not to be dismissed as inconsequential chats in the hall, socializing creates common bonds and a sense of collective identity and collegiality. In the office, people talk, laugh, listen, show, celebrate, mentor and establish the trust necessary for productive discussions, cocreating and sharing knowledge in order to reach a goal.

5.103

Avatars

"BLASTO" AND "FANDARR THE AMBITIOUS" ENABLED THE GLOBAL TEAM TO EFFECTIVELY COMMUNICATE IN A VIRTUAL REALITY WORK ENVIRONMENT.



SOCIALIZING IN VIRTUAL SPACE

Promoting a collegial culture and casual interaction is tough enough in physical space, and in virtual space, more difficult still. How does one replicate the random encounters that occur in the physical world?

Anne-Laure Fayard and John Weeks writing *Who Moved My Cube?* in the *Harvard Business Review* suggest translating the kind of engagement that occurs in the office to the virtual setting. "When virtual team members come to know one another beyond the confines of their job, the team is strengthened. Understanding this, Nokia...provided social networking tools and other online resources specifically to encourage employees to share photos and personal information, and created virtual "offices" that were open 24/7." ^[25]

IDEO is a company that has grown from a handful of people to 500+ employees in eight locations around the world. The experience of those involved in IDEO's two-year effort to create and implement "the Tube," an enterprise-wide intranet system for knowledge sharing, reinforces the importance of mirroring the company culture and social processes for collaboration or "information exchange." "The unique success of the Tube comes from the insight that

5.106

5.107

effective knowledge sharing is a *social activity that is enabled by technology*, rather than a technological solution bolted onto an existing work culture."^[26] The Tube, according to IDEO's Chief Technology Officer, Doug Solomon, provides tools designed to allow individuals, teams and enterprise-wide groups to share information and collaborate, but "more importantly, these tools are needed to encourage natural communities of passion to emerge." The knowledge-sharing team realized that technology alone does not foster collaboration, and, in fact, can create nearly as many barriers to collaboration as it enables.

"Frictionless accessibility is key," say the authors of *Who Moved My Cube*? in the *Harvard Business Review*. "Our studies show that if connecting with a team member online requires more than one click, informal encounters won't happen." When you run into someone at the coffee machine in the office, it is natural to exchange pleasantries, which may lead to a more significant conversation. But it is difficult to replicate such spontaneous social behaviors in a virtual environment. At the same time, "When virtual-team members come to know one another beyond the confines of their job, the team is strengthened." ^[27]

5.108

New technologies, intelligently deployed, do help to create "communities of passion" at sophisticated companies like IDEO. Still, there's almost no way to recreate the kind of interactions that occur among people gathered in a lunchroom or copy room. Again, quoting *Who Moved My Cube?*, "People gathered around [the copy machine] might discover in the documents coming off the machine, the write-up of a colleague's project that's relevant to their own work"...and a rich discussion might ensue.

In the knowledge economy, the office serves not as a place to house the equipment, documents and people necessary for work to take place, but rather as a site for facilitating the flow of information between and among people, a place where workers create formal and informal networks and build a sense of community and reciprocity that underpins collective action.

For modern knowledge and creative workers, the office holds the potential to be a richly diverse community of practice, a center of excellence, a crucible of innovation.



MODELS CLICK

As part of my research, I investigated the workplace strategies of five very different organizations—all respected industry leaders, driven by technology and requiring a high level of creativity to succeed in their field. And yet, all design and utilize the office in a unique way; incorporating mobile technology to a greater or lesser degree to achieve their goals of productivity and innovation. Each has created a unique mix of technology, people, design and fresh business models to achieve greatness.

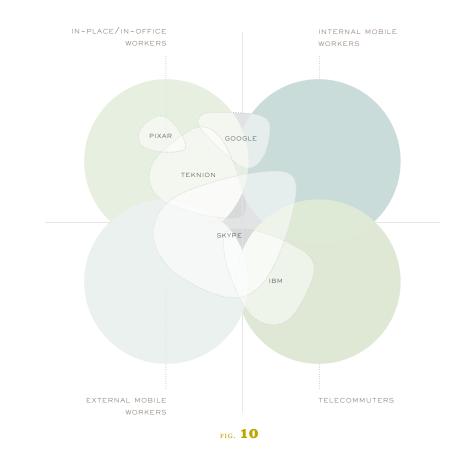
6.112

6.113

IN THE FIELD: THE WAY WE REALLY WORK

For this paper, several companies were visited, including many in the Bay Area—the epicenter of technological innovation and, one might assume, of companies defined by a mobile workforce. However, it quickly became clear that each company had its own approach to the potential for mobility. Vanguard companies like Pixar and Google, for example, do not encourage telecommuting, but rather make every effort to bring employees to the workplace—and keep them there. IBM on the other hand encourages telework and has put in place strong programs to support those who choose to work off-site.





PIXAR: IN PLACE, INTERNALLY MOBILE

A hugely successful animated film studio, Pixar's accomplishments are extraordinary: 26 Academy Awards, seven Golden Globes and three Grammy Awards. Not to mention the fact that its films have grossed over \$6.3 billion worldwide with Toy Story 3 earning the distinction of highest grossing animated film of all time. The studio's hits also include A Bug's Life, Ratatouille, Cars, Monsters, Inc, Finding Nemo and Up, the first animated and 3D film to open the Cannes Film Festival.

A hotbed of creativity and collaboration, Pixar houses its employees in several buildings parceled out over a campus in Emeryville, across the Bay Bridge from San Francisco. There are numerous small meeting spaces in each building, but also one enormous central hall in the main building where all paths are likely to intersect. Every employee has access to a lap pool, basketball and volleyball courts, a soccer pitch, wellness center and a very popular cereal bar dispensing Cocoa Puffs and Frosted Flakes 24 hours a day.



Con Ceiling

m

CRET AMUSEMENT

6.116

Anthony Lane, writing for *The New Yorker*, describes one of Pixar's newest buildings—designated "Brooklyn"—as a "calm concoction of brick and reclaimed wood" equipped with a rooftop camera "which gazes westward, allowing the weary to sit downstairs and watch the changing weather over the Golden Gate Bridge. Hardier souls, meanwhile, will ascend to the open-air deck on the top floor, take a drink from the bar, and survey their domain." His description begins to give you an idea of the Pixar lifestyle. ^[28]

To employ a cliché, Pixar employees are exceptionally talented people who work hard and play hard in an atmosphere of intense communal creativity. Expectations are high. Yet, there's a sense of fun. There is little or no telecommuting. Mobility occurs primarily within the campus as people circulate with laptops, tablets and cellphones. Given the extraordinary success of its animated films, Pixar's workplace strategy is working very well.

GOOGLE: INTERNAL MOBILITY

With assets of more than \$58 billion and a global employee roster of around 10,000, it's hard to believe that Google has been in business a mere 15 years. Yet, this smart start-up by two Stanford computer science grads is one of the most admired companies in the world, receiving over 1,000 resumes a day from engineers and other hopeful Googlers. More importantly, Google has become a part of the social fabric and the verb, to "Google," is an active part of our vocabulary. For many, Google is where we begin any Internet journey.

How does a company that has surfed a technology-infused wave to the heights of success work? Does this forward-thinking organization exist primarily in the digital dimension? Not at all. 6.119

The Googleplex is almost a self-contained city, or perhaps a university, where interaction is encouraged and "office flow" keeps the engines of invention humming. Any visitor to Google's global headquarters in Mountain View, California, steps onto a campus where workers pedal from building to building on bicycles provided by the company. It is a highly team-oriented, collegial environment and the on-campus perks are enviable. In fact, Google goes far beyond most companies to get people to and from the office.

Lunch and dinner are free—and the company's chefs are reported to be excellent. Google employees can get a massage, swim laps and relieve tension at the volleyball court. There's also an on-site car wash, bike repair, laundry, hair stylist and free medical check-ups. But most telling about the company's approach to workforce mobility—or more specifically, telework—is a shuttle bus system that transports Google employees to and from work.

Google "ferries about 1,200 employees to and from work daily—nearly one-fourth of its local workforce—aboard 32 shuttle buses equipped with leather seats and wireless Internet access." Workers can bring bicycles and dogs. The buses are free. And they run on bio-diesel, thus earning the company and its riders "green" credits for using eco-friendly fuel and "ditching their cars." ^[29]

Shuttles pick up commuters as far away as Concord and as far south as Santa Cruz, running more than 100 trips every day to approximately 40 pick-up and drop-off locations in the East Bay, San Francisco and the South Bay. Google seems to have built an unparalleled transit network to make sure that its employees come to the Googleplex rather than work remotely from an apartment in San Francisco or Oakland.

Having arrived at the Googleplex, workers are highly mobile internally in a remarkably appealing and lively environment. Shared spaces are the center of Google life. People interact in team meetings, break rooms and the office café at lunch or dinner, sitting at any table with an empty seat and conversing with Googlers from other teams—or indeed the CEO. As Google's web site says, everyone "should feel comfortable sharing ideas and opinions." This contained, yet open environment, has made Google the undisputed leader in Internet searches, cloud computing and digital advertising.

6.121

SKYPE: IN-PLACE, INTERNAL MOBILITY, EXTERNAL MOBILITY "Skype me." Founded in 2003, the European company Skype has added another new proper noun/verb hybrid to our vocabulary. Recently acquired by Microsoft for \$8.5 billion, Skype software allows users to make voice and video calls, or chat, over the Internet.

Given the company's software, one might expect that here would be a company of teleworkers collaborating in real time with others around the world. As Skype's web site promises, "With Skype, you can share a story, celebrate a birthday, learn a language, hold a meeting, work with colleagues – just about anything you need to do together every day." However, while electronic communication is certainly frequent, most workers at the Palo Alto site (Skype is based in Luxembourg and has major offices in London and Stockholm) do come in to the office to work. Relaxed, open and spacious, Skype's office is designed with lots of exposed piping, concrete and plywood. People sit at open workbenches and meet in spaces furnished with bright red chairs, low tables and whiteboards. There are also touchdown areas for teleworkers, media stations designed for small groups and a cozy lounge for quiet time.

One of the more unique features is the extensive use of whiteboards hanging from pegs that allow workers to take the boards down and move them around—a low-tech solution to sharing ideas that is working very well at Skype.

Skype's flexible workplace strategy—a combination of in-place and internally and externally mobile workers—together with its democratic work culture provides an excellent context for the integration of new ideas and new processes that lead to innovation.

