

SPACE SQUEEZE

As positive economic conditions continue, corporations are increasingly concerned about the issues of managing business expansion and space use. "Space squeeze" occurs when business growth leads to organizations hiring additional people without having enough space to house them. Cautious corporate management often tries to squeeze more people into existing space, rather than add new space. This is based on economic concerns: they do not want to be locked into a long-term real estate lease in the event of an economic downturn. (1)

Space has been identified as the single largest concern of facilities managers. Space also generally represents the second largest expenditure. Therefore, the effective use of space is critical. Spatial reconfiguration to accommodate the appropriate relationship of workers to each other and respond to changes in the organization can cause disruption and be costly.

Len Kruk, WCE Futurist



The Incredible Shrinking Office

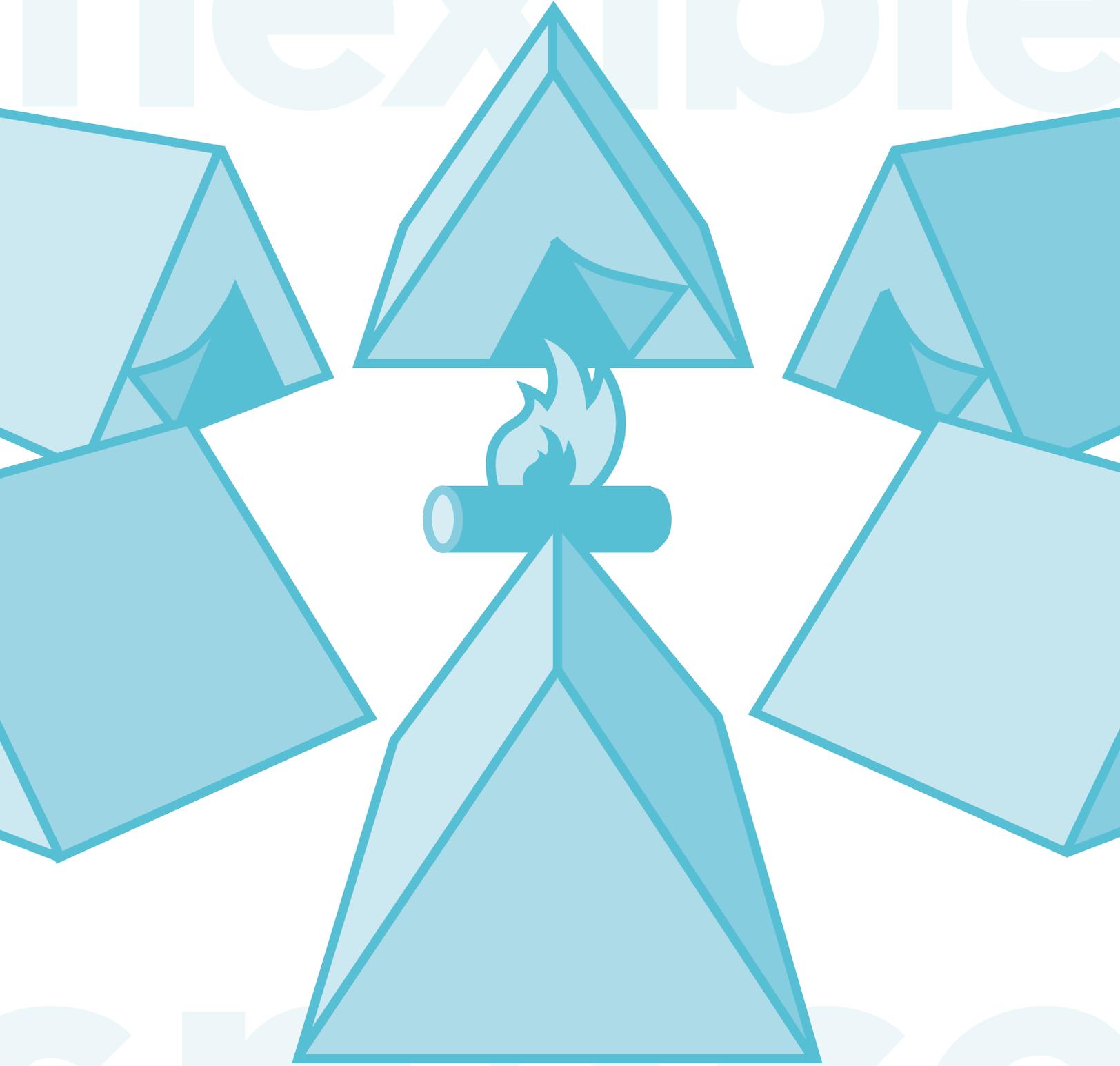


1985-era cubicle standards,
Managers 115 sq. feet
Technical 82 sq. feet
Clerical 43 sq. feet

2000 cubicle standards,
Managers 64 sq. feet
Technical 48 sq. feet
Clerical 36 sq. feet



flexible



space

Updating Outdated Standards

Outdated corporate furniture standards contribute to "space squeeze." Space planning patterns, carried over from previous decades, are no longer appropriate. The resulting space standards often dictate a generous footprint, which is greater than needed for the end-users' work activities.

In these cost-cutting days, you don't have to be outplaced to be downsized. Work-Space Squeeze has invaded the workplace, victimizing almost everyone who still has a job. Someday, perhaps, it may dawn on Corporate America that hearing your neighbor... while you try to negotiate a billion dollar deal tends to impair productivity. "How companies are putting the squeeze on work space" by Madeleine Begun Kane/Los Angeles Times. (2)

In the 1970s the arrival of the open plan concept from Germany changed the concept of space planning in the office environment. At the time, "technology" was a telephone and an IBM Selectric on every desk. In the 1980s, it was typical to see a mix of open plan and more private offices, which were equated with power and status; PCs were found on more and more desks.

As the systems furniture industry matured, the flexibility and breadth of options in the product led to problems in inventory and asset management. In the 80's and early 90's facilities managers accepted the needs for standards programs, and managing 5 to 7 typicals was not unusual. Often a work station standard was larger than functionally necessary so that a consistent panel width could be maintained. The cumulative effect was wasted space and added real estate costs.

