



REVOLUTIONIZING THE WORKPLACE: A CASE STUDY OF THE FUTURE OF WORK PROGRAM AT CAPITAL ONE

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Today's workplace designs are being revolutionized due to the changing nature of work and worker profiles, the impact of technology, and the need for organizational efficiency and flexibility. Our case study of the Future of Work (FOW) program at Capital One highlights how thoughtful segmentation of work styles, supportive HR policy, customized workplace design, and the optimal use of technology can enhance knowledge work. FOW results show clear success in terms of increased employee satisfaction leading to improved organizational performance along with better real estate asset utilization and flexibility. To assist HR leaders and planners, we suggest a practical model that shows the impact of workplace design requirements on employee behavior and ultimately on organizational outcomes. © 2008 Wiley Periodicals, Inc.

Workplace design continues to change dramatically as we have moved from the industrial worker of the 1800s to the blue-collar worker of the 1900s to the knowledge worker of the twenty-first century. In recent decades in the United States, traditional office settings were predominant until the early 1960s and moved in the late 1960s toward open plans for the sake of more flexibility, democracy, and economy. By the late 1970s, however, researchers and companies realized that the move from traditional to open-plan offices had an adverse effect on employees' work concentration, satisfaction, and motivation (Oldham &

Brass, 1979; Zalesny & Farace, 1987). Thus, in the 1980s, companies began moving from densely populated open-plan offices to either low-density open plans or to partitioned, cubicle environments. This significantly improved the privacy of work and communication, reduced crowding, and increased employee satisfaction (Oldham, 1988). Companies such as Xerox and Hewlett-Packard used three-foot partitions to bring back some separation of workers; National Gypsum reported its movable wall sales doubled in 1984 (Smith, 1985).

Today's workplace design also aims to encourage teamwork and provide flexibility to help people do their jobs more effectively.

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Pressures on corporations that require a revolution in workplace design include the changing nature of work, demographics, technology advancement, and the cost pressure and need for flexibility essential to survive in a highly competitive global environment.

The walls are coming down again, and companies are embracing new openness in their designs (Brennan, Chug, & Kline, 2002). A combination “cave and commons” environment is gaining popularity and providing individuals control over private work and conversation areas, while also promoting teamwork and flexibility in the larger communal team space (O’Hamilton, Baker, & Vlastic, 1996). Companies now talk about “work anywhere, anytime” programs to leverage technology tools (laptops, BlackBerries, wireless networks, etc.) to get work and the worker together.

We begin this article with a brief overview of factors creating the need to revolutionize today’s workplace and provide some examples of companies leading the way. Then we present a case study of Capital One’s workplace design innovations in its Future of Work (FOW) program, identifying program goals, key components, and outcomes. Finally, we offer a summary model that links workplace design to the behavior of the knowledge worker and to changes in organizational outcomes. Based on the model and case study, we make suggestions to HR and business leaders about their own workplace design choices.

Factors Driving Today’s Workplace Design

Pressures on corporations that require a revolution in workplace design include the changing nature of work, demographics, technology advancement, and the cost pressure and need for flexibility essential to survive in a highly competitive global environment.

The rise of knowledge work as a dominant activity in our economy has driven the development, coalescence, and emergence of a new class of workers—those who produce and apply information and knowledge—

known as knowledge workers, or the creative class. In 2002, such workers made up more than 30% of the U.S. workforce (Florida, 2002), and the number continues to steadily increase. This new demographic requires appropriate work environments to attract knowledge workers and keep them satisfied in their jobs (Brill, 1992; Brill, Weidemann, Olsen, & Keable, 2001). The workplace must now support concentrated thinking while enabling collaboration. Neither the long corridors of private offices nor the simple open plans of the past can meet these needs.

Other worker demographics are changing as dramatically as the kind of work being done. The U.S. Bureau of Labor statistics estimates that over the next few years, the number of people in the workforce 55 and older will grow by an annual rate of 4%, four times faster than the growth expected for the entire workforce (Croasmun, 2004). An older workforce creates pressure to design a more ergonomic workplace and allow for more part-time work. Also, the increasing gender, racial, and cultural diversity of the workforce requires workplace designs that accommodate different needs. For example, the younger generation’s preferences and demands for work-life balance, an open management style, and distributed work delivery (courtesy of the Internet) impact workplace requirements (Ware & Grantham, 2003).

