

The High Performance Office

How to Design a Comfortable Workspace that Encourages Productivity

By Jackie Tiani

Workers who are satisfied with their environmental conditions are more comfortable and productive. Full time workers spend most of their waking hours at the office, so the way it is designed has a tremendous effect on morale and performance. Working in a pleasant environment involves not only how an office functions, but also how it looks and feels to its workers. The focus of office design must strike a balance between production efficiency, aesthetics and ergonomics. You can create a high performance office by carefully planning office design.

Functional Analysis

The ultimate office design solution begins with an assessment of human needs. The need of a one-person office differs greatly from that of a large corporation occupying many floors in a high-rise office building. It is essential to understand the spatial and functional needs of each individual type of office and type of worker within an office. Even if your office is already set up and functioning, it may be a useful experience to reassess your needs and workspace arrangement.

The first step to creating a high performance office is to develop detailed organizational charts. The most efficient and functional use of space can be determined by reviewing the organization of the company, analyzing the interaction between employees, departments and the public, and establishing a connection between workers and equipment.

Communication is a vital part of daily office functioning. Workspace placement should be based on patterns of communication. Evaluate whether there is interaction with customers or clients (by phone and face-to-face), between employees, and between departments. Prepare a diagram depicting the lines of communication in your organization. Consider who needs to work with whom, which employees share what information and resources, and which workers may need to acquire the skills of others. Grouping these people together can enhance productivity.

Space Requirements

The cost of space, how it is used, the frequency of its use, who uses it, and how it is arranged all figure into the productivity equation. In a service company, the two biggest expenses of doing business are labor and housing. The high cost of space is a limiting factor that requires careful planning, and companies are rethinking space requirements. Flexible environments have become an ideal solution for both a larger organization with a team building emphasis, as well as small companies where the business owner doubles as salesperson.

To determine the amount of workspace required, perform a task analysis to evaluate the job function of each worker and the equipment necessary to perform tasks. Personal computers, printers and fax machines can overcrowd a single workstation. Proper space configuration and furniture selection can help to eliminate that “boxed-in” feeling while improving efficiency.

Floor Plan

Whether you are building from scratch, reconfiguring the layout of an existing office, or simply evaluating your workspace to achieve maximum efficiency, begin with a floor plan. Even if it is a rough sketch, prepare a scaled plan of your office space. With this plan, you will see how it will look and function *before* you implement the design. Make sure that your office is arranged properly the first time, and save yourself money, time and energy rearranging later on.

Companies with substantial budgets have access to computer aided design (CAD) software, but reasonably priced software is available at your local computer store which enables you to draw a basic design to scale with the help of your computer.

If you want to use paper and pencil, grid or graph paper is available in your local office supply store. Measure and draw the outline of the space and mark doors and windows. Create symbols to map out existing electrical outlets, switches, and telephone and network jacks.

To determine how much floor space the furniture will occupy, cut out squares, rectangles, circles and other shapes to scale to represent the width and length of each piece of furniture. Use repositionable glue on the back of your “furniture”, so that you can arrange and rearrange until you are satisfied with your design. Consider privacy, ease of communication, placement of workstations, and proximity to equipment and supplies. Plan for adequate storage, conference and assembly needs. Allow space for the free flow of traffic and for opening doors and drawers.

As technology evolves, the space needs to be capable of serving both your present and projected needs. Plot out the optimal arrangement of electrical outlets on your floor plan, taking into consideration your furniture selections and modular panels with wire and cable management. Never discard a preliminary sketch, which may reveal a solution to a problem in a later sketch.

Traditional Offices vs. Open Work Areas

Working together as a means to encourage communication, foster creativity and increase productivity has given rise to the concept of the interactive setting. As the popularity of office space designed to accommodate group work has increased though, attention to the needs of the individual has become neglected. People brainstorm in groups, and individuals must have a time and space to think. Anything that gets in the way of either way of thinking affects the creative process and performance. Teamwork and individual work are equally important factors in the productivity equation, and office designs must maximize the performance of both teams and individuals. The most popular office layouts offer flexibility.

An open office plan increases opportunities for learning and social interaction, and facilitates supervision and monitoring. Yet everyone needs some degree of privacy in the workplace, whether to concentrate or to discuss sensitive issues. A separate office may be necessary in situations where there are phone conversations or business meetings that should not be overheard by others, or where information in files or records must be kept confidential.

Don't overlook the need for workspace conducive to concentration for individual tasks in your office design. Research shows that certain jobs, like computer programming and technical writing require more privacy than other jobs, such as product design. How much and what type of privacy one needs to get their work done productively is a matter of personal preference. The ability of workers to screen out distractions can affect their productivity. Some people need to be shielded from distractions; others can easily ignore noise and commotion. Others function better when there is activity and involvement with others. No design can be all things to all people.

There are some ways to personalize spaces in open work areas to increase work productivity and satisfaction. Moving flexible partitions can minimize visual distractions. Piping background music into the work area can mask conversations. Work areas near passageways, equipment centers and windows with busy views can be used for workers with good screening abilities. Those needing to be shielded from distractions can be placed near interior walls, inside corner spaces and quiet views.

The psychological aspects of office design are as important as the physical dimensions and can greatly affect productivity. The perception of individual control over one's work area is important when designating office conditions. Exposure to unavoidable distractions decreases one's sense of control. Give people the opportunity to participate in planning the office design. Ask them about the physical and sensory elements in their work environment. Ascertain worker's preferences before arbitrarily imposing a work area configuration.