IBM: IN-PLACE, EXTERNAL MOBILITY, TELEWORK

IBM is a typical big, multi-national company we all know—or is it? A \$65 billion corporation, IBM is among the 20 largest in the United States, the top 10 most profitable and recently celebrated its centennial anniversary. For 100 years, the IT and business consulting company has worked to "make the world work better," developing innovative systems, servers and software that have changed how people work and live—do you remember going to the bank before ATMs, an IBM innovation?

IBM's innovation extends to how it organizes and supports its employees. Big Blue was one of the first corporations to provide group life insurance (1934), survivor benefit (1935) and paid vacations (1937). Today, IBM offers employees the chance to design their own workday to meet both the demands of clients and of family. This "traditional" company has instituted major telework programs across the organization to reduce employee commuting, heighten morale and improve retention rates.

IBM employs about 6,000 people in the Greater Toronto Area and has two main facilities, the IBM Software Lab in Markham and the smaller downtown Wellington Street offices on the third floor of the TD Waterhouse Tower. There are approximately 2,500 workstations and 1,200 of those are used on a daily basis. Almost no one has a private office and a large number of people—managers included—work remotely for at least two days a week.

In order to coordinate a huge network of teleworkers, IBM employs a Rapid Reserve System that employees use to reserve a desk or group meeting space. The system can be accessed from a computer or phone. While managing so many remote workers has its challenges, the rewards are significant. By sharing desks and allowing employees to work from home, IBM reduced its Toronto office space by 40% and energy use at its offices has plummeted. So have the costs of air conditioning, heating and lighting.

Describing IBM's recently renovated downtown office in the *Toronto Star*: "Shared desks, stayat-home workers, space at a premium: welcome to Toronto's new alternative offices. With commercial real estate prices still high and sustainability a hot topic, some brave (or crazy, perhaps) companies are turning their workplaces upside down in a bid to shrink their square footage—and their carbon footprint." ^[30]

Published in 2010, the article goes on to quote Jim Brodie, manager of IBM's "workplace-ondemand" program. Brodie works from his own home and goes into the office only for meetings. "Young talent expects to work this way. Old folks want to 'retire' to the cottage and work from there."

Upon arriving at the IBM office, employees can go to a touch-screen kiosk to pull up a map of the office, see which desks are open for booking and where coworkers have logged in. Inside, the sleek white desks are arranged in pinwheels and divided only by low panels and cupboards for temporarily storing coats, umbrellas and other items. The space is light, airy and open—an appropriate representation of the company culture.

Globally, IBM has reduced its office space by 78 million square feet since 1995; 40% of its 386,000 employees do not have a traditional office and thousands more work outside the office part of the time (figures are as of 2009). "Work is no longer where you are, but what you do." ^[31]

The different forms that mobility takes among these four companies—all highly successful, all with a technology-based business—indicates that there is no one way or best way for a company to incorporate mobility or adopt practices like telework.



RECONNECTED LET'S

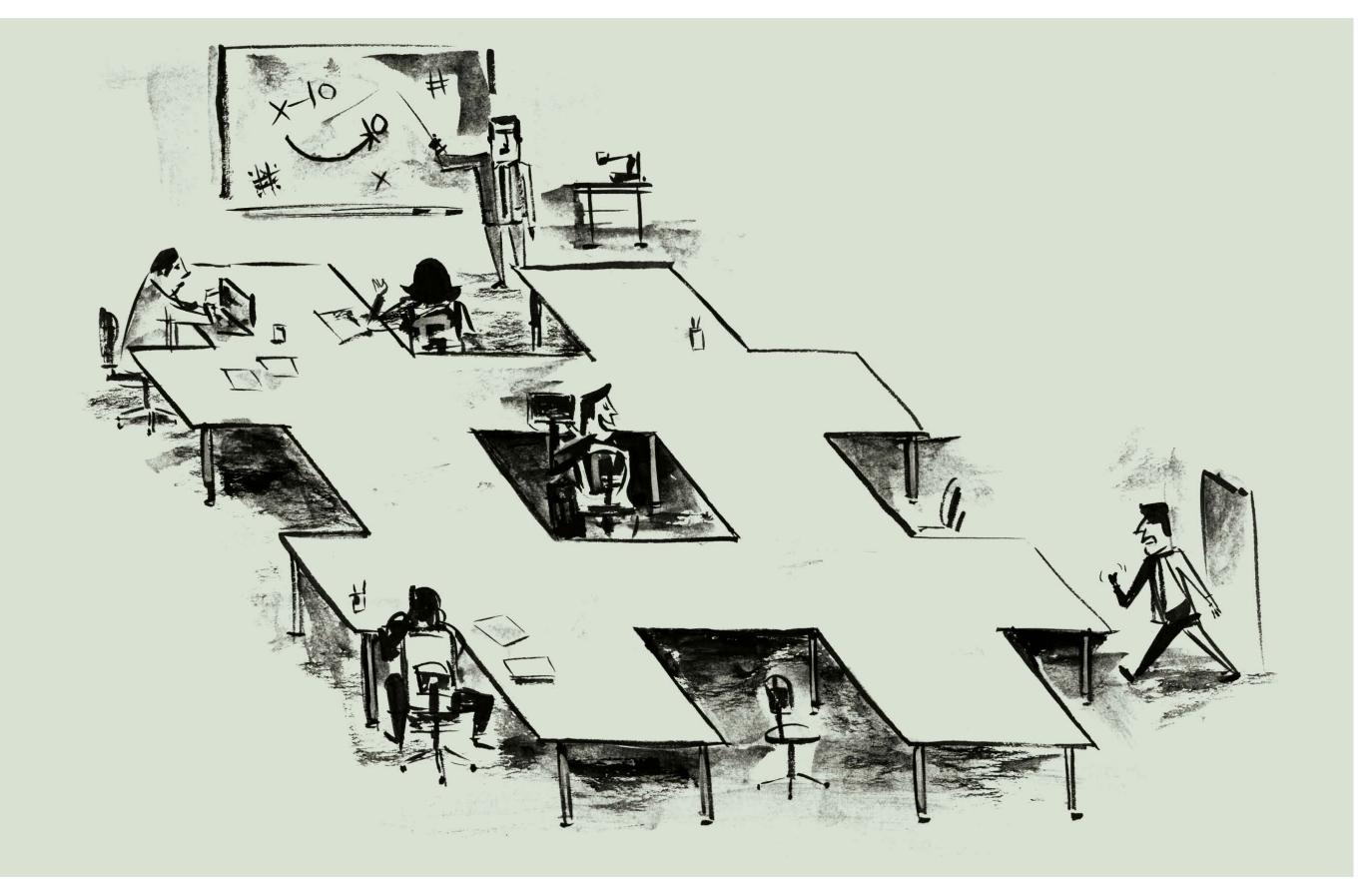
Building a mobile workforce can be a strong competitive advantage, as well as providing economic, ecological and humanistic benefits. At the same time, my research indicates that the office is not going away in the near future—if Pixar and Google are any indication. Of course, one would hardly call the Pixar "fun factory" a traditional office (working at Pixar is almost synonymous with lifestyle); nonetheless, it does reveal the satisfaction that people can find working together in one place.

7.129

The emergence of collective or coworking spaces may be testament to the human desire for social contact.

Tic Tac D'oh

JOHNSON'S NEMESIS ONCE AGAIN STAKED THE COVETED CENTER POSITION AT THE STRATEGY MEETING.



COLLECTIVE WORK SPACES

Recently, a collective office space—irreverently called Grind—opened its doors in New York's Union Square high-tech hub. As reported by Teressa Ierezzi in *Fast Company*, the impetus behind Grind is the likelihood that, "by choice or not, a growing number of people will find themselves working outside of the traditional, full-time template..." where work is about commuting to and sitting in a central office. Ty Montague, one of Grind's cofounders (as well as a cofounder of the Co: Collective creative consultancy) says it is "designed to actively facilitate the leap from corporate life by offering not only a place to work but a community of like-minded people who can share advice and, sometimes, skills." ^[32]

And Grind isn't the only coworking space out there. Deskwanted.com, a web site dedicated to coworking spaces, shared workspaces and meeting spaces, lists more than 15,000 desks in shared workspaces around the globe—including one in my own city, Toronto, known as the Marketcrashers Hackernest. This shared office is fully furnished, available 24/7 and self-described as a "social, open-concept affordable space...to convene, collaborate and create." And in San Francisco, Next Space provides a physical and virtual infrastructure for a "collaborative community for freelancers, entrepreneurs and creative class professionals." And such cross-sector workspaces are popping up in cities across the U.S. Is this the best of both worlds? ^[33]

A recently introduced app, LiquidSpace, is designed to locate oases of connected space—high-end business centers, coworking spaces and even conference rooms and settings appropriate for VC pitches. Additionally, the app has a scheduling system for office owners looking to rent space to potential business partners. Yes, there's an app for that.

BACK HOME AT THE OFFICE

We find ourselves at an interesting juncture in which human beings and their technologies are more inter-connected, more "intimate," than ever before. Thanks to mobile devices, "un-tethered" workers are now capable of accessing and sharing ideas and information however dis-connected they may be in time and space. Yet, we are also learning that, given the right context, teams who work in close physical proximity enjoy an intellectual intimacy that sets off sparks and brings forth information. This is an interesting dichotomy. Knowledge workers are capable of working alone and enjoying the benefits of fewer interruptions and distractions. Yet ideas take shape and become solutions as they move through an organization. What then, is the role of the office given the tools at our disposal and the nature of human creativity?

7.136

7.137

Certainly, there's no rush to eliminate the office. In fact, as we discussed briefly above, the central workplace clearly retains its relevance within the eco-system of an organization.

In a hyper-connected world, people "show up" primarily for meetings, face-to-face teamwork and serendipitous collaboration—and the most effective spaces seem to be those that create proximity and eliminate barriers to communication, while also providing sufficient privacy to dispel anxiety about being overheard or interrupted.

The office space must also convey permission for casual conversations to occur—and so must company culture.

7.139

Managers can potentially sabotage collaboration by transmitting disapproval to employees lingering in a break room or lounge area. And such potentially collaborative spaces may carry a stigma if not designed to permit work, as well as random encounters.