New computing and communications technologies significantly impact how people interact, conduct research, solve problems, and produce new knowledge. Along with globalization, these technologies have led to the disappearance of traditional boundaries of work related to geography and time. Flextime and flexplace programs are much more prevalent. Today’s work also increasingly demands that distributed teams complete complex tasks. Even with teams anchored in the same physical location, scheduling problems and the option to telecommute create new challenges. Hence, the value of mobile group technology for anytime, anyplace team support has increased (Nosek & Mandiviwalla, 1996).

Work is already being done in a greater range of locations and settings, and this

trend is expected to continue. In one recent survey, workers indicated that they would prefer to spend significantly more time working in home offices and third places such as a coffee shop or bookstore. Some forecast that work activities will eventually be distributed across central offices and remote locations each 40% of the time and to transient community locations 20% of the time (Ware & Grantham, 2003). Rapid changes in technology such as voice-over-Internet protocol (VOIP), proliferating wireless and real-time access to content, will enable this workplace evolution to continue.

While ensuring that critical workers have access to needed information and communication capabilities at all times and in all locations, successful organizations must simultaneously minimize workforce support costs for technology, facilities, compensation and benefits, travel, development, and management. Ware and Grantham (2003) contend that creative and integrated management of knowledge workers can reduce workforce support cost by 30% while substantially improving employee productivity.

Flexibility is another significant need of today's workforce and workplace. The future of work requires a workplace arrangement that gives organizations more agility, including the flexibility to expand and contract the workforce and all its support costs to meet dynamically changing needs in an increasingly volatile business environment.

Some Companies Leading the Way

Companies leading the workplace design revolution can reap the benefits of satisfied and engaged employees and increased organizational effectiveness (Ware & Grantham, 2003). Leaders include Hewlett-Packard, Procter & Gamble, Ernst & Young (O'Hamilton et al., 1996), MCI, Sun Microsystems (Verespej, 1996), IBM (IBM Investor Relations, 2006), AT&T, Best Buy (Conlin, 2006), and Capital One (as indicated by the results of the current case study). Some of these leaders start the change by redesigning the physical workplace, while others focus more on HR policies. Among the former, MCI sales

offices promote collaboration by building hearths, which are family-room-like settings with meeting tables, fireplaces, and television monitors, along with whiteboards and modular configurable furniture. Sun Microsystems saves \$300 million a year in real estate costs by allowing nearly half of all employees to work anywhere they want. At IBM, 40% of the workforce has no official office, and at AT&T one-third of the managers are untethered (Conlin, 2006).

Best Buy's Results Oriented Work Environment (ROWE) illustrates an HR-led workplace redesign. In 2003, employee stress and high turnover—as high as 65% in some departments—were serious problems. The goal of ROWE was to decrease burnout and turnover rates while increasing productivity. Best Buy's approach flies in the face of decades-old business dogma that equates physical presence with productivity. Under the program, employees in selected departments could work wherever and whenever they chose as long as they got the job done. The program's popularity pulled other departments to convert to ROWE; the average voluntary turnover among males has dropped from 16% to near zero, and productivity has increased by 35% (turnover data was not reported for females). Some employees, however, have expressed resentment over the change, insisting that work relationships are better face to face, not screen to screen (Conlin, 2006).

In the next section we discuss Capital One's FOW program that successfully combined a workplace design and HR approach. The FOW program took an integrated approach that combines innovative practices and policies in workplace design, HR, and IT. The goal was to create a physical environment supported by HR policies and technologies that enabled employees to work when and where they will be most effective.

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The Future of Work at Capital One

Headquartered in McLean, Virginia, Capital One Financial Corporation is a diversified financial services company whose principal subsidiaries (Capital One Bank, Capital One, N.A., and Capital One Auto Finance) offer a broad spectrum of financial products and services to consumers, small businesses, and commercial customers. A Fortune 500 company and one of the top 15 banks in the United States, Capital One has more than 700 branch bank locations in New York, New Jersey, Connecticut, Texas, and Louisiana.

Capital One describes its culture as collaborative, team-oriented, and innovative, with work guided by two key values: Excellence and Do the Right Thing.

Capital One's Chairman and Chief Executive Officer Richard D. Fairbank founded Capital One in 1988 based on his belief that the power of information, technology, testing, and great people could be combined to bring highly customized financial products directly to consumers. Since then, Capital One has emerged as one of America's largest consumer franchises with more than 50 million customer accounts and one of the nation's most recognized brands.

Capital One describes its culture as collaborative, team-oriented, and innovative, with work guided by two key values: Excellence and Do the Right Thing. From our combined years of working directly and indirectly with Capital One, we do believe that employees take pride in thinking independently in a goal-oriented environment and have considerable direct ownership for executing their ideas and seeing them succeed. The company is regularly on *Fortune* magazine's list of the "100 Best Companies to Work For."