During the last few years, many business organizations have been forced to reorganize and downsize. Corporate downsizing revealed to many organizations that their systems furniture was not as flexible as they had originally believed. A common problem was the partially empty systems furniture "six pack." A company might have started with a standard configuration of six 8x10 work stations back to back and shoulder to shoulder.

When downsizing took place and two or three people were removed from the standard "six pack," the company was left with an abundance of empty 8x10 cubicles.

This issue was made more complicated when companies assigned workers to space left over in the "six pack" that was either larger or smaller than their hierarchical rank allowed based on the company's standard program. Standards programs broke down and became more difficult to apply particularly because business organizations said in effect, "We just downsized to save money, and now we can't invest in moving furniture because of the cost of reconfiguration."

As office space becomes increasingly fluid, furniture needs to be able to accommodate those changes. Off-modularity, freestanding options and surfaces that work in multiple applications will help reduce inventory and complexity while allowing for flexibility and change.

Space flexibility is increasingly more important than space efficiency. Investment in an office infrastructure that supports change and adaptability will pay long-term dividends. Use systems furniture and universal space planning modules that allow a high degree of employee mobility or dual usage. Select interchangeable components for lighting, voice, data and electrical systems. The ability to form new teaming or "micro-office" environments within 24 hours versus two months of retrofit time will provide a distinct competitive advantage for companies striving to shorten product life cycles. Eileen Circo, Senior VP and Richard W. Reynolds, Senior VP/Principal, Spaulding & Slye Colliers. (3)

Flexibility is also a key issue with the increasing use of the team approach to work today. Innovative companies encourage workers to interact more, form multifunctional teams to address strategic challenges, and find group solutions to business problems. Teams can include employees who are on-site, employees who work at home, their customers, or business partners from other joint venture companies.

