

Revisiting Office Space Standards

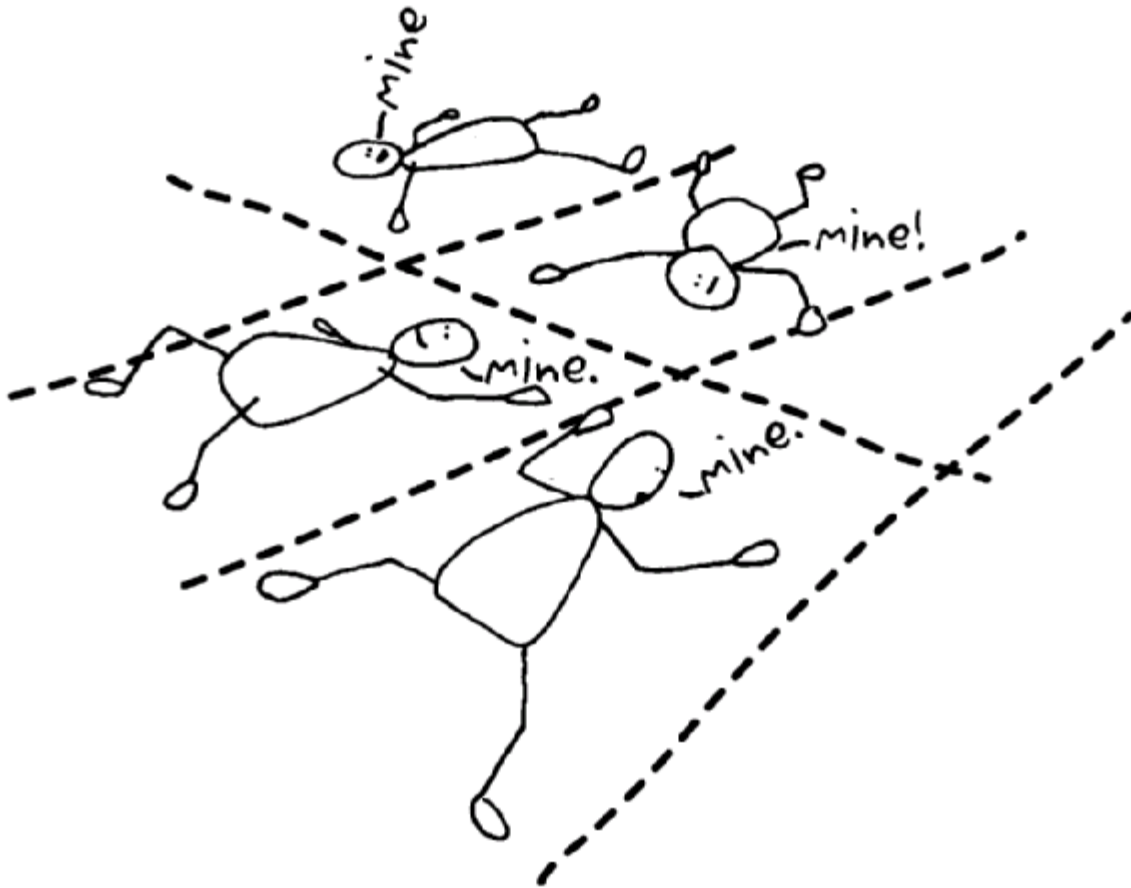


Illustration by Laura Staub

Judy Voss -- June 2000

HAWORTH®

©Haworth, Inc.
One Haworth Center
Holland, Michigan, USA 49423
www.haworth.com

Revisiting Office Space Standards

Office space has been getting a lot of attention lately. After staffing, office space is typically an organization's second largest expense. Also, because office space can impact the ability to recruit, and the satisfaction and productivity of employees, many organizations have been taking a very careful look at how their space is working for them and are revisiting their space standards.