Capital One attributes much of its success to its information-based strategy in which new concepts are continuously developed and tested. The company is very data-driven in its decision making, and Davenport (2006) identifies Capital One as among the handful of leaders "competing on analytics . . . wring[ing] every last drop

of value from [its business] processes." The company reports conducting more than 30,000 "experiments" annually, with workplace design, information technology, product features, and other variables. Thus the "test and learn" environment is deeply rooted in the company's culture, and most Capital One employees are true knowledge workers.

The company is also a leader in information technology (IT). Capital One's IT department has been consistently recognized for its innovation and commitment to providing strategic solutions to the business. For example, for the tenth consecutive year, *InformationWeek* named Capital One as a Top 500 innovator in IT. Capital One's 2007 application for the award highlighted emerging technology and spotlighted the recent deployment of VOIP as a technology enabler for associates working in the FOW environment.

The FOW Program

Capital One's FOW program is about rethinking the way work is done. The program is designed to support the idea that new distributed work practices, technologies, and work settings, combined with extensive change management and education, can improve employee satisfaction and group performance while reducing costs. While many companies have adopted telework and alternative work arrangements as cost-saving real estate solutions, the guiding principle of the FOW program is that it should be seen as a win for Capital One employees. With this in mind, a percentage of the savings gained in real estate was reinvested into the technology that made the transition to FOW easier, such as wireless-capable laptops, BlackBerries, cell phones, and VOIP.

Although the majority of Capital One employees already sat in what would be considered world-class office space, FOW was designed to untether workers from the traditional, one-size-fits-all office environment. FOW is designed around how Capital One employees work best, not around the conventional theories of buildings or furniture.

FOW builds upon a set of existing HR policies that enable flexible working arrangements (such as flextime, telework, and part-time work), adds technology to enable mobility, and provides a workplace setting to match. The FOW workplace provides supportive and unique activity settings so employees can work flexibly across multiple settings on their campus to accommodate varied associate work styles and the broad range of work that they perform.

Unlike some distributed work programs that encourage and support work primarily from home or from third places (typically designed for sales or consulting functions), the FOW program is also designed to enable knowledge workers within the walls of Capital One. The program was not intended to push employees away from the office. In fact, the majority of employees still show up at the office each day, which is a key element that distinguishes FOW from alternative work arrangements at other companies. The key is providing employees the choice to work when and where they are most effective. Larry Ebert, former managing vice president of Capital One's Corporate Real Estate (CRE), described the program this way:

FOW challenges conventional wisdom. Convention says we must all work in the same place . . . a building with neatly organized work areas of offices, desks, cubicles, and conference rooms. Our challenge is deciding how advancements in technology and communication impact that belief. [FOW] is about rethinking the way we work. FOW will prove the theory that new distributed work practices, technologies, and work settings will improve associate satisfaction and group performance while reducing costs.

The keywords are customer-driven, voluntary, and flexibility. FOW is designed around discovering how we work best, not around the conventional theories of buildings or furniture. The major benefit is flexibility. Above all, FOW supports work when and where it

is most effective by enabling mobility through technology and then ultimately providing supportive and unique workplace atmospheres to reinforce that flexibility. Basically, FOW provides the technological tools and environment needed to work beyond a traditional office setting.

Designing FOW

Prior to FOW, Capital One built a first-class, multibuilding campus in West Creek, Richmond, Virginia. The campus, as designed, was already leading-edge, featuring state-of-the-art conferencing facilities and teleconference rooms, and modular furniture. It also had private offices in the darker central core of the building, while the bulk of the employees had desks near the perimeter with access to natural light. The workplace was designed not only with respect to real estate and assets, but also with employees' needs in mind.

The original space planning was based on a universal plan in which the usual elements of workplace design were standardized, with all workstations the same size and densification possible if necessary. All offices were based on a modular 12 ft × 12 ft grid and were provided only to senior managers. In addition, iconic conference rooms were used to create consistent visual landmarks in each of the buildings.

The development of FOW started in 2003, midway through the build-out of the new West Creek campus and the corporate headquarters tower in McLean, Virginia. The initial inspiration came from a study conducted to map the usage of various real estate components (primarily cubicles) by time of day. The data revealed significant underutilization of resources. More than 40% of the cubicles were vacant every day, and an additional 30% were unoccupied

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during the course of the day (see Figure 1). There was a clear opportunity to develop more efficient and effective workplace models, since cubicles per se were not serving the work style of the employees. Employees needed a rich diversity of workplace settings specifically designed for a variety of tasks, not a one-size-fits-all approach. This meant shrinking individual space, making the environment more open, increasing the area for team collaboration, and providing tools to support mobility.