Today's work requires the use of teams and places for these teams to interact and to relate. Work today requires social relationships to accomplish personal, professional, and organizational goals. Interactions may be planned or spontaneous. They may involve team members from within the organization and/or from customer organizations." Paul Barnette, WCE Architect

The increased need for team space will put pressure on the size of individual workstations as the ratio of teaming/ collaborative space increases.

Technology Expansion

In the last decade a proliferation of technological devices have placed additional requirements on work surfaces and space within the office environment. This technology has been forced into existing spaces in the office area.

The typical office setup has gone from people having their PC, a keyboard, and a mouse pad on their desk to the addition of individual printers and fax machines. This influx of equipment into personal office spaces was prompted by workers demanding immediate access to these conveniences as a way to keep pace with their new workloads. Implementing localized printing and faxing was further pushed forward as the cost of equipment came down. Work station designs had to be adapted to accommodate this equipment.

Historical configurations of space have changed in recent years with the influx of new technology that requires more space for equipment than was previously needed. Today's worker does not relish having to leave their personal workspace to go to a shared printer or fax machine and this type of intra-office movement tends to negatively affect worker productivity. Thus, configuration of personal workspace should accommodate the needs of the worker and enable him/her to complete all of the repetitive or often-performed tasks within the confines of their personal space."

*Edward "Skip" Lange, WCE
organizational expert*

The demand for local support equipment is also rooted in the capability of technology that allows users to do more than process information and data, but rather to configure data and information. An increase in skilled technology users in the work place has resulted in more sophisticated forms of business communications, including desktop published charts, graphs, and business presentations. These communications require equipment, software, and sometimes paper for output. Also, technology has become more ubiquitous.

The reduction in the amount of support staff at companies has led to the migration of computer use up the corporate ladder. Executive offices need to be able to provide the same technological integration that "workers" offices have.

Larger monitors have also contributed to "space squeeze." In a relatively short time, monitor size has migrated from 12" to 15" to 17" screens. The 17" monitor no longer fits many work stations without interfering with either a task light or a binder bin. Monitor size necessitates a need for more room so that the user is not too close, thus avoiding eyestrain and discomfort.

*It seems like companies are trying to fit in more workers per square inch than ever...This space squeeze makes it hard to (use) big-screen monitors... Middle-age eyes demand large text to keep eye fatigue at bay. And the biggest desktop monitors--with 21-inch tubes--just don't fit on most desks without sticking out so far that they threaten to topple. Even if your desk can support the monitor, you still may not be able to work an ergonomic distance (arm's length) from your display.
Rex Farrance, PC World. (4)*

Today we see the introduction of flat screens. While some corporations resist widespread use of flat screens because of high costs, flat screens will increasingly gain acceptance because they reduce energy costs, allow the screen to be farther from the edge of a work surface, and accommodate such innovations as video conferencing and multiple screens.

Despite the much-publicized hype about the "paperless office," storage for paper continues to take an inordinate amount of space in most offices. While it is possible that newer technologies will eventually reduce dependence on paper, paper storage will continue to be found in file drawers, binder cabinets, and piled on work surfaces. "Traditional" storage for paper such as file cabinets, lateral files

under a work surface or a pedestal, and/or overhead cabinets is no longer sufficient. New multi-function storage towers not only store paper files, but also are used to store disks and CDs. These more flexible storage towers can be reconfigured and tailored to a variety of user functional requirements.

A new trend toward multifunctional technology is emerging incorporating faxes, scanners, and printers into a single device with a smaller footprint rather than having three separate devices. Rapid change, such as this shift from multiple devices to one multifunctional device and increased technological miniturization, is why it is difficult to design furniture that integrates technology, rather than accommodating it.