Hoteling, or working from an office where workers do not have a permanently designed workspace allows for consolidation of space. An increased number of employees are working from home, making one or two trips to the office a week. There is a strong trend towards adaptable interiors, and many office buildings are becoming more like hotels, with freelance employees "checking in" for work.

Drop-in Offices are designed for handling individual tasks. They flexibly equipped with phones, computers and equipment, and can be used on an "as needed" basis.

Project Rooms are equipped similarly to drop-in offices, and are designed to facilitate long-term teamwork.

Office landscaping, or modular offices, offers flexibility, adaptability and compatibility. Working without walls, though more costly to construct than standard walls, saves space and may accommodate changing work patterns quickly and inexpensively. Carpeting floors and using acoustical ceilings can reduce the noise that comes with the loss of privacy.

Furnishing Your Office

It may be a temptation to cut corners on furnishing your office, especially when your budget is limited. The way your office is furnished may be low on your priority list. You might think nice furnishings are only necessary when you have to impress clients or customers in your office.

But your choices in this area go beyond style and aesthetics, and a wise investment in furniture and equipment will actually maximize business value. Sturdy file cabinets, comfortable chairs and suitable desks are critical to

your own and your workers' performance. Worker-driven amenities pay for themselves through increases in productivity. An attractive office that is functional conveys a positive message to the public.

Furniture - Buy furniture for its functionality, not for image. Define your furniture requirements by what you and your employees need to work effectively. Choose desks with adequate space for your computer and flexibility for organizing supplies, paperwork, equipment and desktop items. Compensate for a lack of floor space by furnishing your office vertically. Use shelves that reach the ceiling, and are only as deep as necessary. Use wall space for hanging files, lights, and telephones. The tops of file cabinets can be used to hold peripherals, such as printers and scanners.

Modular vs. Built In - Built-in furniture fits your workspace perfectly, and wins when it comes to visual appeal. But once your furniture is built-in, modifications are expensive or impossible to complete. Modular furniture offers much more flexibility, is ergonomically sound, and makes better economic sense. If you move, you will be able to take your modular system with you and re-configure it. As technology and your needs change, modular furniture can be easily modified.

Equipment - The electronic office has helped to improve office efficiency, but the enmeshment of equipment, components, power cords, and cables are often the cause of worker frustration. Plan the workspace so that it harmonizes the worker and the equipment, making technology more effective. Make sure the equipment is not just functional, but is ergonomically sound and creates a comfortable and safe working environment, to help reduce stress and improve performance.

Other Office Design Elements

A nicely furnished office involves more than finding the right furniture. The lasting nature of a design can directly affect the profitability of a business. Choice of a design that may be popular many years from now may help a business to avoid an expensive remodeling project. A well-designed and properly organized office will put you at a major advantage in terms of productivity. Studies show that even air quality and acoustics influence task performance, and are critical elements of a high-performance office.

Air Flow - Keep fresh air flowing to aid concentration. Office equipment generates excessive amounts of heat. Without a reasonable amount of fresh air being circulated throughout the building, worker productivity is stifled.

Acoustics - Uncontrolled or fluctuating noise levels are disruptive to worker concentration. A good acoustical ceiling is the best way to control noise in an office. Too many overhead lighting fixtures will cause sound to bounce around the office and raise noise levels. Wall panels in systems furniture can also absorb and block the pass-through of sound. Remove noisy office machines from the general office space.

Traffic and Work Flow - An efficient workspace allow workers fluid movement from one task to another. Allow ease of access to shared workspaces. Place permanent files in remote locations. Design your own workspace with you in the center, so that you are able to perform multiple tasks within reasonable reach.

Color - Color reflects the personality of the business. It also affects mood and perception of space. Provide a relaxed atmosphere in work areas by using muted colors. For public spaces like lounges and lunchrooms, use bold, attractive colors for refreshing variety

Lighting - Worker concentration is improved in a data-driven environment by reducing glare, so decrease the number of overhead lighting fixtures and use more supplemental task lighting. Sunlight is not essential, in fact studies have proven that office windows have little impact on job performance and environmental satisfaction. But providing unrestricted access to windows creates a bright environment that boosts employee morale, so leave a window line open. People who work on the interior like to share the fact that it's sunny, cloudy, raining or snowing.

Ergonomic Considerations

How you lay out your workspace and interface with it has an immediate impact on both your productivity and your health. The way you sit, stand, move around, view your computer screen, and position your keyboard or mouse can be hindered or improved based on your environment. According to the U.S. General Services Administration, "the quality and suitability of the workspace greatly affects the productivity and well-being of those using it." Well-designed workspaces reduce worker fatigue, injury and discomfort.

OSHA and ADA compliance and local zoning have made an efficient office much more difficult to design, however ergonomically designed workspaces ensure employee production and health. The initial investment to the employer is offset by a noticeable increase in productivity and profitability. Facilities operation expenses are reduced as high employee turnover, absenteeism, and work inefficiencies are brought into control through well-designed workspaces.

Purchasing furniture and equipment suitable to the physical and psychological limits of individuals can prevent repetitive stress injuries and other disabling disorders.

- An easily adjustable chair that allows a neutral body position
- Frequently used items positioned within arms reach
- Telephone headsets, to avoid cradling the receiver between the head and shoulder
- The computer monitor positioned at or slightly below eye level, 18"-28" from the eye
- The keyboard and mouse at a height that allows the arms to form a 90 degree angle at the elbows, and the wrists straight and parallel to the floor

Integrate all elements of the office environment to create harmony in the workplace and give a sense of wholeness to its occupants.