A FOW team with representatives from HR, CRE, and IT worked hard over the next year to design a comprehensive program. This collaborative approach was a key factor in the program's success. The idea that emerged was to divide the workforce into work-style segments and to design customized activity settings to meet their needs. It was then easy to study the work styles of each segment in more detail and work with architects, technology providers, interior designers, and human work process engineers to come up with the overall work environment.

In December 2004, a pilot project was launched. More than 1,100 HR, CRE, and IT

employees in two buildings of the West Creek campus and 70 in the McLean headquarters were introduced to the first wave of FOW. By the first quarter of 2005, an additional 400 people shifted to the project. Today there are approximately 3,000 employees in FOW.

Program Goals and Strategy

The FOW program was designed to meet three overarching goals: increasing employee satisfaction, increasing organizational performance and productivity, and achieving greater real estate asset utilization and flexibility.

FOW was expected to increase employee satisfaction and individual and group productivity, leading to increased performance for the entire business unit (BU). Another major anticipated benefit was the optimal utilization of space to cut real estate costs and reduce BU costs. Employee flexibility and BU flexibility were also expected to increase. Because many seats were unassigned, the space allocated to a particular BU could grow or shrink, depending on demand.

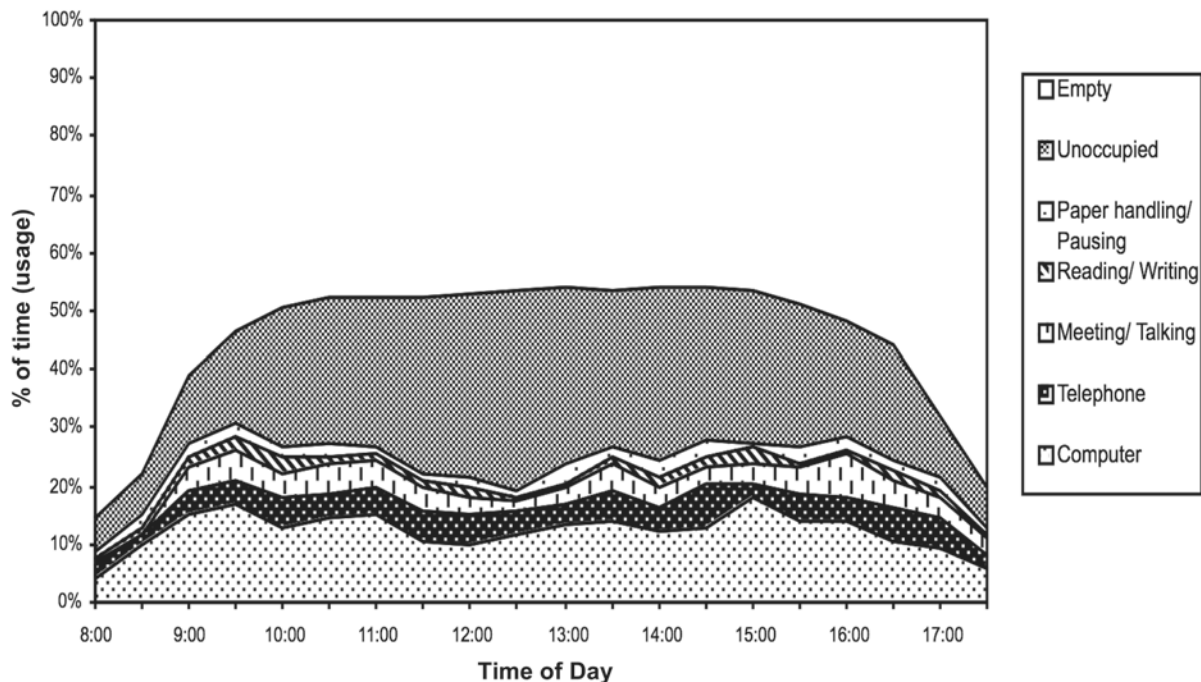


FIGURE 1. Cubicle Usage

The overall strategy was to build a program that enabled employee mobility with workplace settings that supported knowledge work when and where it would be most effective.

Program Components

FOW addresses key issues of HR policy, facilities design and furnishings, and technology.