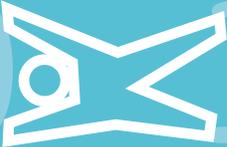
New technology may not fit well into a company's office space as it exists today. When technology is forced into existing spaces it results in low space utilization. The challenge is to keep pace with technology, which is the fastest changing element within the office environment.

Ultimately, to help fight space squeeze it is necessary to follow the direction of technologies and the way people use them to drive work station and office design.

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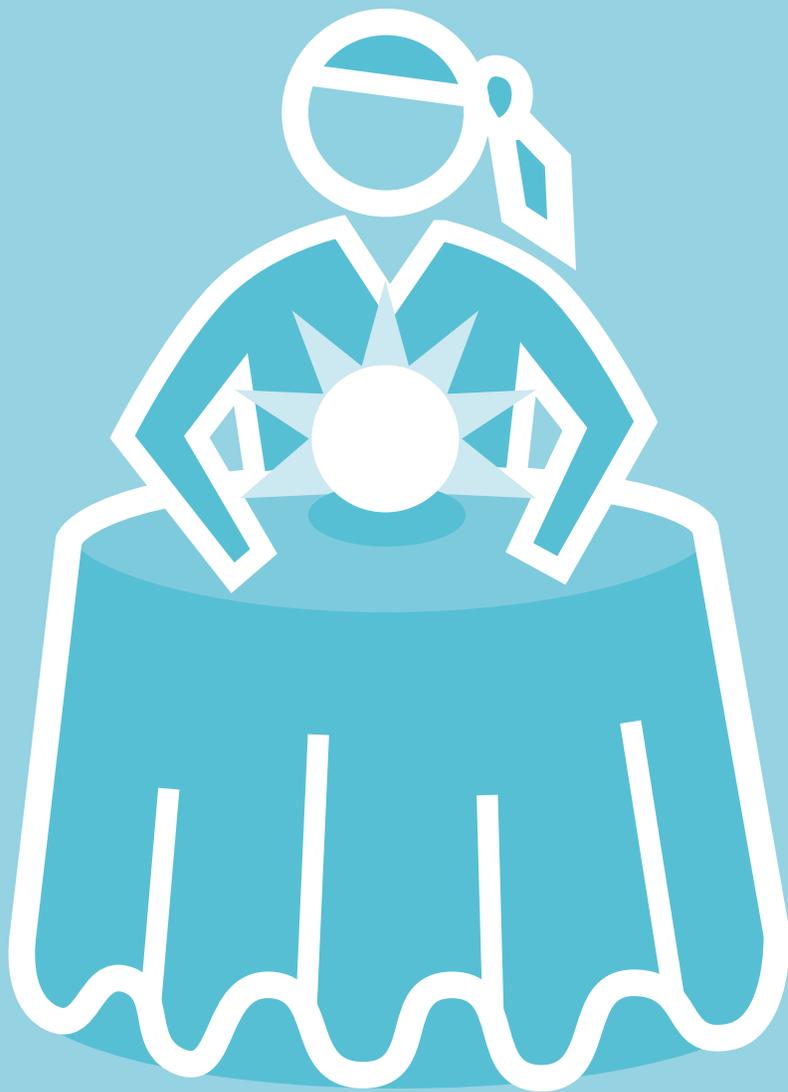
Forecasting Growth

The inability of organizations to forecast growth dramatically impacts space squeeze. A decade ago it was relatively easy for organizations to make business projections. Today, rapid growth or shrinking of companies and mergers and acquisitions means that you would need a crystal ball to predict staffing and space needs next month, much less over multiple years.

Businesses today are being cautious when leasing space. Many are seeking shorter term leases to reduce the risk of exposure of having too much (or the wrong type of) space in case of downsizing, an economic downturn, consolidation with another company, or a significant change in technology. (5) Because businesses are looking to maximize their space, there is little room for swing space. As corporations become leaner this lack of swing space means that managing rapid changes is even more challenging.