The office retains its importance as a space where leaders can walk around and get a feel for what's going on, pick up cues about who's talking to whom and who is not, or drop in on meetings to listen, contribute or motivate. In the office, coaching can happen by chance in the hallway, leaders have an opportunity to inspire people gathered together in one room and proximity can create a feeling of connection simply because executives are having lunch in the same room as a recent hire, the sort of thing that does happen at companies like Google.

It is a "hub" for staff and clients, vendors, partners and other business associates that reflects the philosophy and personality of the organization—and helps to shape its culture. The Pixar campus is a great example. It says, "We're in the business of delivering entertainment. We're creative. We have fun."

The office can still be an important place to undertake concentrated work that may not be easy to pursue in a noisy coffee shop with people coming and going or the home office if there are children, pets and spouses underfoot. Not to mention the lack of a comfortable ergonomic chair, well-designed table, lighting and immediate access to a copier, or other equipment and supplies. Of course, the open office has its own share of noise, distractions and disruptions, but when thoughtfully designed will also include quiet rooms, enclaves or other provisions for concentrated work.

It is also important to remember that the office is a symbol, a brand expression that conveys the unique brand message to everyone who interacts with the space. For now, the office is not likely to go the way of the phonebooth or the mailbox.

7.142

7.143

We can exchange lots of data without ever being in another's presence, but it's still nice to know that the people on your team aren't just sources of information, they're comrades and allies.





MAPS THE GEOGRAPHY OF WORK

ЧҮ ОГ ЖОРК

Cheap, fast and reliable communication permits such phenomena as integrated national economies, multi-national corporations and, more prosaically perhaps, one's personal experience of events and places.

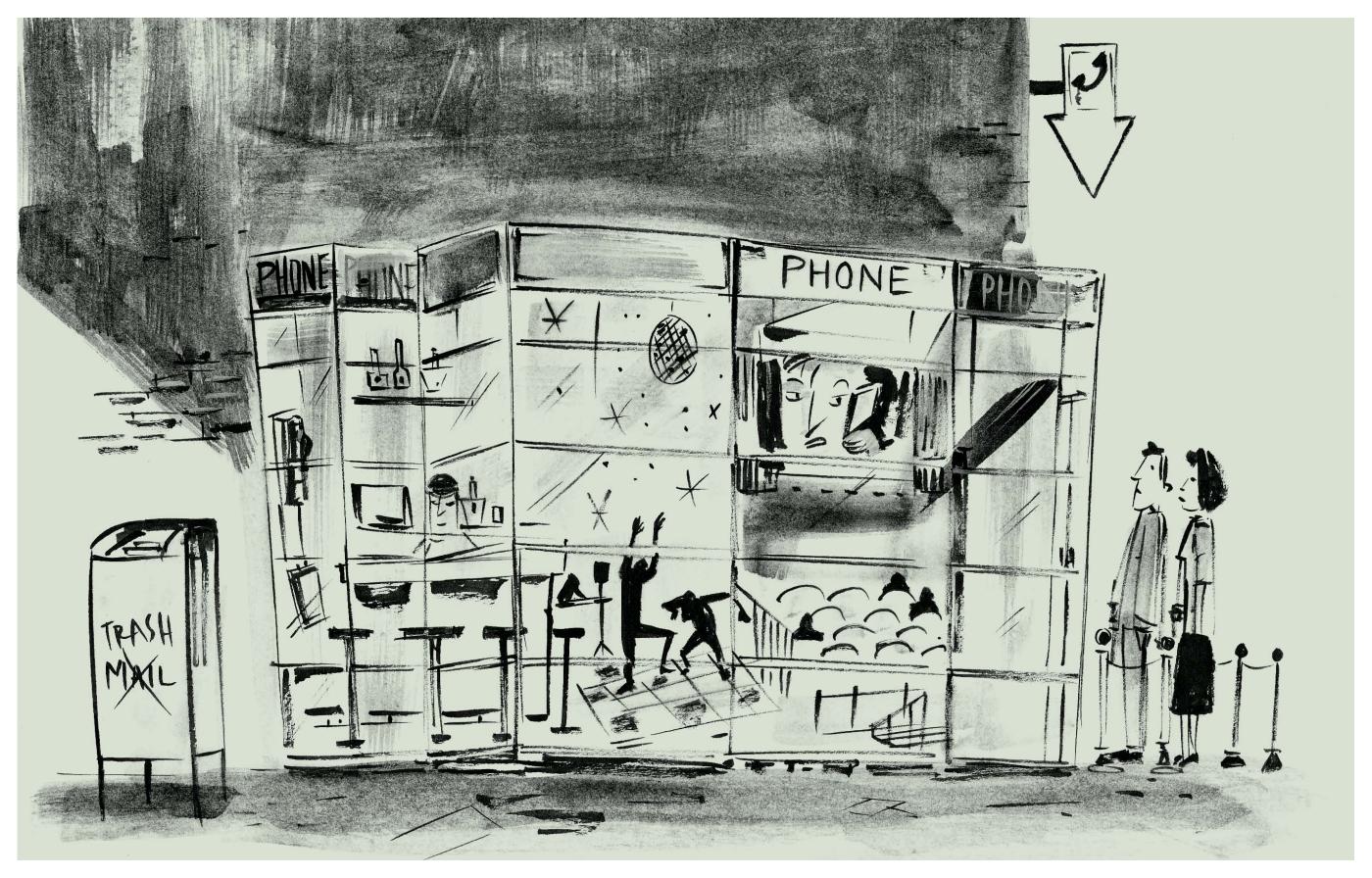
As a teenager leaving the house for a night out with my friends, my parents gave me a quarter in case I needed to make an emergency call or if I was going to be late. I knew the location of every public telephone in my town. I could have written a Fodor's guide on public phones—which were clean, which were busiest (always important to avoid telephone lineups— I promise, they really did exist), which were the most private and which ones were always broken or doubled as public toilets. I had to carry that map in my head. I had to stay connected to our friends and family. Today, I know where to find good Wi-Fi or at least an app that gives me this knowledge (thank you, free boingo app).

8.147

Technology and globalization (which is largely attributable to technology) have altered irrevocably the landscape of our lives and the way we "map" our world.

Tiny Footprint

EVENTUALLY THE TELEPHONE SIGN WOULD BE ALL THAT REMAINED OF THE ORIGINAL PHONEBOOTH, HAVING EXPANDED TO INCLUDE A COFFEE BAR, DISCO CLUB AND MOVIE THEATER.



The difference in the city landscape, the difference in my "mapping" behaviors and my store of knowledge is all due to mobile technology: my laptop and smartphone and whatever magical device comes next.

THE NEW OFFICE LANDSCAPE

These same tools have also changed organizational maps—the "geography" of a company's facilities and personnel. And technology has changed the map of the workplace itself. Office design today is about people and culture, rather than machines. It's about creating a place where people want to be, an environment that serves the reasons people come to the office: companionship, collaboration, community.

THE NEW DEMOGRAPHICS

The design of today's workplace must address, among other considerations, the variety of individual and group activities that take place within the frame of the office and the needs of people whose work allows or requires different levels of mobility. As I briefly mentioned earlier in the paper, we can identify four main groups of workers who require some type of accommodation in the physical office space.

P

Fixed-Focus/ In-Office Workers:

These resident workers spend all or most of their time working at a designated desk in an enclosed or open workspace within a central or satellite office building. They may use mobile technology—a laptop, tablet or smartphone—while at their desk and to carry along when summoned to a meeting or when traveling to a client's premises.



Unmasked

SEEING FREDDIE UNCHANGED BEFORE THE IN-OFFICE WORKERS MEETING MADE KAREN RELAX ABOUT NOT HAVING TIME TO CHANGE OUT OF HER GYM SHOES.

8.158



THE ADDITION OF THE VE WORKER RANDY'S SPACE HIS WORK-LIFE BALANCE F THE VENN DIAGRAM RUG IN IN-OFFICE S SPACE HELPED HIM FEEL MORE IN CONTROL OF



In-Motion/ On-site Workers:

These internally mobile workers come to an office building or corporate campus to work, but may or may not have an assigned desk. Rather, each person may be issued a laptop and a locker for personal items and work at various sites within the office—shared workspaces, casual collaborative spaces and private quiet rooms are all possible sites for work.

In-motion/on-site workers include not only corporate employees who are frequently in motion, but also those who work in a hospital, warehouse, plant or retail store, moving from location to location throughout the day—for example, nurses, IT technicians, plant superintendents and facility managers.



The Edge







Status Symbol

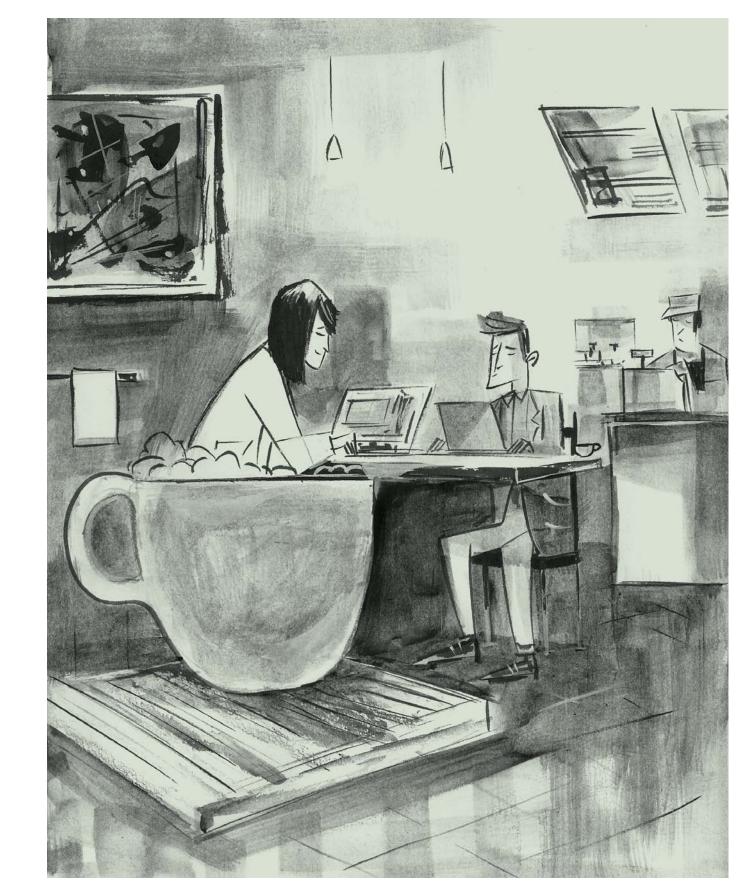
IN-MOTION WORKER DEVON MADE A SPLASH WITH HIS SPORT-UTILITY-SIZED CELLPHONE DESPITE HIS CHIROPRACTOR'S ADVICE.