- Part of the reason for re-evaluation is that organizations are trying to free up space for more collaborative work processes. In order to make room for new gathering spaces, individual workstations are often re-sized.
- A recent building boom in office space has also renewed interest in space planning. 110 million sq. ft. of new office space is forecasted to be built in the U.S. during 2000—the same high level as last year.¹ When building a completely new space, there's a prime opportunity to seize the day and get it right.
- Mergers, acquisitions and globalization also lead to space analysis. The value of announced cross-border mergers & acquisitions surged to \$1,100 billion in 1999. Organizations are looking for ways to use their workspaces to communicate a sense of their corporate cultures across the world. Even within one country, merged companies with varying workplace standards can use the standards-setting process as a tool to reach consensus on how work will be supported.
- Many organizations are also undergoing fundamental changes in their work processes. For some organizations moving to internet-based business models or making other significant changes, traditional workspaces may no longer work well. These organizations don't want to give up standards, but know that they need new approaches.

Ultimately, most aspects of workplace design relate back to cost. It is well worth the effort to balance costs with the harder to calculate, but larger potential productivity gains a truly supportive office space can foster. In the U.S., "Assuming an employee salary of \$48,000, the benefits of an appropriately designed workplace range from \$1,440 to \$7,200 per employee"². This amounts to 4.7% to 23.7% of the average corporate profits when broken down to a per-employee basis.

Concern for people and processes, moves to new spaces, and the need to integrate global operations and control costs are all driving a renewed interest in how the best offices work.

International differences influence space standards

Private offices and team spaces tend to take more space than standard cubicles. Per the 1999 BOMA Experience Exchange Report, the average U.S. cubicle is 90-sq. ft., (including

¹ Torto Wheaton: The U.S. Market Outlook: 2000. December 15, 1999.

² Fischer, Glenn. February/March 2000. Leap Into Future Space. Buildings Interiors. 8-BI.

management stations), while the average private office is 186 sq. ft. Bullpen spaces for multiple workers average 1,402 sq. ft. Many jobs in IT programming also use private offices of around 120 sq. ft. Published space studies may seem generous however. Recent U.S. projects tend to allot about 64 sq. ft (8' x 8') for a typical office worker, and some go as small as 48 sq. ft (6'x6').

In Europe, private offices and team spaces (or "group rooms") are commonly used. There are also many national building and employment codes requiring specific working conditions. For example, European workers have a right to be near windows for natural light and ventilation. This basically outlaws the kinds of very large floors North American offices typically have. There are also more worker councils in Europe than in other parts of the world so there is employee, as well as governmental enforcement of workplace quality standards. Northern Europe has a strong tradition of private or semi-private offices being of higher status, as does North America.

In the U.K. and Europe today, there is some shift toward more alternative officing with new spaces being developed to support collaboration and alternative work styles. Varying real estate costs also have some influence on office sizes throughout the U.K. and Europe, with London being at the high end of the cost scale.

European Space Standards³

City	Average Space per Employee	
Central London	181 sq. ft	16.8 m ²
Frankfurt	274 sq. ft.	25.5 m ²
Amsterdam	258 sq. ft.	24.0 m ²
Brussels	258 sq. ft.	24.0 m ²

U.K. office standards are quite similar to the U.S. and tend to be smaller than on the European continent.

Typical space standards in the U.K.⁴

Function	Type of Space	Typical Office Size	
Senior manager/director	Private office	215 - 323 sq. ft.	20-30 m ²
Manager/head of dept	Private office	161 - 215 sq. ft.	15-20 m ²
Manager/Professional	Private office	108 - 161 sq. ft.	10-15 m ²
Professional	Group room/open plan	97 sq. ft	9 m ²
Secretarial/Administration	Open plan	97 sq. ft.	9 m ²
Clerical	Open plan	75 - 97 sq. ft	7-9 m ²
Dealer (Trader)	Group room/open plan	65 - 97 sq. ft.	6-9 m ²

In the U.S., offices are trending slightly smaller for professional and managerial job grades per the two most recent IFMA surveys.

³ Juriaan van Meel. 2000. The European Office: Office Design and national Context. 010 Publishers. 62.

⁴ Juriaan van Meel. 2000. The European Office: Office Design and national Context. 010 Publishers. 61.