More and more leases are being negotiated for the standard five years with one, three or five year options. In contrast to common practice five or ten years ago, the new terms that are also being negotiated now include exit strategies. Not only do companies want options to take more space, they also want options to give up space. That trend is a significant indicator in business today. Corporate management wants to zero in on not only their annual costs, but their monthly operating costs. They want to be able to quickly get out of undesirable situations, even if it costs them a short-term premium.

Just as corporations are seeking exit strategies from real estate leases, they will need strategies to quickly change furniture on demand as their needs change. The ability to buy back or trade in is absolutely critical if organizations can't forecast their growth. Customers are also demanding that furniture manufacturers create more flexibility in their product to adapt to change. What is often needed is a space which can accommodate 50 people today, 80 next month, and 60 the month after.



Successfully Managing Social Change In The Workplace

Organizations are not only trying to understand the impact of technology, but also the impact of changing social attitudes on facilities design. Finding solutions for technology issues goes hand in hand with addressing psycho-social attitudes of workers.

Today's workers are more concerned with balancing their personal and business lives as evidenced by such workplace options as flex time, on-site daycare, and working from home. Corporations are addressing these lifestyle needs because it helps them attract and retain employees. (6,7)

It is also necessary to address the differences between the cultural assumptions made by workers of different generations. Younger workers, given the choice between a private office and better technology, often choose technology. Many older office workers, who have worked in open plan, value private offices because they see them as a benefit and an expression of their stature in the company.

According to the Wall Street Journal, when Alcoa instituted an "office without walls" approach that eliminated a hierarchal approach to space planning, some older workers felt losing an office meant losing their stature, and they had to adjust to the new workplace. Change can be a threat to psychological security and self-esteem. It can also be an opportunity for growth and development.

Companies can look to other investments that will replace the status of the physical environment to alleviate the psychological impact of space squeeze. Cool technology, interactive work-tools, flextime and other amenities can work as incentives, much like space did in the past.

"Early in the Alcoa planning process (of its new headquarters), design principles were established to guide the architects and project team members as they developed the facility and its services driven by function and need, rather than by status and hierarchy. We went from a building with 31 floors and hundreds of private, closed-door offices to a much more open environment. It's a place where people matter. The entire building is your office, and within the building everyone works collaboratively. Paul H. O'Neill, Alcoa Chairman and CEO

Given differences in age and attitudes, perhaps it is time to start considering an "any and all plan" approach to standards. This means designers not only have to look at the functional requirements of work tasks, but also at the psychological elements. If older workers are thrust from a private office into a typical open teaming work environment with no walls, they may feel demoted and demoralized. If younger knowledge workers do not have access to enough technology, they may leave the company.

Age affects reactions to physical workplace environment. Baby Boomers (age 35-54) tend to be activists about the physical workplace environment because they know they will spend a lot of time there. As a result, they complain more readily about aspects of the environment they do not like. Generation Xers (age 18-34), by contrast, will not complain about an unsatisfactory physical workplace environment; they are more likely to leave a job than try to correct the situation. ASID/Haworth Survey

Young people coming into the workforce have high expectations regarding work, a career, the company and industry they will work in, and the workplace environment. People later in their career have different expectations depending upon various social and demographic factors. Young people expect superior accommodations. They have more disposable income than prior generations; they have been given to and provided with the "best" schools and equipment; they have been schooled in "open" classrooms with team teachers; they want the "best" products when they buy consumer goods or services. Based on their experience, they expect the hardware and software to enhance their performance. Ron Goodrich, WCE Psychologist





Why not seek equipment, furniture, and space solutions to accommodate both generations, instead of a rigid standard that serves neither? New furniture product lines have many options that allow individuals to tailor their personal work space. Today more of a “parts package” approach is needed similar to the auto industry where a consumer buys a particular model and customizes it from the upholstery to the CD player. Could “cafeteria” benefits be expanded to include “cafeteria” work environments?