8.169

P

Externally Mobile Workers:

These "road warriors" tend to be in constant motion, working the majority of the time in different locations and relying on technology to stay connected to "base camp," as well as support from the IT department within the enterprise. Externally mobile workers include consultants, sales representatives, specialists who provide services to various offices, or clients and executives who spend most of their time traveling.



Venti

EXTERNALLY MOBILE WORKER KAREN HAD THE Luxury of ordering a jacuzzi cappuccino before her teleconference.

8.174



More Than An Apron 8.177

0 S 5 N OPPORTUNITY TO ENGAGE KERS WITH THEIR TACTICAL RECREATION

Distance Workers:

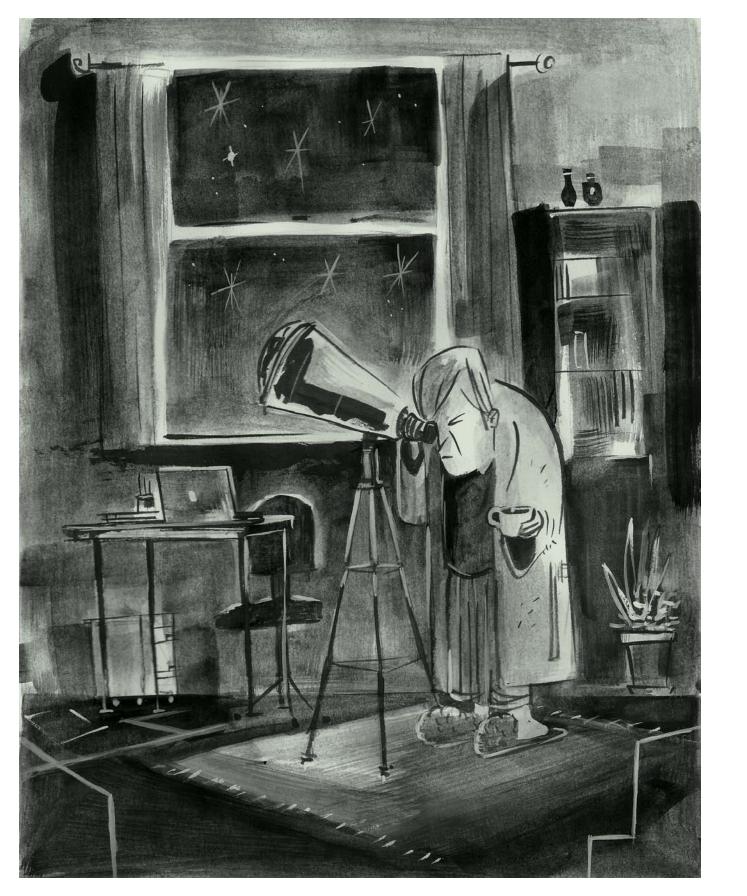
Although distance workers perform their work outside a central physical building such as a corporate headquarters or regional office, they work primarily in one place such as a home office. They may be employees or contractors who do visit the central office from time to time to meet face-to-face with colleagues or participate in team meetings. Distance workers are also referred to as telecommuters, area workers and dial-in workers.



The Conference

THE TIME HAD COME FOR DISTANCE WORKER MIKE TO MEDIATE A SESSION BETWEEN COWORKERS CAT AND CACTUS.

8.182



All-nighter

DISTANCE WORKER DARRYL LIKED TO GAZE AT THE SATELLITE OFFICE DURING HIS COFFEE BREAK.

8.185

What will the office that accommodates these workers look like? There is no one answer. Finding the right path, or drawing up the right map for your company, requires thinking beyond the physical possibilities of a building. You have to assess your organization and your people, creating physical and virtual spaces that mirror the culture you have or aspire to become. One has to assess the tools and spaces that people need to accomplish their work and also feel good about how and where they spend their working hours.

It is well to remind ourselves that technology-enabled workers can work anywhere—and that successful companies must have a workplace strategy that is compelling enough to attract the best talent and keep it. And because workers are first of all people, that will include enhancing the possibilities to connect whether the connection is accomplished in cafes and lounges as at Pixar or via technology-mediated connections as at IBM.

8.187

So, of every solution we propose, we must ask, "does it serve our human needs and purposes?"



AND

As I have discussed, technology is just the "ante to get in the mobile workforce game."

9.190

9.191

As David Clemons and Michael Kroth learned in writing *Managing the Mobile Workforce* and interviewing 39 leaders, "The online devices your employees are using right now...are the least important factor for your organizational and competitive mobile workforce success. Sooner or later everyone can get the same devices you are using. *More* valuable will be the applications you are using. *Most* critical will be whether or not you have created a work environment that attracts, motivates, trains, enables and retains the talent you need to stay ahead of the competition and meet your goals." ^[33] I couldn't agree more.



Design of the workplace must offer physical, social and psychological support for:

01

FIXED FOCUS/IN-OFFICE WORKERS

- Setting Assigned offices and workstations open or enclosed equipped with computer, monitors, storage
- CPU or laptop/docking station
- Day spent facing computer screen
- Dress Business casual to formal
- Gear Gym bag
- Demographic Any

02

IN-MOTION/ON-SITE WORKERS

- Setting Open workbench, formal meeting rooms, casual collaborative spaces, cafeteria within office
- Laptop/docking station, smartphone, tablet
- Day spent on focused tasks, team meetings, casual collaboration in various sites across the office landscape
- Dress Business casual to formal
- Gear Briefcase, laptop case, gym bag
- Demographic Gen X or Y

03

EXTERNALLY MOBILE WORKERS

- Setting Coffee shop, airport lounge, hotel, client site, satellite office
- Laptop, smartphone, tablet, Bluetooth, phone chargers
- 90% of time out of office, true corporate nomad
- Dress Casual to business casual
- Gear Messenger bag, cases for electronics, passport
- Demographic Gen X

04

DISTANCE WORKERS

- Setting "Home office" island at home, coffee table at home
- Laptop, smartphone, tablet
- 50% of time at home; 50% at office
- Dress Bathrobe to casual
- Gear None required (no commute)
- Demographic Any

Design for the future of work.

The premise of our design solution is that the workplace is evolving and will continue to evolve along with technology, culture and the world's economies. Although no one can say with certainty what form the workplace of the future will take (who, 20 years ago, could have imagined the mobility of today's corporate nomads?), we can say that work now occurs whenever and wherever people want to work. Time and distance barriers are eliminated. Thus, the traditional boundaries of the office have become permeable and the model of the workplace has been deconstructed into a dynamic, flexible and freeform paradigm. The concept of "going to work" has been redefined.

As a parallel, we can consider the form of pre-industrial cities characterized by a central square or plaza where markets, civic buildings and the like create a hub for community life, with outlying areas designated for specialized functions or production. Our concept of the contemporary workplace also assumes that arrival, gathering, eating and group activities occur at a nucleus and are directly tied to information gathering and other work modes that may occur in adjacent spaces or surrounding "neighborhoods."

As work becomes more diffused and, as individual workers we become more virtual and "on demand," the physical workplace will evolve to accommodate new conditions and needs—and magical new technologies that supersede the mobile tools and wireless communication already in place. Architects and designers will be pressed to deliver dynamic solutions that can be adjusted through the reconfiguration of furniture or architecturally augmented with screens and modular and mobile elements that create an office envelope able to adapt readily, if not infinitely, to the demands of the future.

Our vision for the workplace, regardless of industry, is to continue to exploit technology, mitigate hierarchy and support nomadic and collaborative work styles that allow the creative human spirit to prevail. Thus, the solutions offered here propose a mix of settings, a variety of open and enclosed spaces within the frame of the office architecture. Although we present layouts that illustrate the formal entity that has been the legacy of the corporate world, we will "walk through" and describe in detail only the plans relevant to our research into the future of work.

Ultimately, the goal is to create an engaging and adaptable workplace, one that fosters a lively, collegiate culture and delivers a superior level of innovation. Perhaps ideally, a place where people forget they are "at work," and simply experience a rewarding creative, intellectual and social life.

TRADITIONAL WORKSTYLE

WORKSPACE TYPES

- OI Focus room (I-2 people)
- 02 Team meeting room (4 people)
- оз Legacy meeting room (6-16 people)
- 04 Huddle room (4-6 people)
- 05 Open alcove meeting space (4-6 people)
- oe Training room (20 people)
- 07 Work bistro/cafe
- os Open/closed project room
- o9 Juicing station (technical or touchdown station)
- 10 Lounge/gaming area
- 11 Concierge station
- 12 Technology bar or "technology bar"

- из Pantry (bistro/cafe area)
- 14 Workstation (1 and an occasional drop by)
- 15 Quiet/library (1-3 people)
- 16 Lockers (bistro/cafe area)

.....

