

“The Times They Are A-Changing,”: FMs Answer with Updated To-Do Lists

by **Rodney Stone** and **Subodh A. Kumar**

Bob Dylan wrote, “The times they are a-changing,” an adage that for today’s facility managers could not be more true. From an entirely practical focus, facility managers’ commercial design “to do lists” will become more creatively pragmatic. But one constant will remain: the importance of technology to increase efficiency. With a drive toward “make it work” solutions that ensure tangible value in every project, below are some of the hottest topics heading FM’s to do lists.

Technology across the generations

For the first time in the history of the workforce, four generations are working side-by-side, in all roles and all levels of responsibility, and all with varying degrees of technology experience. Facility managers must understand the unique needs of these workers and provide options that allow them to take full advantage of the technology, their office and their world. From laptops with docking stations to permanent workstations, to PDAs and cell phones, facility managers need to create flexible and accessible environments.



Figure 1- A “virtual highway” makes power and data connections available almost anywhere without unsightly wires and cables.

For example, a financial company who needed to attract young employees—who typically look for a “hip” corporate culture that allows them the freedom to do their job anywhere, even sitting in the outdoor courtyard—created a “virtual highway” for employees on the move, making power and data connections available almost anywhere in the office.

Whether renovating or building new facilities, the key to success is assembling a technology inventory by department that identifies current needs, as well as changes that may occur in the short-term (five years) future, and using it to create a design that meets those objectives in advance. (See Figure 1).

Life cycle costs

Life cycle cost (LCC) includes the cost of a system or product over its entire life span including planning, research and development, production, operation, maintenance, cost of replacement and disposal or salvage. Equipment and furnishing life cycles span a broad range with “soft” materials like flooring and furniture lasting between three and 10 years to large equipment such as HVAC and building infrastructure, which can last between 10 and 30 years.

To evaluate life cycles, FMs must consider the initial costs including capital and administrative expenses; facility operating costs such as operation (energy usage, operation costs), maintenance costs (cyclical replacements, credits, revenues), as well as loss of use or alternative use costs; and financing costs including the tax implications, discount/interest rates, escalation/inflation rates, financing options, the time value of money and salvage and residual values. Together, these will provide a close estimate of total LCC, by comparing competing products for the life expectancy of the project.

Life cycle costs (continued)

One large residential and commercial lender used this formula and found that purchasing an energy efficient AC unit that initially cost more but qualified for rebates, actually cost less to operate, and lasted nearly 50 percent longer than less expensive models. In addition, recognizing that the cost of replacing carpet included labor, materials and loss of productivity, the firm opted for hard surfaces such as stone, granite and marble at building entrances and in high use areas to maximize the flooring life cycle. (See Figure 2).



Figure 2 - Hard, durable, long lasting surfaces that can be cleaned easily with water rather than abrasive cleansers increase LCC

Value

At first, this may seem to put FM's in a quandary, as it appears to contradict the goal of maximizing LCC. In reality, it's one leg of the Value Triangle that includes quality, LCC, and time. When any leg of the triangle changes, it impacts the other two. If the goal is to renovate in the smallest amount of time possible, hence with the least disruption, the Value Triangle grows.

Good design adds value and improves the company's image as well as productivity of its employees, yet it doesn't always translate to added costs. A large financial institution wanted to extend the rich tones and textures that came from deep reddish-brown wood panels and reveals that lined the walls of the executive area. To achieve the same look and feel Environetics recreated the same detailing using less expensive gypsum board, resulting in image duplication without the high cost. (See Figures 3a and 3b).



Figure 3a - Rich tones and textures from deep reddish-brown wood panels and reveals line the walls of the executive area.



Figure 3b - Outer areas created using less expensive gypsum board, provide a duplication of rich wood paneled executive offices without the high cost.



Sustainability

LCC are an integral part of sustainability initiatives, and are tallied as points for a LEED application. Sustainability is now standard operating procedure. FMs should ensure that sustainability is a primary consideration across all aspects of design, from lighting—incandescent vs. fluorescent, to flooring—carpet vs. hard-surface. In addition to the types of materials, the composition of materials is an important factor. What percentage of the item is made from recycled content? Are the items recyclable for the future? Do the materials reduce or eliminate volatile organic compounds (VOC) and their contribution to the carbon footprint? Also consider the distance from the project site and manufacturing location. (See Figure 4).

Doing more with less

With management, FMs are identifying ways to increase the efficiency of space use while boosting productivity and reducing real estate needs. Research shows that approximately 40 percent of offices are vacant due to travel, vacation and other reasons for extended absences. In addition, on any given day, offices of employees who are “on-site,” are vacant 20 to 25 percent of the time due to meetings or work that takes them to other areas of the facility. (See Figure 5).

