Eight Critical Console Design Elements

By Michelle Koss

1. PLAN AHEAD:

Designers and clients should think about, and even mentally walk through, the details of the workspace to ensure that all aspects of design have been addressed. Some areas to consider include the layout and flow of consoles/workstations, supervisors and management areas, server/equipment rooms as well as meeting areas. Additionally, the location of restrooms, break rooms and common areas should also be considered. One very critical element often-forgotten are design obstacles such as corners, columns, and utility access.

Sometimes the best way to determine the ideal floor plan is to try a variety of different floor plan options to maximize the number of users per square foot while still providing an effective flow for the operations center.

Of course, the final floor plan needs to ensure that all OSHA requirements (which vary by state) at met.

2. ERGONOMICS:

Ergonomics has become an integral part of the design of command/ dispatch control center equipment and environments. The implementation of a proper ergonomics program has been shown to positively benefit both the operator and the employer. Some of the advantages of good ergonomics include:

- Increased productivity
- Improved work quality
- Diminished worker compensation claims
- Heighten worker satisfaction

Without question, ergonomic consideration is imperative to the design of command /dispatch control center equipment. Proper implementation of ergonomics not only enhances the health and well-being of the operator, but also the productivity and efficiency of the company as a whole. Realizing the great importance of ergonomics thus should be adapted into the design philosophy of the furniture.

3. IMMERGENCE OF NEW TECHNOLOGY:
The single greatest impact on future console furniture designs will be the continuing evolution of communications, computing and particularly, display technology, along with changing approaches to their utilization.

Industry trend toward smaller, lighter flat panel displays creates new challenges for mounting solutions and significantly alters the furniture landscape. Foremost of the changes are reduced need for heavy-lift leg mechanisms and decreasing real estate requirements for the primary work surfaces. This trend is compounded by increasing placement of CPU's and other technology in locations remote from the console- further reducing space and storage requirements for each position.

As a result, console designers will be challenged to find new ways to integrate changing input and display technologies, but they also will enjoy greater freedom to explore sleeker, move attractive designs. The rapid pace of change is likely to result in a need for today's console furniture to support two or more generations of technology during its expected lifespan This challenge is amplified by increasing space constraints within command centers and individual consoles.

4. CONCEALED YET ACCESSIBLE:
If a command/dispatch center is designing its own building, the layout of the wiring and cables should be factored in, but when moving into an existing facility, careful consideration must be given to the console furniture that both conceal unattractive wires, yet also allow for accessibility when required. Be sure to research console solutions that offer generous channels for wires and cables and that allow connections between consoles.

As console designs change, and particularly as they decrease in size, work surface clutter becomes a critical issue, increasing the need for components designed to clear distractive items that find their way into sight lines and reach zones.

One solution to this issue involves full-height off-station storage cabinets. These units can be designed to accommodate cpus and other below worksurface technologies, shared material such as binders, SOPs, files maps, and personal items such as beverages, food and clothing.

An alternative to off-station storage is to utilize the understructure frame of the console. This area can double to accommodate cpu trolleys, mobile/fixed pedestals and miscellaneous rackmount gear.

The adaptability of new furniture designs allows for the reconfiguration of monitors, rack-mounted equipment, cpus and other equipment by building multiple access points, storage space and wiring routes.

5. PERSONALIZING THE USER ENVIRONMENT
While user console controls have been a mainstay of dispatch console design, few significant improvements have been introduced in recent years. However, in 2004 a new generation of console management technology emerged.

Major aspects of console management include increased lighting, ventilation and heating control, height adjustment, and energy management. In the past, available options have been extremely limited in these areas, and there was even less flexibility after the original console purchase.

6. DESIGN FEATURES:
One element that is too often underestimated is the strength and durability of furniture that will be subjected to the rigorous 24/7 console center environment. Console lifecycles average eight years encompassing 8,760 hours of use per year, or the equivalent of 24 years in a normal office environment. Existing durability standards are based on far lower levels of use have little bearing on how 24/7 consoles will hold up- particularly considering the frequency of height adjustment, density and uneven distribution loads.

The new generation of integrated console management technology provides mobile air delivery units, increased lighting and heating. In fact, while console furniture represents a relatively small portion of the investment in a new or improved facility its durability, flexibility, visual appeal, and ergonomic value can have a tremendous impact on the success of a project...

Research consoles designed for unparalleled durability. Rugged and steel modular based frame systems allow for the use of standard modules to create various configurations and visual layouts. Such modularity means that the panels and cladding can even be removed without affecting the structural integrity of the console, while making future reconfigurations and retrofits easy.

7. CUSTOM MANUFACTURING APPROACH:
In designing console furniture, the "tasks/services being performed" should be taken into consideration and the command console designed accordingly. The furniture should be designed to facilitate the environment and the work being performed. Individual company "cultures" or "environments" can range from privacy concerns- to "open" call center floor- to the creation of "team" environments whether users openly communicate and share information. This then drives the console design in terms of panel heights, size and design of the station and the grouping of users. If the furniture is specifically designed for the individual command/dispatch center environment then the furniture will enhance productivity of the center- and thus the profitability.

8. SOLE SOURCE PARNTERSHIP:
Look for a full-service/Turn-key company that will provide project specific design. Turn-key providers should not only specializes in innovative furniture solutions, but offer those items of project enhancement such as video wall furniture, storage cabinets, meeting tables, chairs, server enclosures as well as hardware products as they are related.

Request a single-point-of-contact. This contact should help develop the Scope of Work and manage all aspects of your project.

Last but not least, using one partner makes it easy to find replacement of additional parts and new purchasing easier when expansion is required.