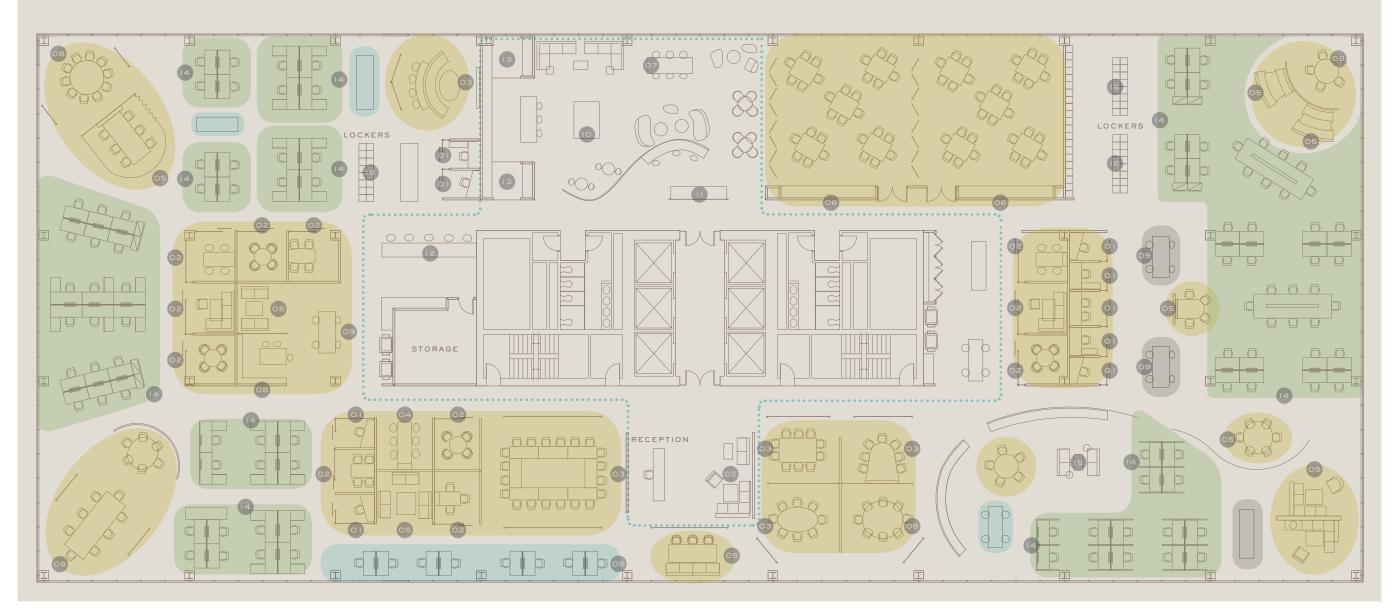
KEY

• General office support space: reception, conceirge, cafe, lounge/gaming area, technology bar "Technology Bar," short term work/recharge, "juicing station," storage, printing, copy and supply spaces

• Open office workstations

• Workstation support areas: "kit of parts," meeting, storage, printing area, easily reconfigured for user group

• Conferencing spaces: small/large informal and formal



NON-TRADITIONAL WORKSTYLE

WORKSPACE TYPES

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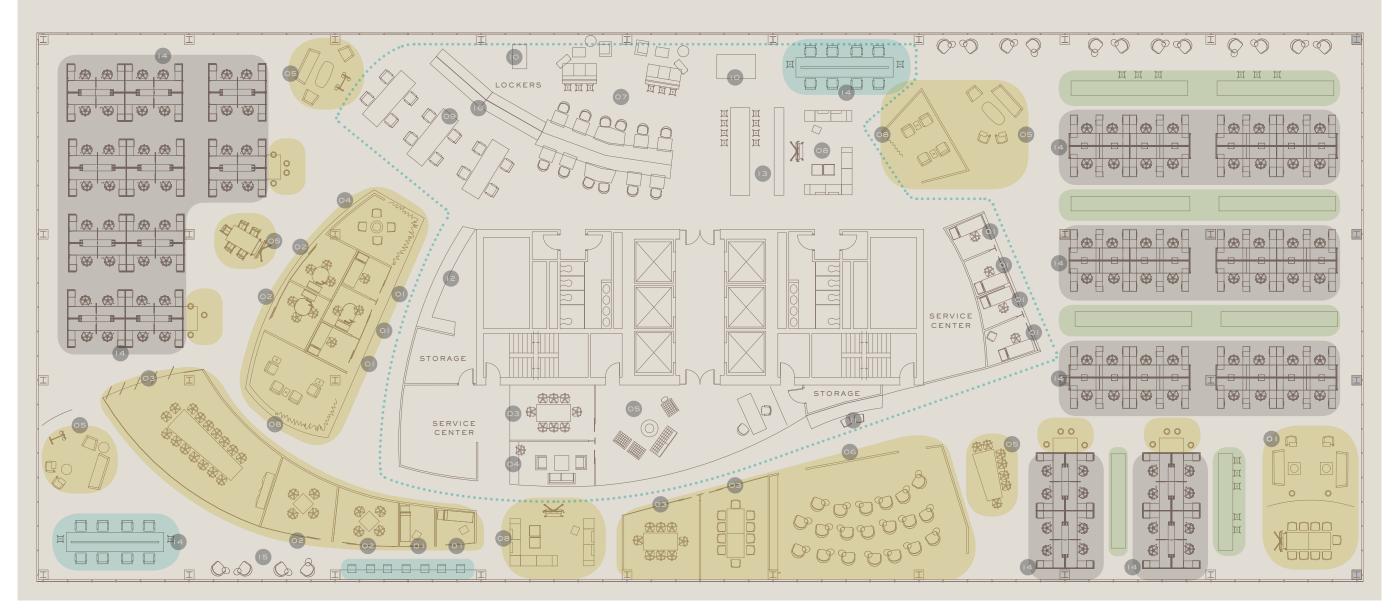
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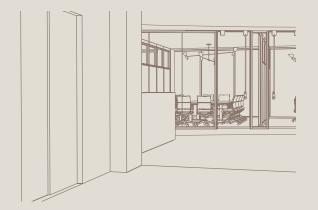


FIXED FOCUS/IN-OFFICE WORKER:

NON-TRADITIONAL WORKSTYLE

DAVID WRIGHT, A FIXED-FOCUS OFFICE WORKER, also known as a resident worker, "owns" a designated workstation where he spends about six hours a day four or five days a week. However, the fixed-focus worker's ownership may be temporary, as many companies now require relocation at intervals in order to encourage interaction with a broader sampling of co-workers than might be the case should each individual remain at one workstation for an extended period of time.





9:05am

Senior Copywriter, David Wright, arrives at the office—slightly damp—from a bike commute in a light rain.



9:06am

First stop is the pantry for donuts and coffee. Over a second cup, Wright chats with Susan Spry, a junior writer, tossing around taglines for her new project.

PANTRY

An semi-enclosed drop-by space designed to provide a comfortable, casual setting where occupancy ebbs and flows throughout the day. The pantry functions as gathering space with a welcoming feel that is similar to that of a residential kitchen, drawing people in to talk, relax, refresh and re-invigorate.

PURPOSE

Although occupants often remain standing while visiting the pantry, stools or footrests may be provided along a counter. The pantry is also outfitted with a variety of storage cabinets and perhaps open shelves for storing cups, plates, utensils, paper supplies and food and beverage items.



9:30am

Wright settles into his workstation. Checks e-mail on the desktop monitor, deletes twenty-four junk e-mails, answers two, checks iPhone for texts, sets a voice reminder to talk to Tim, plugs in his ear buds, pulls up a file and goes to work.

WORKSTATION

An open or semi-enclosed space that is "inhabited" by an individual and where that person is expected to be present or to return to. The workstation is a familiar, comfortable "home" where one resides while pursuing focused tasks at work, and may be supplied with casual seating for guests.

PURPOSE

A designated workstation or cluster may be based on a panel system, desking system, open worktable or a combination of freestanding furniture and perhaps mobile elements such as privacy screens or pedestals. Panels and screens define space and establish a sense of place. The workstation provides access to electrics, networks, clouds and other shared resources.



12:00pm

Lunch! Wright heads for the Bistro/Café, iPhone in hand to check the surf report, Facebook and project deadlines. Shares lunch with Len from IT, another bicycle enthusiast.

WORK BISTRO/CAFÉ

An open, communal gathering space with a 'buzz' for all. Ideally, the office café is open for business at all hours of the day, acting as a sort of Grand Central Station cum coffee shop or late-night diner that is visited by employees at all levels, as well as clients and workers from distant offices.

PURPOSE

The purpose of the office café is not only the convenience of on-site beverages and comestibles, but also to encourage gatherings, collisions and taking a moment to get away from one's desk and decompress. Thus, the café provides a variety of seating types and configurations to create micro-settings for working, socializing and relaxing.



1:00pm

Back at his desk, Wright researches the new client on the Web, calls the Creative Director, IMs his girlfriend and reads the company blog and Twitters. Hammers out a few lines of copy.

WORKSTATION

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3:00pm

Quick game of ping-pong with Steve, a junior account exec, who bats a few copy ideas, as well as balls over the net.

LOUNGE/GAMING AREA

An open space primarily designed for relaxation and recreation. The "funplex" offers a way to enhance camaraderie among staff and discharge physical and mental tension that accrues over long hours of work.

PURPOSE

The lounge/gaming area may be furnished with comfortable sofas and chairs, as well as ping-pong, foosball and pool tables, large-screen displays and other low and hightech equipment.



3:30pm

Meeting with Creative Director and Account Manager at the alcove to discuss Monday's pitch. Wright makes notes on his iPad to share with team.

ALCOVE MEETING AREA

An informal, lounge meeting space for 4-10 people. Designed to inspire interaction, the Alcove Meeting Area is a partially open space that allows passersby to contribute ideas and allows meeting participants to gather adjacent opinion. This lounge space is a magnet for people and ideas, promoting cross-disciplinary creativity.

PURPOSE

Design and furniture for Alcove Meeting Areas are varied and may include sofas, lounge chairs, benches, a variety of tables, whiteboards and "club talk."



4:30pm

At his workstation, one of the designers stops by to show Wright new layouts; Tim stops by to comment on the pitch strategy; Susan stops by with new copy. Wright crafts a perfect three-word headline.

6:00pm

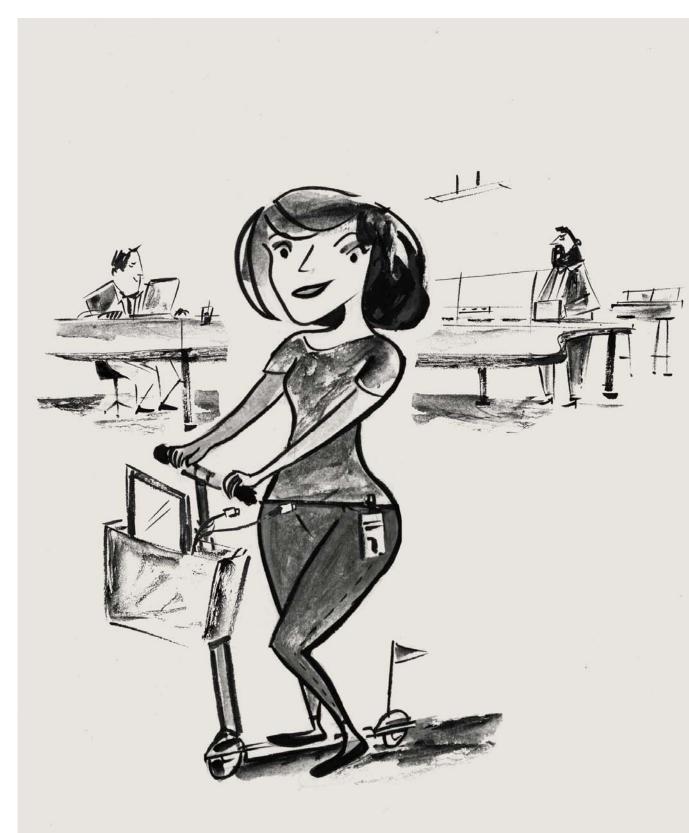
Head for home. Arrive soaking wet from the bike ride. Greets cat and cactus.