U.S. Space Standards

Job function	Space per Employee - 1994 ⁵		Space per Employee - 1997 ⁶	
Upper management	289 sq. ft.	26.9m ²	280 sq. ft.	26.0 m ²
Senior management	200 sq. ft.	18.6m ²	193 sq. ft.	17.9 m ²
Middle management	151 sq. ft.	14.0 m ²	142 sq. ft.	13.2 m ²
Senior Professional	115 sq. ft.	10.7 m ²	114 sq. ft.	10.6 m ²
Technical/Professional	90 sq. ft.	8.4 m ²	92 sq. ft.	8.6 m ²
Senior clerical	81 sq. ft.	7.5 m ²	84 sq. ft.	7.8 m ²
General clerical	69 sq. ft.	6.4 m ²	73 sq. ft.	6.8 m ²

In the U.S., private offices are concentrated at senior management job levels. The use of open plan predominates for professional, technical and clerical workers.

Typical space standards in the U.S.⁷

Function	Type of space	Typical Office Size	
Upper management	95% private office, 5% open plan	280 sq. ft.	26.0 m ²
Senior management	85% private office, 15% open plan	193 sq. ft.	17.9 m ²
Middle management	65% private office, 34% open plan, 1% group room (bullpen)	142 sq. ft.	13.2 m ²
Senior Professional	39% private office, 60% open plan, 1% group room	114 sq. ft.	10.6 m ²
Technical/Professional	15% private office, 80% open plan, 5% group room	92 sq. ft.	8.5 m ²
Senior clerical	9% private office, 86% open plan, 5% group room	84 sq. ft.	7.8 m ²
General clerical	5% private office, 82% open plan, 13% group room	73 sq. ft.	6.8 m ²

The U.S. became highly driven by office standards in the 1980s because standards facilitated quick absorption of new space and new employees. There were large increases in employment during that time and consistent furniture and space plans made this growth more manageable. During the 1980s, most organizations used up to 13 different office standards, based on job levels. Offices were used to reward people, and to visually communicate subtle status differences.

In the 1990s, a need to simplify office planning was driven by increasing rates of change. It was difficult to move people quickly when offices had to be exactly matched to job levels. Most organizations pared down to as few as three different office sizes and configurations so most workers could be moved into existing spaces with minimal changes.

Per IFMA, 31% of organizations are now using consistent written standards to manage workspace allocations. 32% are using written standards with exceptions and 28% don't have written standards, but do follow consistent practices. 9% make space decisions case-by-case.⁸

⁵ International Facility Management Association. 1994. Benchmarks II

⁶ International Facility Management Association. 1997. Benchmarks III

⁷ International Facility Management Association. 1997. Benchmarks III. 31-32.

⁸ International Facility Management Association. 1997. Benchmarks III. 30.

The “lean and mean” movement also caused many organizations to pare office sizes down as far as possible to save real estate costs. The result is that many professional and technical workers in the U.S. today have offices as small as 6’ x 6’. This re-sizing resulted in higher densities than many office floor plates were set up to accommodate so HVAC, acoustic support etc. had to be adapted. Most large organizations now routinely measure costs and other performance data about their spaces. Along with more use of user-moveable furniture and less concern about adherence to strict workstation standards, there is a higher degree of interest in overall workplace cost control.

How Small is Too Small?

This depends partly on national culture, partly on corporate culture, and partly on the science of *anthropometrics*—or allowing humans comfortable space and room to move. Increasingly, it also depends on work style.

In highly collaborative work groups, where the bulk of the day is spent in meetings or out visiting customers, a very small workstation may be perfectly adequate. Some consulting firms for example, have reduced individual workspaces to around 30% of total leased space because not all employees are in the office most days. For people who do work in one place most of the time however, feeling crowded in a small space would be stressful.

Cultural issues also influence the perception of “enough” space. North Americans and Northern Europeans value having personal space. Large offices have traditionally been used as rewards in these regions too; reinforcing the bigger is better mentality. In parts of Asia however, an office may have a spacious feel relative to the worker’s home environment.

Perception of workstation sizes is also a matter of comparison. If your peers have bigger offices—your office will definitely seem too small. Psychological research has also flagged a loss of space vs. just-prior condition (your last office) as a potential performance issue. "Analysis found a substantial decrease in job satisfaction for workers whose workspace floor area has been reduced by more than 25%."⁹

True space requirements depend on anthropometrics, or human body measurements. Offices need to accommodate people physically and let them move while doing their jobs. More space would always be appreciated for storage, visitors and greater movement, but these are absolute minimums.

