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The Demise Of The Cubicle

Employers these days are taking a serious look around their office environments and recognizing the disconnect with today’s work styles.

By John Campbell, LEED AP, AIA, RIBA

The original idea behind the cubicle’s design, which came out in 1967, was to allow employees to concentrate privately on their tasks at hand. The designer, Robert Propst, wanted to give people a personalized space they could make their own.

In time, the cubicle became slightly more flexible with overhead shelves, moveable drawers, and versatile walls to reconfigure desks. Despite this evolution, the cubed layout does not fit the way people currently work for several reasons.

The workplace model has changed from one of hierarchical command and control to one driven by network relationships in order to meet today’s business demands and the pressure to add value. These needs push the desire for companies to work quickly, harvest vast amounts of data, and produce innovative solutions and products. This makes collaboration a prime method to gather multiple sources of knowledge and drive complex solutions forward.

At the same time companies are under pressure to reduce operating costs. With the ubiquitous use of laptops and tablet computers with cloud storage technology, employees no longer need to be tied to a particular space. Work is possible anywhere, anytime. These changes have called into question the validity of the traditional office layout outfitted with perimeter offices and workstations.

More Work, Less Space

The ability to work anywhere has changed the traditional 9 to 5 workday. It is becoming obsolete as people remain connected, even if they don’t physically come into their offices. Attending virtual meetings, replying to e-mails from their Blackberries, and conducting “heads down” concentrated work in off-site locations have become the norm.

Designers employ time utilization studies to observe how their clients’ office areas are used. The studies show that most offices are only occupied 45% of the time.

After seeing this information, those clients have started to question traditional workplace models as they drive to create both effective workplaces for employees and maximize their real estate efficiency. As a result, designers are working with facility managers (fms) on office configurations where an assigned space is not provided for every employee. In some cases, there is no assigned space at all.

The result is that companies require less space, which has yielded huge real estate cost savings. For example, at the recently completed U.S. Maintenance Headquarters, the American standard of 225 square feet per employee was reduced to 135 square feet, and group areas for informal meetings were increased—all without diminishing employee attraction and retention.

New Dynamic Takes Over

The growth of distributed work, including sharing spaces and collaboration, has resulted in employees placing less priority on having their own individual spaces and more of a priority on communal spaces. In surveys, employees consistently state they need more space for group work. In a recent survey for W.L. Gore, a company listed consistently on Fortune’s “100 Best Companies to Work For,” 20% of employees reported they don’t require any individual space at all.

Typically, designers have found that people do 70% of their work in a group setting. In addition, the generation entering the workforce today is the first one to grow up fully immersed in technology; there is a desire for constant connectivity to everything at all times. Their education has focused on blending individual and group project work while moving between different environments to complete assignments.

As they start their first jobs, they arrive at the office highly tech savvy and ready to engage and collaborate with fellow employees on a variety of projects. These young employees find the traditional cubicle stifling and inadaptable to their way of working. While there is still a need to provide space for individual, focused work, the balance has shifted towards a variety of collaborative work settings.

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Several research activities continue to develop and apply smart DER integration approaches. For example, EPRI’s Smart Grid Demonstration Initiative is exploring large scale integration of DER and demonstration of smart grid concepts that reap economic and reliability benefits. The international collaborative, started in 2008, includes more than 20 utility partners and 13 projects that are investigating the specific needs of various distribution systems.

Some projects examine electric vehicle charging options to support balancing the grid by charging at night when it is common to have excess wind generation available. Meanwhile, others are harnessing building energy management systems to smooth the intermittency of PV generation (such as adjusting the speed of ventilation fans in large buildings as a function of solar radiation to compensate for fluctuations in the power output of rooftop PV systems).

EPRI is also spearheading a Smart Inverter Communication Initiative for battery and PV applications. This is a public-private industry collaboration that supports the coordinated buildout of two-way smart inverters—recognized as potentially pivotal devices for managing intermittent PV resources. So far, this effort has identified common language and developed a uniform set of functions for inverters that can be engaged by utilities to provide future grid support. Since some of these inverter projects are likely to be operated by fm’s, this provides another opportunity to participate in the smart grid by tapping available building assets, with potential for additional revenue streams.

Taking the concept a step further, response building load and controllable building distributed generation and energy storage may enable a commercial facility to be considered as a virtual power plant (VPP). For the fm, the result could mean a fundamental shift in building management.

Indeed, going forward, greater deployment and use of smart building management equipment may feasibly enable building associations to serve as VPP operators and aggregate DER and demand response resources as if they were a single power plant. Facilitated by a platform of intelligent devices (such as smart meters and grid sensors, pervasive broadband communications networks, and analytical software applications), VPPs could prove instrumental in dispatching and balancing distributed energy. It could even make it feasible for fm’s to trade with energy suppliers, perhaps in wholesale markets. In this way, VPP operation could help to balance the grid, enhance revenue opportunities, and help mitigate utility grid management challenges associated with the integration of variable renewables.

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Have you looked into creative energy strategies? Send an e-mail to tfm@ groupec.com to share.

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Providing environments with access to technologies suits employee workstyles and tasks. Employees can seamlessly remain connected as they move across different work settings to complete different activities: catch up on e-mails, join a web meeting, grab a cup of coffee with colleagues, or huddle down in an enclave for some focused work before globally presenting to a team. Companies are also recognizing that providing access to natural light and changes in scenery or environments can help boost employee satisfaction. Providing a space to take a quick break and walk away from issues often gives employees a chance to look at their work with a new perspective.

Even The Bosses Like It

While companies have focused on creating new environments to foster an office culture and support their employees’ productivity, upper management is enjoying these changes as well. In feedback from clients, supervisors report that while there was an adjustment period, the advantages are overwhelming.

With an open workspace, senior staff is able to stay in touch more with its teams, hear what is going on, quickly huddle to brainstorm ideas, and move innovative solutions forward. Equally the space savings are significant. From an fm’s perspective, upper management can address issues in an expeditious manner without reconfiguring physical space.

Workspaces will continue to change to suit business needs. The growing use of technology and the emphasis on collaboration has changed the design of workspaces drastically and will continue to do so. In their experiences, architects have seen that the move to an “activity-based workplace” has enabled fm’s to adapt quickly to changing business needs without losing productivity to undertake costly physical workplace changes.

What is the future of office design? There is no one universal solution, but certainly it will be collaborative. Every company has its own particular business drivers and company culture. More than likely, there will be a mixture of office types that includes a variety of collaborative work settings that respond to different business needs—some will house core business functions, while others will provide an infrastructure where individuals and specialist teams will congregate on an as needed basis for specific project assignments. It is equally important that offices provide the right technology infrastructure to adapt to continuously evolving platforms. In any case, it’s clear that fm’s are finding that cubicles may impede business needs, and these corporate cornerstones may soon be a relic of the past.

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