HR Policy

Capital One’s flexible work arrangements (FWAs) reflected an ongoing commitment to supporting work-life balance across the organization. The company had always offered

some informal flexibility as a work-life balancing resource. FWAs formalized a broad set of standardized options that were available to all exempt and corporate support employees. FOW built upon this preexisting set of HR policies. A key element of choice in the FOW program is the individual work style that an employee selects in collaboration with his or her manager.

Five work styles were defined that varied in terms of space and technology provisioned. By making a selection at the beginning of the process, employees had a significant amount of control over how they would operate in the FOW environment. Table I describes the five FOW work styles and the spaces and technologies that were provided

TABLE I Pilot Work-Style Descriptions

Work Style	Work Behavior	Workstation	Technology
Anchor and Resident	Resides primarily in a single location Leverages other work environments	Large, dedicated, individual workstation used everyday	Laptop VOIP phone
Director/Executive	Highly mobile within Capital One and beyond Minimal time working in external sites (home, external vendor site, etc.)	Small, dedicated workstation Executive/director “digs” (small dedicated workstations providing dedicated space for the highly mobile executives)	Laptop BlackBerry/cell phone Reimbursement of broadband Internet access at home VOIP phone
Mobile Worker	Highly mobile primarily within Capital One space Minimal time working in external sites (home, external vendor site, etc.)	Shared medium-sized workstation No dedicated space within Capital One	Laptop BlackBerry/cell phone Reimbursement of broadband Internet access at home VOIP phone
Teleworker	Works from home	Laptop, desk at home, and shared desks	Laptop BlackBerry/cell phone Reimbursement of broadband Internet access at home

to support the way the employees work. Two of the work styles (anchors and directors) have assigned desks within the space; the other two (mobile worker and teleworker) use shared desks in the office though they mostly work from home. Due to their mobility, directors, mobile workers, and teleworkers received BlackBerry cell phones. Employees in all three work-style categories received laptops, and each assigned or shared desk is equipped with an external monitor, keyboard, and mouse.

Table II shows the number and percentage of employees using each work style during the pilot program.

Facility Design and Furnishings

Activity settings provide guidelines for different designs and furniture layout.

- Anchor workstations are large and dedicated, providing work surface and storage as a primary workspace. They have their own pedestal and storage tower or lateral file.
- Executive workstations are smaller, compressed, and provide dedicated space for the highly mobile executive. They are in close proximity to anchor workstations, additional storage, and dedicated huddle rooms.
- Resident workstations are medium-sized, dedicated, and provide work surface and storage as a primary employee workspace. They have their own pedestal and storage tower or lateral file.
- Mobile workstations are shared spaces, providing highly mobile employees with a place to work when they are on campus. Dedicated storage is provided in a shared space nearby. Resident and mobile workstations are of the same size.
- Enclaves are 6 ft × 12 ft enclosed rooms providing space for heads-down work or quick pull-ups and private conversations.
- Huddles are 12 ft × 12 ft enclosed rooms providing space for heads-down work or quick pull-ups and private conversations.
- Quiet-zone workstations provide a space for silent, concentrative, heads-down work only. No phones are provided in these areas. Etiquette dictates that there should be no cell phones or conversation within this area.
- Agile project rooms are dedicated to groups using the Agile work method for the duration of group projects. Agile is a formal application of lean principles of speed, continuous improvement, and the elimination of waste within software development. It is designed to deliver projects in a collaborative and iterative approach. The dedicated Agile project rooms accommodate a higher level of power and data connectivity as well as flexibility for the team to fully control its environment (e.g., the ability to post project plans, team structures, and even photographs on the walls).
- Cafés and lounges are set up with upgraded coffee vending, restaurant-style booths, and power and data connections. They provide excellent spaces for small

TABLE II Initial Pilot Populations by Work Style

	McLean 6th Floor	West Creek Building 7	West Creek Building 4	Total	% of Total
Teleworker	12	48	156	216	13%
Mobile Worker	14	162	805	981	60%
Resident	22	136	153	311	19%
Anchor	9	24	36	69	4%
Executive	13	20	32	65	4%
Total	70	390	1,182	1,642	100%

groups to pull up for quick informal meetings.

- Multifunctional devices are placed throughout the floor (eight per floor), providing employees with close proximity to these services. These devices are essentially a combination of the printer, copier, scanner, and fax.