The solution is to establish the coexistence of multiple planning concepts. Instead of one across-the-board, “one size fits all” set of space standards, there needs to be more flexible variable standards. These space standards will be driven by technology and the new work force. Office furniture and layouts must be designed to adapt quickly to changes in how business is conducted.

“In the fast-paced, ever-changing world of today’s organizations, space plays an important role in the organization’s ability to sustain rapid growth and change. More and more often, organizations that have not thought strategically or planned properly are finding that their ability to grow is constrained by the physical limitations of their existing space.”
Edward “Skip” Lange, WCE
Organizational Consultant

Flexibility has been the topic of facilities management for well over a decade. Flexibility used to be thought of as the capability to reconfigure work stations once or twice a year. Today flexibility calls for virtually daily flexing of a facility to address new work habits, attitudes, and technology.

As changes occur, it is critical to involve technology, human resources, and financial departments along with the users at the space. Everyone the change affects should be included in the process.

Organizations must allow more opinions from the user groups into the process for developing built-environment criteria. Furniture, interiors and facility infrastructure are key tools for dealing with today’s chaotic work environment. These tools, as all tools, must be adaptable to the ever-changing needs of the knowledge worker. The users must adjust address specific activities and tasks.” Paul Barnette, WCE Architect

Issues for Team Work

Team space should be designed to accommodate three sets of paradoxes: level of confidentiality vs. open communication/displayed thinking; level of mental concentration vs. space for interaction; and level of autonomy vs. team work. Several rules that can apply to a facilities assessment for a teaming environment.

- First, remember that the level of openness in the workspace is directly proportional to the degree of teaming.
- Specifically, team clusters with 65" high panels provide privacy but only minimal teaming. Team clusters with 48" high panels still provide privacy, but encourage more teaming. Team suites that lack panels are designed for intense teaming and employee interaction.
- Also, to support face-to-face communications, additional space should be created for team activities, while simultaneously reducing individual workspace sizes to conserve space.
- Autonomous workers, such as computer programmers, some attorneys who work alone and research scientists, may be accommodated most suitably with a private office or fully-enclosed work station. This arrangement meets their need for confidentiality, mental concentration and autonomy.
- A conventional team cluster set up, meanwhile, may be best for traditional workers, such as accountants, financial analysts and those knowledge workers who need some privacy, but also need to interact.
- At the same time, support workers, secretaries and clerks although diminishing in number, must be readily accessible and can work well in open workstations.
- Team workers, including project teams, sales representatives, architects, engineers, designers and real estate brokers, are best situated in totally open team suites where they can communicate freely, interact easily and work as a team.

FOOTNOTES

- (1) What's An 'Exit Strategy'? *Buildings Magazine*, June, 1998
- (2) Too close for comfort? How companies are putting the squeeze on work space, *Los Angeles Times*,
www.jobfind.com, Madeleine Begun Kane, 3-15-99
- (3) Strategies for Corporate Real Estate: When Volatility Is Constant, Banker & Tradesman, Eileen Circo, June, 1996
- (4) PC World, "All the Monitor That Fits Your Desk," *PC World Monthly*, Rex Farrance 08-01-1998
- (5) Investment: Sensing changes ahead in balance of risks., Independent, Jonathan Davis, 05-26-1999, pp 5.
- (6) Welcome to your office of the future, *Midwest Real Estate News*, Jeff Harrington 06-01-1997.
- (7) What's An 'Exit Strategy'? *Buildings Magazine*, June, 1998 Stamats Communications, Inc
- (8) Strategies for Corporate Real Estate: When Volatility Is Constant, Banker & Tradesman, Eileen Circo, June, 1996
- (9) Wild ride for the future ahead, *Computerworld*, Mark Borsuk, 3-23-1998
- (10) High-Tech Labor Hunt Commerce Dept. Says Companies Must Look, Michael J. Martinez, ABCNEWS.COM, July 1, 1999

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