

# Workplace RESEARCH

## Changing Nature of Organizations, Work & Workplace

(Adapted from a Whole Building Design Guide Resource Page prepared for Steven Winter Associates by J. Heerwagen, K. Kelly and K. Kampschroer, WBDG.org, 2005)



### INTRODUCTION

Imagine you went to sleep and woke up to a work day in 1960. How different is your work life today, compared to what it was 40 years ago? Clearly, there would not be a Starbucks on every corner or a cell phone in every pocket – but what else has changed and why?

In today's world, the structure, content, and process of work have changed. Work is now:

- More cognitively complex
- More team-based and collaborative
- More dependent on social skills
- More dependent on technological competence
- More time pressured
- More mobile and less dependent on geography

In today's world, you will also be working for an organization that is likely to be very different due to competitive pressures and technological breakthroughs. Organizations today are:

- Leaner and more agile
- More focused on identifying value from the customer perspective
- More tuned to dynamic competitive requirements and strategy.
- Less hierarchical in structure and decision authority
- Less likely to provide life long careers and job security
- Continually reorganizing to maintain or gain competitive advantage

### Changes in Organizational Structure and Relationships

Increasing pressures on organizations to be more competitive, agile, and customer focused has generated much interest in the "lean enterprise" that first captured attention in manufacturing, lead by Toyota in the 1970s. Adopting lean principles and lean thinking has led to numerous changes in organizational structure to improve the efficiency of internal processes, with a goal of eliminating waste and redefining customer value.

These changes have been supported and enabled by transformations in information and communications technology, especially the Internet and mobile computing and communication devices.



Local coffee shops are an increasingly popular workplace for high mobility Workers.

Kling and Zmuidzinas (1994) identify three types of organizational change:

**“Metamorphosis”** - far reaching, fundamental change

**“Migration”** - shifts toward a new form

**“Elaboration”** - changes that enhance some aspect of work.

### Key organizational changes include:

*Reduced hierarchical structure* – Hierarchies are cumbersome and cannot respond quickly to changing market demands. Hierarchies are being replaced by cross unit organizational groupings with fewer layers and more decentralized decision making.

*Blurred boundaries* -- As organizations become more laterally structured, boundaries begin to breakdown as different parts of the organization need to work more effectively together. Boundaries between departments as well as between job categories (manager, professional, technical) become looser and there is a greater need for task and knowledge sharing.

*Teams as basic building blocks* – The move toward a team-based organizational structure results from pressures to make rapid decisions, to reduce inefficiencies, and to continually improve work processes.

*New management perspective* – Workers are no longer managed to comply with rules and orders, but rather to be committed to organizational goals and mission. Also, as employees gain more decision authority and latitude due to reduced hierarchical decision making, managers become more like social supporters than commanders.

*Continuous change.* Organizations are expected to continue the cycles of reflection and reorganization. However, changes may be both large and small and are likely to be interspersed with periods of stability.



Working together, both informally and formally, requires social and Interactive competence.

### How Work is Changing for Individuals and Groups

Over the past two decades, a new pattern of work is emerging as the knowledge economy realizes the full potential of both new technologies and new organizational models. The changes fall into the following domains:

- Cognitive competence
- Social and interactive competence
- The new “psychological contract” between employees and employers
- Changes in process and place

Although these domains are discussed separately, they overlap. We briefly discuss the overlaps, where they exist, and point to the benefits and concerns the new work patterns present for workers and managers.

“Kaleidoscope thinking is at the heart of the creative process in innovation – the use of new angles or perspectives to shuffle the parts to make a new pattern, thus challenging conventional assumptions.”

*Rosabeth Kanter, 1990.*

### **Cognitive Competence**

Cognitive workers are expected to be more functionally and cognitively fluid and able to work across many kinds of tasks and situations. The broader span of work, brought about by changes in organizational structure, also creates new demands, including:

*Increased complexity of work* – Workers need to know more, not only to do their jobs and tasks, but also to work effectively with others on teams. Many knowledge based tasks require sound analytical and judgment skills to carry out work that is more novel, extemporaneous, and context based, with few rules and structured ways of working. Although demand for high cognitive skills are especially prominent in professional, technical, and managerial jobs, even administrative tasks require more independent decision making.

*Different ways of thinking* – Rosabeth Kantor (1990) argues that cross-functional and cross-boundary teams require “kaleidoscope thinking,” the ability to see alternative angles and perspectives and to create new patterns of thinking that propel innovation. Workers also need to be able to synthesize disparate ideas in order to make the cognitive leaps that underlie innovation.