Technology

Technology tools and infrastructure are critical to enable greater mobility and portability. Each work style has an associated bundle of technology assigned to it by IT as detailed below:

- Anchors/residents have limited mobility, and their technology bundle is the simplest and closest to that of a traditional office worker. They are provided with the basic on-campus technology—desktop, keyboard, and mouse. To enable on-campus mobility, they are also provided with a laptop and a cell phone. Instant messaging (IM) and VOIP extension mobility also boost these workers’ freedom to move from one building to another without being out of touch with team members and colleagues. The IM tool is similar to the many chatting tools on the Internet (e.g., AOL) that enable instant short text communication exchange between two workers connected to the company network. The VOIP phone system enables workers to use any phone on campus for outgoing calls and to pick up their voice messages from any phone by using a log-in and a password. In addition, a ubiquitous wireless network provides the ability to work from any place on campus, including the cafeteria, athletic fields, and even the treehouse platform and gazebo in the attractive wooded campus at West Creek.
- Mobile workers constitute the bulk of the workforce for which the FOW program has been designed. They have all the tools the anchors/residents have and many more to enable off-campus mobility as well. A critical addition is a Black-

Berry that allows constant access while on the move to e-mail, calendars, and to-do lists. Since these workers do not have a fixed desk allocation, they rely on cell phones and VOIP as their primary telephony solutions.

- Teleworkers are provided with all the tools of a mobile worker as well as a soft-phone on their laptop, which enables them to receive internal calls to their extension or at their home. Since these workers often work from home, they are provided with a home broadband Internet connection plus equipment (router) to access the Internet wirelessly from any part of the home. Since they are often working within the Capital One network or accessing or transmitting Capital One proprietary material over the Internet, they have to use a virtual private network to provide a security firewall.
- Executives/directors are senior executives who are also mobile and have all the options that the mobile worker has and more. The additional amenities include a wireless headset at work and provision and reimbursement for a full home office, including desktop and home office furniture.

Each work style has an associated bundle of technology assigned to it by IT.

Outcomes of FOW at Capital One

FOW was successful in accomplishing its three major goals: increasing employee/group satisfaction, increasing organizational performance and productivity, and achieving greater real estate utilization and flexibility. The project team collected user surveys and other data before and after FOW implementation.

Increased Employee/Group Satisfaction With the Work Environment

Employee surveys were designed to gauge perceptions about the quality of the work

environment before and after FOW. Results were very positive:

- a 41% increase in overall workplace satisfaction (from 57% premove to 80% postmove);
- 87% would not go back to their old workplace if given a choice;
- a 46% increase in satisfaction with access

to daylight (from 58% premove to 85% postmove);

- a 95% increase in satisfaction with access to quiet space (from 35% premove to 68% postmove);
- a 60% increase in making the workplace atmosphere more creative;

a 42% increase in satisfaction with videoconferencing and teleconferencing (from 45% premove to 64% postmove);

- a 46% increase in those who felt the work atmosphere was stimulating (from 46% premove to 67% postmove); and
- a 60% increase in feeling that the work atmosphere was creative (from 39% premove to 63% postmove).

There was a 53% increase in those who felt their workplace enhanced group productivity (from 43% pre-FOW to 65% post-FOW). Organizational performance and productivity were also perceived to have increased through increased decision speed, increased concentration, and decreases in the number of formal meetings.

Perceived Increase in Organizational Performance and Productivity

There was a 53% increase in those who felt their workplace enhanced group productivity (from 43% pre-FOW to 65% post-FOW). Organizational performance and productivity were also perceived to have increased through increased decision speed, increased concentration, and decreases in

the number of formal meetings.

Employees within FOW work settings perceived themselves to have more and faster access to colleagues and information. Mobile technology (laptops, BlackBerries) supports greater virtual interaction among team members, and the open environment

allows more direct visual access to colleagues, which leads to spontaneous interaction. A FOW hypothesis was that increased access to colleagues, information, and flexibility would also result in increased collaboration among employees, thus increasing decision-making speed. Survey responses indicate this did occur:

- a 31% reduction in time to get input from peers (from 10.7 hours to 7.4 hours);
- a 14% increase in satisfaction with access to colleagues (from 62% to 71%); and
- a 24% reduction in time to get input from managers (from 8.4 hours to 6.4 hours).

Another aim was to provide employees more choice and control over campus quiet and solo spaces, leading to fewer interruptions, increased concentration, and improved productivity for heads-down work. Employee survey responses indicate this clearly occurred:

- a 10% reduction in individual productive time lost to visual distractions and noise (from 32 minutes lost per day to 29 minutes);
- a 12% increase in satisfaction with time for concentration (from 48% to 53%);
- a 25% increase in satisfaction with time spent on unscheduled phone calls (from 52% to 64%); and
- a 124% increase in the amount of individual work that takes place in enclosed or quiet spaces.