WORKSTATION

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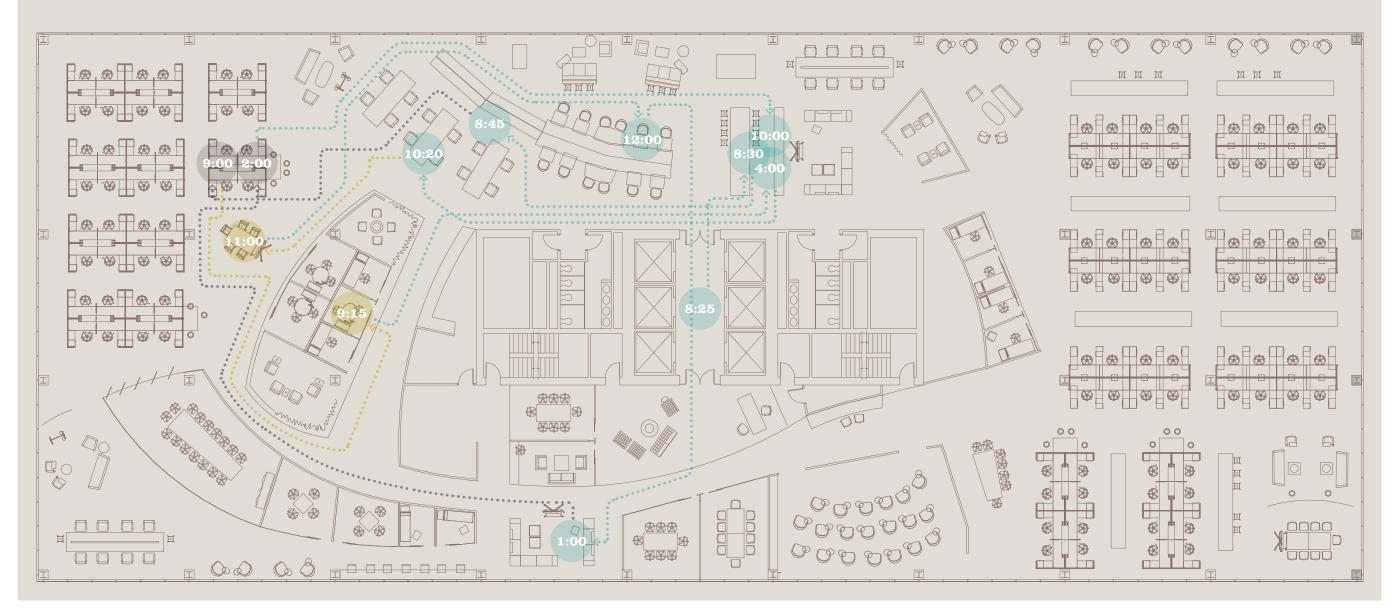
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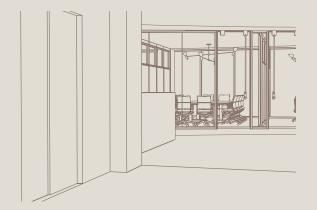


IN-MOTION/ON-SITE WORKER:

NON-TRADITIONAL WORKSTYLE

JILL KAUSHIK, COMPUTER SUPPORT TECHNICIAN, exemplifies the mobility typical of an employee whose tasks require moving between distinct locations according to the demands of the moment. The workday of the in-motion, on-site worker is characterized by interactions with those who actively seek her expertise and by chance meetings that may serendipitously result in the exchange of ideas unrelated to her usual work. Jill gathers information from those she needs to talk to in order to get her work done, and from those she runs into unexpectedly during the course of her workday.





8:25am

Jill Kaushik, Computer Support Technician, steps off the elevator with cheerful Christy Brown, chatting blithely about writing a business plan for a start-up she plans to sell to Google.



8:30am

Jill stashes her paper bag lunch in the pantry fridge, helps herself to pastry and coffee.

PANTRY

A semi-enclosed drop-by space designed to provide a comfortable, casual setting where occupancy ebbs and flows throughout the day. The pantry functions as gathering space with a welcoming feel that is similar to that of a residential kitchen, drawing people in to talk, relax, refresh and re-invigorate.

PURPOSE

Although occupants often remain standing while visiting the pantry, stools or footrests may be provided along a counter. The pantry is also outfitted with a variety of storage cabinets and perhaps open shelves for storing cups, plates, utensils, paper supplies and food and beverage items.



8:45am

Collide with System Administrator in the hallway. Reminds Jill to set up the telepresence system for the big meeting today. "Totally on it."

LOCKERS

A feature of the contemporary workplace that derives from the advent of remote workers who now and then arrive at the office and need a place to store their "stuff," as well as internally mobile employees who work anywhere and everywhere and also require a secure place to check in and check out their gear. Designated lockers offer place to store coats, jackets, bike footwear and other items needed for the commute.

PURPOSE

Lockers are most likely to exist as an architectural feature of built-in cupboards with doors that can be secured by a locking system. Low stools or benches can be placed adjacent to the lockers to offer a convenient seat.



9:00am

Jill sets up workstation for the day, logs in and checks for service tickets. Not too backed up so far. Quickly scans Google job site.

WORKSTATION

An open or semi-enclosed space that is "inhabited" by an individual and where that person is expected to be present or to return. The workstation is a familiar, comfortable "home" where one resides while pursuing focused tasks at work, and may be supplied with casual seating for guests.

PURPOSE

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9:15am

Meeting in focus room with IT team. Discuss overlap of Tech Support and Technology Bar tasks. Discuss LMS, CRM and CDN. Discuss Liz Lemon's predicament on the latest 30 Rock.

FOCUS ROOM

An enclosed, intimate space designed for a single person engaged in concentrated work. Offering privacy and quiet away from the hustle and bustle of the community, the Focus Room may be used on a scheduled or unscheduled basis to do heads-down work, make private calls or participate in a conference call and perhaps conduct a brief, two-person chat.

PURPOSE

The "plug and play" Focus Room is supplied with a worksurface and comfortable task seating. Low-level ambient lighting is augmented with a task light for reading or working on a laptop. Glazed fronts provide a degree of "veiled" privacy.



10:00am

Back to pantry for espresso shot. Help new freelancer with his phone at the pantry bar. Smiles. Says, "cool digs here."

PANTRY

A semi-enclosed drop-by space designed to provide a comfortable, casual setting where occupancy ebbs and flows throughout the day. The pantry functions as gathering space with a welcoming feel that is similar to that of a residential kitchen, drawing people in to talk, relax, refresh and re-invigorate.

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10:20am

Answer "urgent!" call from freelance designer at a touchdown station. Jill quickly solves a problem accessing image files.

"JUICING" STATION

An open, accessible space for use by staff, visitors and clients on a scheduled or unscheduled basis. Designed primarily as a place to "juice up" laptops, mobile phones, tablets and other tools, the Juicing Station also becomes a place for unexpected collisions, casual work and refreshment of mind and spirit.

PURPOSE

A variety of options are possible depending upon the space available. At a minimum, a counter-height table(s) and stools should be supplied.



11:00am

Informal gathering of the design team is underway in open meeting area. Team flags down Jill to ask about new monitors.



12:00pm

Lunch in café. Ramen noodles today. Talk web analytics with Jason. Talk old South Park episodes with Jody.

ALCOVE MEETING AREA

An informal, lounge meeting space for 4-10 people. Designed to inspire interaction, the Alcove Meeting Area is a partially open space that allows passersby to contribute ideas and allows meeting participants to gather adjacent opinions. This lounge space is a magnet for people and ideas, promoting cross-disciplinary creativity.

PURPOSE

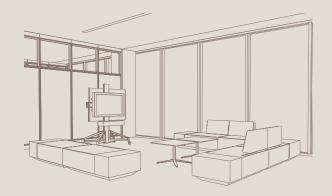
Design and furniture for Alcove Meeting Areas are varied and may include sofas, lounge chairs, benches, a variety of tables, whiteboards and "club talk."

WORK BISTRO/CAFÉ

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PURPOSE

The purpose of the office café is not only the convenience of on-site beverages and comestibles, but also to encourage gatherings, collisions and taking a moment to get away from one's desk and decompress. Thus, the café provides a variety of seating types and configurations to create micro-settings for working, socializing and relaxing.



1:00pm

Jill sets up A/V system in the project room. Creative Director pops in. Shows Jill new analytics app on his mobile. Awesome.

PROJECT ROOM

An open, enclosed or partially enclosed room for 1-12 people. The Project Room is most often reserved for project teams who are in the process of working on a project or as a show-and-tell space for the team to highlight the progress of project development, as well as outcomes and achievements.

PURPOSE

Designed for collaborating, presenting and displaying, flexible furniture solutions and "plug and play" support are mandatory for the Project Room.



2:00pm

Back at workstation, Jill cleans up a list of e-mails and zips off report to System Administrator. Gazes out window. Thinks...this is cool digs.

WORKSTATION

An open or semi-enclosed space that is "inhabited" by an individual and where that person is expected to be present or to return to. The workstation is a familiar, comfortable "home" where one resides while pursuing focused tasks at work, and may be supplied with casual seating for guests.

PURPOSE

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4:00pm

Last minute meeting of IT team in the pantry. Discuss new CMS (content management system). Long meeting. Team pops a few micro-brews. Watch account team leave at 5.