Application	Minimum Requirement Ranges ¹⁰ - United States	
Two people can meet in an office with a table or desk between them - such as a supervisor and an employee	60-72" x 90-126"	5.78 m ² - 11.7 m ²
Worker has a primary desk, plus a return	60-72" x 60-84"	5.78 - 7.8 m ²
Executive office: 3-4 people can meet around a desk	105-130" x 96-123"	9.75 - 11.4 m ²
Basic workstation - such as a call center	42-52" x 60-72"	3.9 - 6.7 m ²

⁹ Brill with Stephen Margulis, Ellen Konar & BOSTI . Using Office Design to Increase Productivity - Volume One, Workplace Design and Productivity, Inc., Buffalo, NY, 1984, p. 108.

¹⁰ All sizes are from Panero, Julius and Zelnik, Martin. 1979. Human Dimension & Interior Space.

Minimum size standards vary by country. A Dutch or Danish workstation minimum would be 7 m² excluding circulation and filing space. German regulations prescribe 8 m². U.K. offices would average about 6 m².¹¹

Standards 101

Developing standards, or programming, is typically the first step in a space design process. This process can be fairly detailed and time-consuming. The benefit is not only that it makes the initial space design successful, it can also provide a long-term plan for the organization to use over multiple spaces, in multiple countries.

A professional designer or a member of an in-house Facilities department usually leads this process. The basic elements typically considered include:

- What is the total available space?
- What is the staffing plan? How many more people will be added to the space over time?
- Which pieces of technology do individual workers have? What does each group share?
- Who interacts on a daily basis? Which other interaction patterns may influence adjacencies?
- What is the structure of the workgroup(s)? What are the status differences and how are they communicated/shown by the organization?
- What are the work styles and processes?
- Which specific pieces of furniture do the people in these jobs need?
- How much storage and what types do people need in their workstations?
- What kinds of storage and work support are needed in shared group areas?
- What kinds of adjustability is needed – keyboard, chair, work surface heights etc.
- Any special ergonomic or ADA concerns or requirements?
- What are the aesthetic preferences or expectations?
- What are the HVAC and lighting capacities? Will those be adequate when the layout changes?
- If a global standard, what are the cultural considerations about personal and shared spaces, colors, work styles etc.?

Observation will also reveal space needs that people might not think of when filling out forms or being interviewed. Are there lots of hallway meetings going on because there is nowhere else to go? Are offices spilling over with “stuff” because there’s not enough storage? Have people started bringing in their own furniture or making their own ergonomic interventions such as cardboard monitor glare guards or using phone books as monitor lifts? Observations like this all point to a need for change.

Over the past few years, many organizations have taken programming to a higher level by looking into how they want people to feel while working in or visiting a space, or how a space could influence work to be done in a fundamentally different way. Looking at ways to

¹¹ Juriaan van Meel. 2000. *The European Office: Office Design and national Context*. 010 Publishers. 71.

spread a corporate culture around the world, without ignoring local differences can also be part of this deeper look. Working with an outside design firm is often helpful in this process because of their exposure to national and international trends and practices.

After this information is collected, some basic decisions have to be made about how much space each person, and each group will get. With the basic space standard decision made, the designer can go ahead with allocation of space locations to different groups, and to individuals within those groups. Basic furniture specifications can then be put together along with a budget for the new space. Each step of this process can involve reviewing options and negotiating to get the best work support possible.

Conclusion

Growing organizations often find that they don't have the space to give every worker an appropriately sized area. The temptation is to simply divide the total space by the number of people and call it a plan.

People can work in a cramped space for awhile, especially during the exciting start-up phase of a company or project. But over time, the best way to support productivity and encourage employee retention is to offer appropriate space that supports the work being done. That doesn't just happen - it takes a plan.

It's worth doing standards right as a way to research and plan for future growth and space requirements. Standards can help set the timing and justification for moving to another building. Standards can also help organizations prevent individuals and groups from claiming excessive space and causing dissatisfaction among their colleagues.

Setting standards and reviewing them periodically helps employers to stay in touch with how workers' jobs and needs are changing. Reviewing how offices support workers and the work being done is an integral and important part of overall corporate planning.