*Continuous competency development* – Not only do workers need to keep their technology skills up to date, they need to be continuous learners in their knowledge fields and to also be more conversant with business strategy. Time to read and attend training classes is no longer a perquisite of only a few, it is essential for all workers



Many of our workstations are loaded with paper documents, reminders, and other distractors. This causes frequent shifts in attention as documents move in and out of our visual field.

### **Cognitive Overload: The Cost of Complexity**

Vastly increased access to information has made work both easier and more difficult. The ease comes from ability to rapidly locate and download information from diverse sites. The difficulty comes with the need to consume and make sense of new information in a timely fashion. Information overload, coupled with time pressures and increased work complexity, lead to what psychologists call “cognitive overload syndrome (COS).” Symptoms of COS include stress, inability to concentrate, multi tasking, task switching, and a tendency to focus on what is easy to do quickly rather than what is important (Kirsh, 2000)



Interactions at work occur in many locations and help to build friendships and collaborative work practices.

### ***Social and Interactive Competence***

In a 2001 report on the changing nature of work, the National Research Council called attention to the importance of relational and interactive aspects of work. As collaboration and collective activity become more prevalent, workers need well-developed social skills – what the report calls “emotional labor.”

According to the NRC report, good social skills are necessary for:

*Team work and collaboration* – Conflict resolution and negotiation skills are essential to collaborative work. Conflicts often occur about group goals, work methods, assignments, workloads, and recognition. Team members with good conflict and negotiation skills are better equipped to deal openly with problems, to listen and understand different perspectives, and to resolve issues in mutually beneficial ways.

*Relationship development and networking.* Sharing important information, fulfilling promises, willingness to be influenced, and listening are the building blocks of reciprocity and the development of trust. When workers trust one another, they are more committed to attaining mutual goals, more likely to help one another through difficulties, and more willing to share and develop new ideas.

*Learning and growth.* Many organizations strive to be learning centers – to create conditions in which employees learn not only through formal training but through relationships with co-workers. Learning relationships build on joint problem solving, insight sharing, learning from mistakes, and working closely together to aid transmission of tacit knowledge. Learning also develops from mentoring relationships between new comers and those with experience and organizational know how.

### ***The Costs of Collaborative Environments***

In a collaborative work setting, the fate of individuals is inextricably bound to collective success. Dependence on others for one’s own success is often uncomfortable. Comments about the fear of not having individual efforts recognized are common in the literature on team work.

Collaboration and relationship development also take time and effort. Understanding co-workers perspectives and “thought worlds” requires time spent listening, integrating, and synthesizing. For those workers recognized as both knowledgeable and approachable, the demands of interaction may be especially high.

“We have been socialized to Value individual responsibility And individual achievement, And feel discomfort with the Thought of relying on others.”

S. Mohrman and S. Cohen,  
*The Changing Nature of Work*  
(2005)

## The New Psychological Contract

As work changes, so does the nature of the relationships between employees and employers. In the new work context, the informal, “psychological contract” between workers and employers – what each expects of the other – focuses on competency development, continuous training, and work/life balance. In contrast, the old psychological contract was all about job security and steady advancement within the firm. As already discussed, few workers expect, or desire, lifelong employment in a single firm.

As job security declines, many management scientists see clouds on the horizon, including: *Corporate indifference* -- Shoshana Zuboff and James Maxmin, in *The Support Economy* (2002), describe a new individualism among US workers. These new individuals are invested in “psychological self determination”. They desire participation, expression, identity, and quality of life – all values which are espoused by organizations, but largely ignored in practice as organizations continue to focus on reducing fixed labor costs.

*Reduced loyalty and commitment* – With little expectation for advancement, workers feel less committed to organizational goals and more committed to their own learning and development. The knowledge and technological skills that employees bring with them to the workplace are transportable and are not lost when a new job is taken.

*Increased time burdens* – Years of downsizing and outsourcing have produced what Leslie Perlow (1999) calls a “time famine” – the feeling of having too much to do and too little time to do it. In order to keep up with workloads, many workers are spending longer hours at work, according to reports by the Bureau of Labor Statistics and the Center for Workforce Development.

*Flexible work arrangements do not keep up with employee preferences* – The Work Trends 2000 report found that 74% of workers were not allowed flexible hours and work arrangements (such as telecommuting). Those with flex hours have limited freedom regarding when and where to work. The vast majority of workers have to commit to a specific day to work at home or a specific day to take off if they work four 10-hour days.

## The Changing Workplace

The changing workplace is driven by the organizational issues described above and enabled by technologies that support mobility and easy access to information. These pressures and opportunities, however, have not resulted in a specific new workplace model. Many models and ideas exist concurrently, with designs depending upon the organization, its work practices, culture, and customers. Table 1 highlights key drivers, solutions, and potential issues raised by the solution.