PANTRY

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PURPOSE

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6:05pm

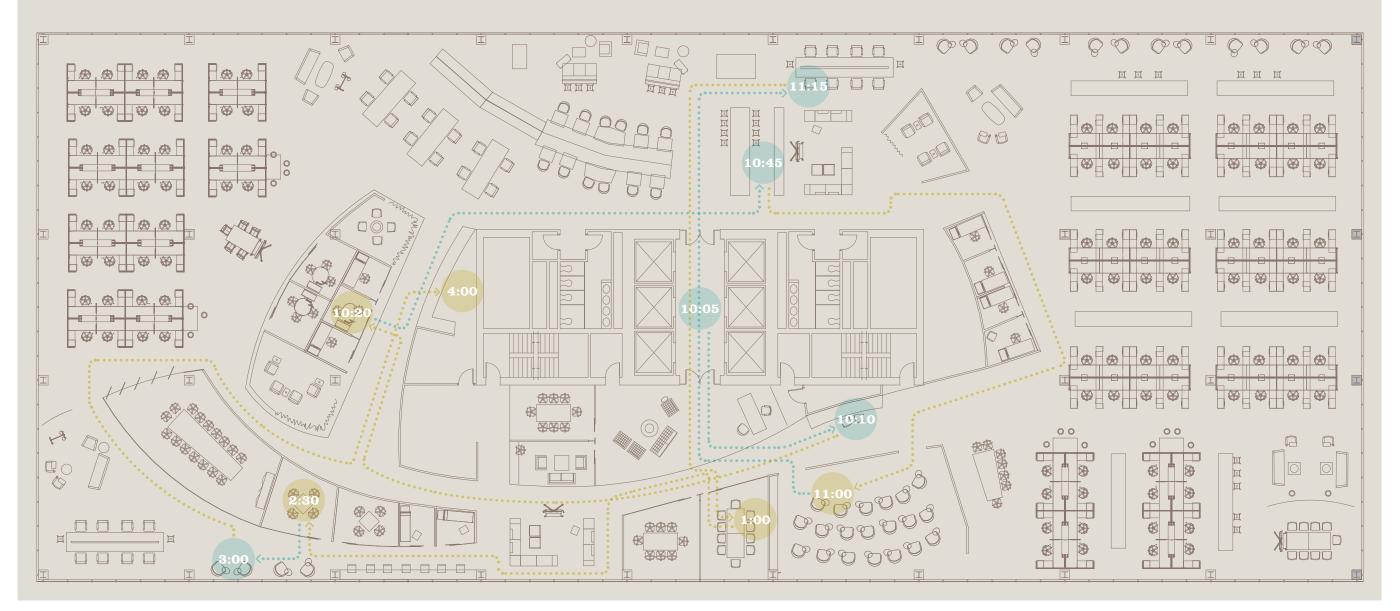
Run out the door to make the soccer game on time.

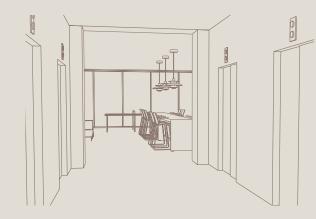


EXTERNALLY MOBILE WORKER:

NON-TRADITIONAL WORKSTYLE

GEORGE DALY IS A CLASSIC ROAD WARRIOR, always on the go and almost always attached to a mobile device. Like George, the externally mobile worker may visit clients and potential clients on a regional or a global basis, depending on the reach of his organization. He may touch base at headquarters or a satellite office one or two days each week, working on-site a few hours each day. Mobile tools—phone, laptop and tablet—are essential to his travels while spending time at client premises for valuable "face time."





10:05am

George Daly, Account Executive, arrives after breakfast with potential client. Every meal is a meeting.



10:10am

Checks in with the Concierge to let everyone know that George is on the premises today.



10:20an

Confers with Advertising Manager in the Focus Room to sketch out campaign budget. Mindy from Accounting sticks her head in. First-class ticket issue is resolved.

CONCIERGE STATION

An open station placed in a central location to serve employees and visitors immediately upon arrival. The Concierge Station may be staffed 24-hours or provide selfservice options before and after regular office hours. The Concierge Station can provide visual orientation to the office and its personnel, as well as information and support for everything from calling a taxi, to finding an open 'flex seat' to reservations at the best restaurants.

PURPOSE

The Concierge Station can be built using systems furniture, freestanding furniture or classic wood casegoods, depending upon what is appropriate in terms of aesthetics and function for the specific office environment.

FOCUS ROOM

An enclosed, intimate space designed for a single person engaged in concentrated work. Offering privacy and quiet away from the hustle and bustle of the community, the Focus Room may be used on a scheduled or unscheduled basis to do heads-down work, make private calls or participate in a conference call and perhaps conduct a brief, two-person chat.

PURPOSE

The "plug and play" Focus Room is supplied with a worksurface and comfortable task seating. Low-level ambient lighting is augmented with a task light for reading or working on a laptop. Glazed fronts provide a degree of "veiled" privacy.





10:45am

Tea, not coffee, in the pantry. No donuts. Doctor's orders. Maybe half a donut.

PANTRY

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PURPOSE

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10:00am

Brief visit to the training room to hear Mike from IT walk staff through new timekeeping software... George makes mental note to do tutorial on the plane tomorrow.

TRAINING ROOM

A dynamic space that may be open, closed or semi-enclosed and capable of accommodating 20-30 people or more. Designed to support teaching, learning and community gatherings, the Training Room can be reserved for software training, summer intern orientation, vendor presentations, celebratory gatherings or social events.

PURPOSE

Options include worktables with task seating, forward facing amphitheatre-style seating or groups of mobile tables and chairs to provide maximum flexibility. The Training Room may also be fully loaded with tackable surfaces and whiteboards, electronic data capture and A/V equipment with interactive displays.



11:15am

Pulls up a stool at the touchdown station. Plugs in and checks his assistant's calendar updates. Pushes new meetings and conference calls to all devices. Reserves a table for dinner with new wine entrepreneur. Researches wine entrepreneur on the Web.

TOUCHDOWN STATION

The touchdown station is a shared-address space for those who spend a significant amount of time off-site, but also require a workspace when visiting the office. Designed to adapt to varying user needs, this station allows non-resident workers to make calls, connect to digital networks or engage in heads-down work.

PURPOSE

Touchdown stations can be built around a panel-based furniture system, a desking system or a worktable to provide a barrier-free worksurface for people engaged in diverse activities. Open worktables accommodate users based on the number of arrivals rather than structural boundaries. Mobile storage can be provided for frequent users.



1:00pm

Time for joint creative and account side meeting in the Legacy Meeting Room. Lively volley of ideas for Monday's pitch. Writer David Wright has light bulb moment. Creative Director likes it. Homerun.

LEGACY MEETING ROOM

An enclosed meeting space with dimensions and furniture suitable for 6-20 people. Designed for scheduled meetings, the Legacy Meeting Room is a bookable space for discussion, brainstorming and presentations. It may also be used as a private dining room.

PURPOSE

While a table surrounded by chairs is a common configuration, the Legacy Meeting Room can be designed with flexible seating arrangements, perhaps combining an area with lounge seating and one with task chairs pulled up to a table. Tackable/writeable surfaces and audio/visual equipment with interactive displays are also key elements of this space.



2:30pm

Drop-in on brainstorming session in a huddle room. Listen and learn.

HUDDLE ROOM

A small, enclosed meeting space for 2-4 people. Designed to support small groups engaged in an impromptu collaboration or a scheduled meeting, the Huddle Room is also ideal for sensitive or confidential discussions such as interviews or employee reviews.

PURPOSE

In addition to a simple table and chairs, the Huddle Room may be equipped with whiteboards and/or "club talk" to support face-to-face and virtual collaboration alike. Lounge seating with tablet arms or low-height tables is also an option. Glazed fronts can provide a degree of "veiled" privacy.



3:00pm

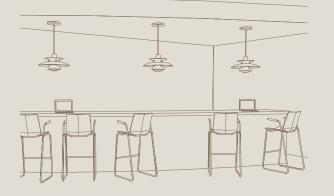
George makes a soft landing in a lounge chair. Makes notes on iPad, skims AdWeek and Vanity Fair, checks e-mail, IMs assistant about flights and hotels, reviews new proposal. Mulls it over. Picks it apart. Thinks.

LIBRARY

A space designed for individuals and small groups who seek a quiet environment with a minimum of noise and distraction. A somewhat symbolic feature given the accessibility of online research tools, the library continues to offer a respite from the activity of the office and a variety of useful resources such as magazines, books, product samples and records of past work.

PURPOSE

The library may be furnished with built-in or freestanding bookshelves, cabinets and files, plus "study" tables for focused work, sofas and lounge chairs for reading or talking in small groups and counters that offer a surface to place binders, papers or publications for quick review.



4:00pm

Chat with Kim, the tech wizard at the Technology Bar, about new apps and red wines. She seems to know everything about both. Ideas can come from anyone.

5:00pm

Off to the gym. Tomorrow, on the road again.

TECHNOLOGY BAR

An open, informal service center that addresses employee IT issues from supplying a replacement tablet or laptop to dealing with problems like, "my dog ate my cord." Staffed by expert technicians, the Technology Bar offers self-service or full-service solutions to equipment and communications problems encountered in the workplace.

PURPOSE

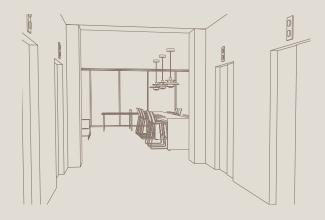
In general, the Technology Bar is furnished with bar-height seating arranged along a counter with plug & play capability.



NON-TRADITIONAL WORKSTYLE

BUDDY JOHNSON, GRAPHIC DESIGNER, WORKS AT HOME MOST DAYS, but comes into the office to attend meetings and collaborate with his creative team one or two days a week. His workstyle is driven by the nature of his work—engaging with co-workers to explore design concepts or focusing on the execution of those ideas at his computer. Office time is essential for building relationships and experiencing the stimulation of diverse points of view. Uninterrupted stretches of time at home are necessary to produce creative and thoughtful design solutions.





8:00am

Wrapped in his bathrobe, Buddy Johnson shuffles over to the computer. Checks e-mail to see if there are any pressing matters. Downloads Adobe update.

9:30am

Running late for status meeting in the office. Pack up laptop. Activate TiVO. Scramble for bus.

10:40am

Buddy arrives at office somewhat disheveled. Frantically checks pockets for cell phone. Where the...? There!





10:45am

Checks pantry for donuts. Nothing but crumbs.

PANTRY

A semi-enclosed drop-by space designed to provide a comfortable, casual setting where occupancy ebbs and flows throughout the day. The pantry functions as gathering space with a welcoming feel that is similar to that of a residential kitchen, drawing people in to talk, relax, refresh and re-invigorate.