Prior to the development of the FOW program, employees reported a desire for fewer formal meetings. After FOW employees became mobile and had more opportunity for spontaneous interaction, they did report fewer formal meetings and consequent time savings:

- a 39% decrease in time spent in large meetings;
- a 19% decrease in time spent in scheduled meetings of all sizes; and

- a 34% decrease in time to get feedback from Senior Leadership Team peers (from an average of 13 hours premove to 9 hours postmove).

Increase in Real Estate Asset Utilization and Flexibility

Real estate costs per employee were reduced, and the speed and quality of response to churn (e.g., moving from one building to another) improved. Post-FOW, the space required per employee was reduced by up to 50%. In addition, working off-site has greatly improved the flexibility of increasing or decreasing the workforce without necessarily having to add real estate assets. The flexibility given to the employees to control when and where to work has also shown positive results:

- a 39% increase in ability to work anywhere in the building (from 61% to 84%);
- a 27% increase in ability to work anywhere outside Capital One (from 64% to 82%); and
- a 95% increase in satisfaction with access to quiet space (from 35% to 68%).

One potentially negative behavioral outcome indicated by survey results was reported reduction of face-to-face interaction, team spirit, and camaraderie among FOW employees. Only 39% of respondents said

that FOW “had increased their sense of community and camaraderie with their teammates and other members of their department,” another 26% said it had remained the same, and 35% said it had actually decreased.

Based on the overall evidence that FOW had met key program objectives, top management declared the project a success and began to offer it across the company, depending on the pull from each BU.

The FOW is a successful and evolving strategy at Capital One. Associates continue to move into FOW settings and new nontraditional settings that have emerged. While some design elements have changed since the pilot, the guiding principle of providing an environment that supports work when and where it is most effective remains. The CRE department continues to monitor and improve the program. In December 2007, the team conducted an extensive survey of more than 3,000 associates as part of the Future of Work Health Assessment. While that analysis is currently in progress, early results indicate the workforce remains generally positive about the FOW workplace settings (e.g., mobile desks, coffee lounges, quiet zones, etc.) and the flexibility the new workplace allows.

Conclusions and Implications

Based on our research review and the FOW case study of Capital One, Figure 2 provides

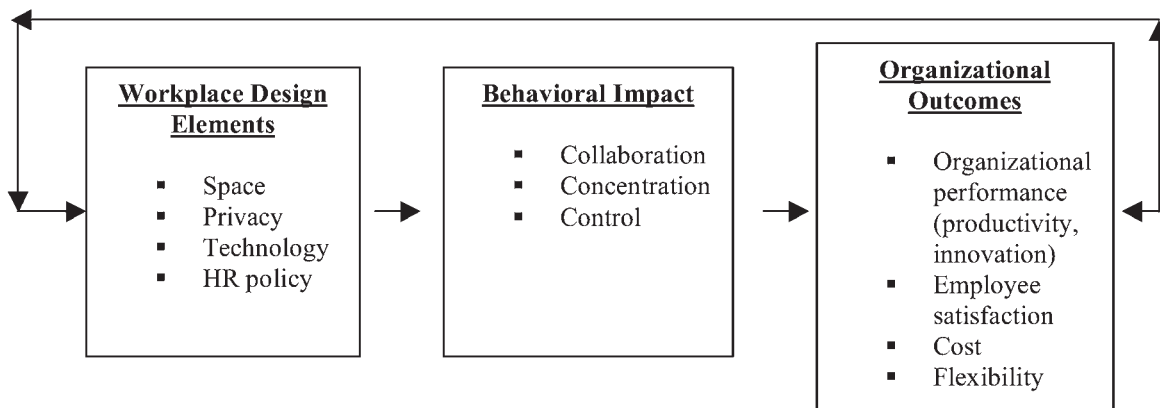


FIGURE 2. Impact of Workplace Design on Organizational Outcomes

our workplace design model. The model shows the key elements and basic relationships among workplace design elements, behavioral impacts, and organizational outcomes.

Today's knowledge workers require a workplace that supports concentrated thinking while enabling a high level of collaboration for achieving desired outcomes. Important work design elements to consider are the degree of privacy, arrangement, and style and size of space given to various employee work settings. For FOW employees at Capital One, work settings include shared desks, anchor workstations, quiet zones, huddle rooms, and agile project rooms.