It’s important to adopt a holistic approach to management and design. This requires a transition from basic workplace strategies to universal plans that take every aspect of a job function into consideration, from the time employees start their workday to the time it ends, and maximizes their ability to fulfill the business requirements of the job.

The universal plan focuses on space usage and not personal work styles. It may not mean an office for every employee. A good analogy is a typical high school. Most have a chemistry lab, a physics lab, a gym, classrooms, auditoriums and other areas that address specific functions. Individuals travel to and from spaces to ensure their educational (job) needs are met efficiently. In universal plans, functionality drives the design.

Universal plans deliver sustainable designs, rapid access to information, flexibility, increased productivity and collaboration, support for individual and group work and improved LCC. To ensure these plans maximize flexibility and meet the needs of every job function, FMs and their design teams must consult with HR, risk management, insurance, IT, and department heads. They must study different teams and individuals to determine how they work, what they need, and whom they interact with over time. In addition, they should talk to individuals at every level to identify the critical requirements for job success and factor in current and potential requirements for sustainability. Armed with this data, they can begin to create or renovate their workspaces.



Figure 5 - Outdoor seating with wireless connectivity allows employees to choose the environment best suited to fulfilling their job responsibilities, whether quiet, independent work or creative brainstorming.

Office settings

Universal plans will aid FMs in designing workspaces that are virtually 100 percent adaptable. For example, an office environment may be comprised of:

- Plain standard-sized cubicles throughout the office that allow employees to move their work materials to where they are needed. Portable pedestals with drawers that can roll easily may be provided to individuals who then take them along to the space most effective for the day's or period's work. Furniture will be on wheels allowing workers to change their office layout or move furniture to other areas quickly, without assistance, and ceding a level of control over their space.
- Meeting rooms in many varieties from "war rooms" with writing surfaces, white boards, complete AV set-ups and other equipment that enables heavy duty working meetings, to small closed rooms for privacy, video conference centers, or open living room groupings, to small areas with a table and chairs or phone banks designed for sound-proofing and privacy, all of which will be dispersed to maximize productivity based on job functions.
- Centralized utility areas for copying, printing and other functions. Placed strategically throughout the workspace, these areas eliminate the need to outfit every office with this equipment.
- Connectivity stations located throughout the space, allowing workers to connect to data and power as needed for every type of technology—phones, Blackberries, laptops, and more. In addition, every office will require wireless connectivity that extends to every work space—inside and outside, at the office, at a customer site, in a coffee shop or at home. Mobility and connectivity, like sustainability will no longer be afterthoughts.

Remote offices

Focusing on job functions in universal plans will also help FMs to "think outside the office." Increasingly FMs have to meet the functional needs of those who work from remote locations. This requires an understanding of the individuals' job functions, connectivity and security requirements. It demands that FMs work closely with other departments to ensure ergonomic and liability issues are resolved (i.e. setting specific work areas and hours). Through a universal plan, FMs can offer a menu of approved products that are acceptable to the company—from technology to furnishings—in terms of price, ergonomics and productivity. Companies then can opt to provide these items in whole, provide allowances, or require them to be used as guidelines as employees establish their workspaces.

Environmental concerns

As spaces become denser, environmental issues become a larger concern. For example, a company that housed 75 employees in 18,000 sf may house 120 in the same space using a universal plan. This results in new challenges from noise, health, temperature (more people + more power = more heat), and transportation. Universal plans must address:

- Sound absorption or attenuation strategies and space planning based on the type of noise generated by the job functions
- Air conditioning and power requirements (location, infrastructure support, individual temperature and humidity control)
- Parking and access to public transportation
- Environmental systems (built in to floors, furnishings, etc.)

Environmental concerns (continued)

One Fortune 1000 financial services firm is already breaking ground and defining best practices for implementing universal plans. The firm created an open desk environment with low walls where associates easily can identify co-workers they need to sit near and where all employees have equal access to windows and sunlight. The majority of workers are “mobile” with no assigned workspace. Those requiring a fixed location have a designated desk. Group areas including executive work rooms that facilitate collaboration, quiet zones with no telephones or talking, small conference rooms of all sizes and privacy levels, informal seating areas, and café environments, enable workers to focus on their jobs in the environment best suited to increasing productivity, collaboration, creativity and results.

Yes, times are a-changing and FMs are facing radical shifts in how they do their jobs. Yet with the help of forward-thinking architects and commercial interior designers with established specialties in sustainability, workplace strategies and universal planning, FMs will have the resources they need to create the office spaces for the future.

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