PURPOSE

Although occupants often remain standing while visiting the pantry, stools or footrests may be provided along a counter. The pantry is also outfitted with a variety of storage cabinets and perhaps open shelves for storing cups, plates, utensils, paper supplies and food and beverage items.

10:50am

Check in with Concierge to book a workstation. Cell phone pings. Text from Justin. Wants to compare notes after meeting. Phone almost out of juice. Can't work without Pandora.

CONCIERGE STATION

An open station placed in a central location to serve employees and visitors immediately upon arrival. The Concierge Station may be staffed 24-hours or provide selfservice options before and after regular office hours. The Concierge Station can provide visual orientation to the office and its personnel, as well as information and support for everything from calling a taxi, to finding an open 'flex seat' to reservations at the best restaurants.

PURPOSE

The Concierge Station can be built using systems furniture, freestanding furniture or classic wood casegoods, depending upon what is appropriate in terms of aesthetics and function for the specific office environment.



11:00am

Drop jacket and bag at workstation. Open laptop. Enter secure PIN. Log into work e-mail and files. Text from Jack. Meeting pushed back to 11:15. Excellent.

11:05am

Buddy stops by Technology Bar to borrow phone charger. Chat with staff about Bump app.

WORKSTATION

An open or semi-enclosed space that can be booked or used on a non-permanent basis by an externally mobile worker when present in the office for training, meetings or consulting with team members. The workstation provides a comfortable place to "land" for a matter of hours or days.

FURNITURE

A workstation or cluster may be based on a panel system, desking system, open worktable or a combination of freestanding furniture and perhaps mobile elements such as privacy screens or pedestals. Casual seating accommodates associates who drop by to converse and collaborate. The workstation provides access to electrics, digital networks, clouds and other shared resources.

TECHNOLOGY BAR

An open, informal service center that addresses employee IT issues from supplying a replacement tablet or laptop to dealing with problems like, "my dog ate my cord." Staffed by expert technicians, the Technology Bar offers self-service or full-service solutions to equipment and communications problems encountered in the workplace.

PURPOSE

In general, the Technology Bar is furnished with bar-height seating arranged along a counter with plug & play capability.





11:15am

Status meeting with creative director, copywriter and Jack, the web designer. Client wants bigger Web presence. Share ideas for e-blast campaign. Chat in the hall with Justin.

HUDDLE ROOM

A small, enclosed meeting space for 2-4 people. Designed to support small groups engaged in an impromptu collaboration or a scheduled meeting, the Huddle Room is also ideal for sensitive or confidential discussions such as interviews or employee reviews.

PURPOSE

In addition to a simple table and chairs, the Huddle Room may be equipped with whiteboards and/or "club talk" to support face-to-face and virtual collaboration alike. Lounge seating with tablet arms or low-height tables is also an option. Glazed fronts can provide a degree of "veiled" privacy.

1:00pm

Lunch in the bistro/café. Check in-box, account team says client loves the PDFs but has some changes. Need by EOD tomorrow. Cancel evening plans.

WORK BISTRO/CAFÉ

An open, communal gathering space with a 'buzz' for all. Ideally, the office café is open for business at all hours of the day, acting as a sort of Grand Central Station cum coffee shop or late-night diner that is visited by employees at all levels, as well as clients and workers from distant offices.

PURPOSE

The purpose of the office café is not only the convenience of on-site beverages and comestibles, but also to encourage gatherings, collisions and taking a moment to get away from one's desk and decompress. Thus, the café provides a variety of seating types and configurations to create micro-settings for working, socializing and relaxing.



2:00pm

Training on new timekeeping software. Buddy takes this opportunity to glance at phone. Checks personal e-mail (36), Facebook, Twitter and bank balance.

3:00pm

Gather up stuff at workstation. Back home by 4:00. Time to get some work done.

TRAINING ROOM

A dynamic space that may be open, closed or semi-enclosed and capable of accommodating 20-30 people or more. Designed to support teaching, learning and community gatherings, the Training Room can be reserved for software training, summer intern orientation, vendor presentations, celebratory gatherings or social events.

PURPOSE

Options include worktables with task seating, forward facing amphitheatre-style seating or groups of mobile tables and chairs to provide maximum flexibility. The Training Room may also be fully loaded with tackable surfaces and whiteboards, electronic data capture and A/V equipment with interactive displays.

01 Brian X. Chen, Always On (De Capo Press, June 2011)

02 Status of Telework in the Federal Government, Report to the Congress,U.S. Office of Personnel Management (February 2011).

03 Leveraging Mobility, Managing Place, GSA Public Buildings Service (June 2010). White paper pdf at www.gsa.gov/graphics/pbs/Leveraging_ Mobility_508_compliant.pdf

04 Telework Coalition web site, www.telcoa.org/

05 Mark Dixon and Philip Ross, V*Work: Measuring the Benefits of Agility at Work,* Regus and Unwired (May 2011). www.unwiredeu.com

06 Stephen D. Drake, Justin Jaffe, Raymond Boggs, *IDC Market Analysis Report: Worldwide Mobile Worker Population 2009-2013 Forecast*, (Doc#221309) www.idc.com

O7 Lynda Gratton Investigates: The Future of Work, Business Strategy Review,Q3-2010. http://www.lyndagratton.com/

08 The Network, Cisco's Technology News Site, San Jose, California, June 25, 2009. http://newsroom.cisco.com/dlls/2009/prod_062609.html

09 Dawn Foster, *Cisco's Take on Telecommuting and Productivity*, GigaOM, June 26, 2009. http://gigaom.com/collaboration/ciscos-take-on-telecommuting-and-productivity/

10 Research: Telecommuting a Win-Win for Employees and Employers, Penn State, Smeal College of Business, University Park, PA (November 20, 2007). http://news.smeal.psu.edu/news-release-archives/2007/nov07/telecom.html

11 Telework Research Network, www.teleworkresearchnetwork.com

12 The Network, Cisco's Technology News Site, Cisco Study Finds Telecommuting Significantly Increases Employee Productivity, Work-Life Flexibility and Job Satisfaction, San Jose, CA, June 25, 2009. http://newsroom.cisco.com/ press-release-content?type=webcontent&articleId=5000107

13 Denise Duble, *Cisco Promotes Telecommuting*, *Network World*, *PC World*, June 28, 2009, http://www.pcworld.com/businesscenter/article/167503/ cisco_promotes_telecommuting.html

14 Janet Caldow, *Working Outside the Box, A Study in the Growing Momentum of Telework*, Institute for Electronic Government, IBM Corporation, January 21, 2009.

15 Kate Lister and Tom Harnish, *The State of Telework in the U.S.*, Telework Research Network, June 2011. http://www.teleworkresearchnetwork.com/cut-oil

16 "Telework Under the Microscope," a joint study by the Telework Exchange and the National Science Foundation, March 2008. www.nsf.gov/http://www. nsf.gov/news/news_summ.jsp?cntn_id=111252&org=NSF&from=news

17 The Network, Cisco's Technology News Site, Cisco Study Finds Telecommuting Significantly Increases Employee Productivity, Work-Life Flexibility and Job Satisfaction, San Jose, CA, June 25, 2009. http://newsroom.cisco.com/ press-release-content?type=webcontent&articleId=5000107

18 Charles Handy, *Trust and the Virtual Organization*, *Harvard Business Review*, June 2000.

19 Anthony F. Buono and Kenneth W. Kerber, *Leadership Challenges in Global Virtual Teams*, SAM *Advanced Management Journal*, Vol. 69, 2004.

20 Karen Sobel Lojeski and Richard R. Reilly, *Uniting the Virtual Workforce: Transforming Leadership and Innovation in the Globally Integrated Enterprise*, Microsoft Executive Leadership Series, April 2008.

21 John W. Rowe, M.D. and Robert L. Kahn, Ph.D., *Successful Aging*, Random House, 1998. **22** Penelope Trunk Blog, *Advice at the Intersection of Work and Life*. http:// blog.penelopetrunk.com/2006/12/26/productivity-tip-face-to-face-contactenergizes-your-brain/

23 Edward M. Hallowell, *The Human Moment at Work*, *Harvard Business Review*, January 1999.

24 Pamela J. Hinds and Sara Kiesler, editors, *Distributed Work*, MIT Press, 2002.

25 Anne-Laure Fayard and John Weeks, *Who Moved My Cube?*, *Harvard Business Review*, July-August 2011.

26 Doug Solomon, Chief Technology Officer, IDEO, *The Tube: IDEO Builds a Collaboration System That Inspires through Passion*, Management Innovation Exchange, April 11, 2010. www.managementexchange.com

27 Anne-Laure Fayard and John Weeks, *Who Moved My Cube?*, *Harvard Business Review*, July-August 2011.

28 Anthony Lane, *The Fun Factory, Life at Pixar, The New Yorker,* May 16, 2011.

29 Miguel Helft, *Google's Buses Help Its Workers Beat the Rush, The New York Times,* March 10, 2007.

30 Sarah Barnak, Goodbye Office, Hello Desk on Demand, Toronto Star, August 26, 2010.

31 Janet Caldow, *Working Outside the Box: the Growing Momentum in Telework*, 2009 Institute for Electronic Government, IBM.

32 Teressa Iezzi, *Co: Collective Founders Launch Coworking Space "Grind" in Heart of NYC Startup Scene, Fast Company,* September 2011.

33 David Clemons and Michael Kroth, Ph.D., *Managing the Mobile Workforce: Leading, Building and Sustaining Virtual Teams,* McGraw Hill, 2011

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01 Milton Public Library, 2nd fl laptop lounge, Milton, Ontario, Canada

- Buxton Hotel, London, England, UK
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- Union Square Park, San Francisco, California, USA
- Star Alliance Lounge, Terminal 1, Dallas / Fort Worth International Airport, Texas, USA
- Milton Sports Centre, Milton, Ontario, Canada
- Borders Books, Topanga, California, USA
- **10** Los Angeles Public Library, Sherman Oaks, California, USA
- **11** Virgin America Lounge, San Francisco, California, USA

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in the US: 350 Fellowship Road Mt. Laurel, New Jersey 08054 USA Tel 877.TEKNION Tel 877.835.6466 Fax 856.552.5088

in Canada: 1150 Flint Road Toronto, Ontario M3J 2J5 Canada Tel 866.TEKNION Tel 866.835.6466 Fax 416.661.4586

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