The technology support provided to an employee should accommodate employees' changing demands for work-life balance, an open management style, and distributed work delivery. Today's technology choices include laptops, VOIP, BlackBerry/cell phone, and broadband Internet access at home as well as throughout the workplace. Choices will continue to increase, with more developed technologies enabling more and more flexibility.

HR policy is the fourth important work design element, as it ultimately enables today's knowledge worker to work differently and more flexibly. Changing the environment and providing tools accomplish little if the employee is expected to show up and sit in the same seat everyday from 8 to 5. Prior to the FOW program,

Capital One had a set of flexible work arrangement HR policies that included flex-time, telecommuting, part-time, and job sharing. Had these policies not been in existence, they would have had to be developed to make the FOW program possible.

The key elements of work behavior impacted by workplace design are collabora-

tion, concentration, and control. All have an impact on productivity and employee satisfaction and are essential for an effective workplace. At Capital One, the FOW survey reported a 20% increase in those whose (previous) workday was very productive or productive during time spent with others, a 41% increase in overall workplace satisfaction, a 46% increase in satisfaction with access to daylight, and a 95% increase in satisfaction with access to quiet space.

Innovation through collaboration can be enhanced by workplace designs that provide project rooms and open office structures, for example. Individual concentration on heads-down tasks is also required on some jobs most of the time, such as an analyst at Capital One, but also in all jobs some of the time. Employee satisfaction is significantly impacted by the control and flexibility to plan one's own work-life balance using new technologies.

Ultimately, the corporation cares about concrete outcomes that impact the bottom line. One direct benefit is that workplace design can increase employee satisfaction, which in turn can work as a talent acquisition and retention magnet for the company. Second, and more important, the workplace design and behavioral impacts described above will translate into better results for the business in terms of improved performance/productivity, lower costs, and greater flexibility with real estate. For example, the FOW program decreased real estate cost per employee to about half of what it is in traditional settings.

These design elements provide greater flexibility to employees in terms of choice and control to work when and where it is most effective. The FOW project showed an increase in flexibility as a 39% increase in the ability to work anywhere in the building and a 27% increase in the ability to work anywhere outside Capital One.

We believe the Capital One FOW case study and our workplace design model have implications for all HR and business leaders. As depicted in the model, the particular workplace design that will work best for a company depends on its own unique combination of design factors. Capital One's culture

The FOW survey reported a 20% increase in those whose (previous) workday was very productive or productive during time spent with others, a 41% increase in overall workplace satisfaction, a 46% increase in satisfaction with access to daylight, and a 95% increase in satisfaction with access to quiet space.

includes a unique combination of corporate history (including the company's youth), people (including a high concentration of knowledge workers), technology, teamwork, innovation, and information-based decision making, all of which influenced the workplace design elements in the FOW project. HR and business leaders in other companies should continuously monitor their external and internal environments and select the best combination of workplace design elements to achieve their own desired behavioral and organizational outcomes.

Suggestions for Further Research

Any given organizational study stands on shaky epistemological grounds, as all research methods are flawed in some way (Van Maanen, 1998). Our case study of a complex workplace design, HR policy, and technology intervention at Capital One, and our subsequent proposal of a rudimentary model for considering such interventions elsewhere, is no exception. Further research can advance what we learned from the case and what we proposed for practice.

First, our study focuses on a particular organization—with its unique combination of history, people, processes, policies, and practices—within a particular industry at a particular point in time. We hope that other researchers will benefit from the results of Capital One's experience and will work with organizations to design and implement their own workplace design interventions, assess the impacts, and make their findings available. With additional case studies, we can increase our understanding of how and in what circumstances the workplace design el-

ements affect various behavioral and organizational outcomes.

Second, while our model is consistent with the Capital One case study and other research, it is very basic and speculative at this point, and further research is necessary to test its accuracy and completeness and to develop it further. The relationships depicted among work design elements and behavioral and organizational outcomes are based on our literature review, advice from professional associations and consulting organizations, and the Capital One study. Further research could specify these relationships and test the hypotheses using more rigorous research methods.

While the changes in workplace design elements at Capital One had an overwhelmingly positive impact on behavioral and organizational outcomes, it would be very useful for researchers to further consider the survey results reporting reduced face-to-face interaction, team spirit, and camaraderie among FOW employees. Although these reductions are not surprising in light of the intervention, further research may yield insights into how to minimize or even reverse the impact.

Meanwhile, we believe that the Capital One case study and our model will prove to be a valuable road map for business leaders and HR planners who must operate with existing knowledge.

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