<b>Table 1. Drivers, Solutions and Issues for the Changing Workplace</b>		
<b>Drivers</b>	<b>Workplace and technology solutions</b>	<b>Issues and concerns</b>
Increased use of teams and cross unit work; more pressure for improved communication and information flow	<ul style="list-style-type: none"> <li>• Greater variety of meeting spaces (open &amp; enclosed, large &amp; small)</li> <li>• Smaller individual workspaces</li> <li>• More open individual workspaces</li> <li>• Unassigned workspaces</li> <li>• Greater interior visibility to support awareness</li> <li>• Mobile supports (phones, laptops, PDAs, wireless)</li> <li>• Personal video, instant messaging, desk top team software</li> <li>• More use of project rooms</li> <li>• Persistent information displays</li> <li>• Small rooms for individual focus</li> <li>• Lockers for personal belongings</li> </ul>	<ul style="list-style-type: none"> <li>• Increased noise</li> <li>• Increased distractions and interruptions</li> <li>• Potential for “over communicating”</li> <li>• Cultural barriers to behavioral change</li> <li>• Individuals working longer hours to compensate for lack of time to do individual asks</li> <li>• Expectations that workers are always available</li> </ul>
Greater use of dispersed work groups – often global	<ul style="list-style-type: none"> <li>• Increased use of video conferencing, computer based team tools</li> <li>• More reliance on conference calls</li> <li>• Greater need for mobile technological supports for meeting rooms</li> <li>• Use of facilities beyond normal working hours</li> </ul>	<ul style="list-style-type: none"> <li>• Expansion of the workday to accommodate geographically dispersed team meetings</li> <li>• Loss of opportunity to develop trust through face to face interaction</li> <li>• More difficulty managing and coordinating</li> <li>• Very high dependence on technological reliability</li> </ul>
Continual reorganization and restructuring	<ul style="list-style-type: none"> <li>• Flexible infrastructure to support rapid reconfiguration</li> <li>• Mobile furnishings and technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Acoustical problems with loss of good enclosure</li> <li>• Potential for reduced ergonomic effectiveness</li> </ul>
Reduced costs/more efficient space use	<ul style="list-style-type: none"> <li>• Shared or unassigned workspaces</li> <li>• Centralized filing system</li> <li>• Reduced workstation size and increased overall densities</li> <li>• Greater overall spatial variety to enable different kinds of work to be accommodated at same time</li> </ul>	<ul style="list-style-type: none"> <li>• Increased distractions and interruptions</li> <li>• Increased noise</li> <li>• May meet with employee resistance</li> <li>• More difficult for paper intensive work</li> </ul>
Improved quality of work life and attraction of new workers	<ul style="list-style-type: none"> <li>• More equitable access to daylight, views, and other amenities</li> <li>• More equitable spatial allocation and workspace features</li> <li>• Amenities (cafés, child care,</li> </ul>	<ul style="list-style-type: none"> <li>• Resistance from those who support hierarchical space allocation</li> </ul>

## CASE STUDY

### Cisco Systems

#### Connected Workplace Proof of Concept

#### San Jose, California

Like many other organizations today, Cisco came to the conclusion that their workplace environment was at odds with the way they worked. People were seldom at their desks. Meeting spaces were in short supply. Communication was ever more variable – face to face, instant messaging, desk top video, phone, e-mail. And work hours shifted dramatically as the need to work globally increased. With these changes in mind, Cisco created the “Connected Workplace.” It is currently in the Proof of Concept phase.

#### Key Goals:

- Encourage collaboration
- Reduce real estate costs
- Reduce infrastructure costs
- Accommodate different work styles

#### Workplace Solutions

- Unassigned workspaces
- Increased number and variety of meeting spaces, from enclosed conference rooms and informal areas with comfortable chairs to a centrally located café
- Small individual workstations
- Highly mobile furnishings and space dividers
- Lockers for personal items
- Increased density; the space used for the POC would normally hold 88 employees compared to the 140 actually assigned to the workplace
- High visibility throughout the space
- High daylight and views to the surrounding outdoor landscape

#### Enabling Technologies:

- Wireless infrastructure and wireless LANS
- Laptops and docking stations
- Cisco work support software for individuals and groups,
- Cisco IP Communications Technology, including software that enables calls over PCs using wired or wireless headsets
- Mobile video conferencing tools and software for web meetings
- Interactive white boards
- Instant messaging, e-mail and voice mail
- Tools for enabling workers to locate one another electronically.

#### Preliminary Results

- Employees expressed generally high levels of satisfaction with the space
- 80% said they would prefer to stay in the space rather than return to their previous workspace
- Those who spend the most time at their desks were more challenged by the mobility.
- Cost savings of 37% to 60% across categories such as rent, construction, furniture, cabling, and workplace services.



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