



Workplace Research

Flexibility for Volatility

Building a High-Performance
Defense Workplace



Knoll

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Building a High-Performance Defense Workplace

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The defense industry must continuously adapt to new and unpredictable changes—from shifting government mandates to the priorities of new administrations, procurement delays, budget changes, technology advances and global tensions.

The volatile nature of the sector understandably can wreak havoc on defense contractors' real estate, facilities and workplace strategies. Meanwhile, companies are also striving for innovation while vying for top talent in an extremely competitive marketplace. These dynamics place immense pressure to build workplaces that appeal to the best and the brightest while supporting employee well-being, maintaining efficiency and accommodating future business fluctuations.

To capture what is affecting defense contractors today, HOK and Knoll partnered to study the trends driving the modern-day defense workplace. The team surveyed corporate real estate leaders from major defense contractors and reviewed design guidelines developed for various clients over the past five years. This report summarizes our research and provides planning strategies for defense companies to consider within their workplaces.

Drivers and Characteristics

A Time of Growth

Defense spending is on the upswing. The current U.S. administration plans to increase ship and aircraft fleets, bolster ground forces and eliminate the defense sequestration cap.²

Its FY2018 budget calls for an \$80 billion (18%) increase in defense spending from the FY2017 base budget.³ This exceeded the \$52 billion (12%) increase anticipated earlier in the year. Unless there is a major new development, industry experts predict a 3-7% compound annual growth over the next four years.⁴

As long as this growth continues, the administration's appetite for industry consolidation is not likely to reduce sector employment. In fact, the administration's interest in

KEY TAKEAWAYS

From changing government policies and priorities to an increasing need for cybersecurity, a wide variety of factors influence the defense industry's work processes and workplace needs. Our research determined that these organizations must create environments that:

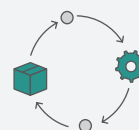
- 1 Foster agility and flexibility
- 2 Enable knowledge sharing and transfer
- 3 Satisfy privacy and security needs
- 4 Attract and retain top talent
- 5 Maximize health and well-being
- 6 Improve speed to innovation

Defense Contractor Segments

The following are the major sections of the defense industry. Though each has unique business challenges, all are affected by the same general workplace forces.



Manufacturing



Supply Chain



Consulting

In 2016, the U.S. defense sector supported over 800,000 workers who build aircraft, engine and engine parts, land vehicles, ships, armaments and related equipment. Another 965,000 people work in the industry's extensive supply chain, and about 700,000 work in extended support roles providing services including facilities management, accounting, legal, consulting, etc.¹

establishing more public-private partnerships, particularly with technology companies, may stimulate private sector employment.

Technology Matters

The rapid evolution of technology is having a significant impact on the defense sector. It affects everything from the types of products and services these organizations offer to who they hire and the space they need to support their processes.

In the near future, for example, autonomous systems, drones and artificial intelligence (AI) may replace manned vehicles and change the shape (literally and figuratively) of military systems.⁵ Drone warfare is already having an effect on the sector. At the same time, offensive and defensive cyber systems are transforming the nature of warfare.

Workplace demographics affect design because different generations often have different work styles.

New Demands for Speed to Innovation

Though fast-paced growth, rapidly changing threats and new technologies demand speed to innovation, the defense industry can be burdened by lengthy procurement processes and product development cycles. A new Air Force refueling tanker built based on the proven Boeing 767, for example, will have required eight years to develop if it is delivered as scheduled in 2018. Meanwhile, the private sector is demonstrating more agility. Six years after it was founded in 2002, SpaceX put its first payload into orbit.⁶

The House Armed Services Committee has expressed interest in easing procurement regulations and expediting the defense sector's processes for bringing new products to market.

Catching Up to Best Practices

The inherent challenges of doing business in the defense industry can leave companies behind the curve when it comes to keeping up with best practices in corporate real estate, facilities and the workplace.

Defense companies must often quickly scale up or down, continuously relocate people and assets, and adapt to ever-changing priorities. Their workplace decisions can be driven more by a sense of urgency than economics. Everything else, including the workplace, takes a backseat to the mission, purpose and fulfilling a contract. This, combined with the temporary nature of much of the workspace, means the quality of the work environment often is overlooked. Workplaces may lack standards, branding or sensitivity to achieving the right cultural fit.

Managing a Corporate Real Estate Portfolio: Industry Influences

Size

- + Large portfolio + decentralized + contract + based growth + bid work = lack of standardization in portfolio
- + Smaller portfolio + centralized + computer-service based contract-based + stable = controlled portfolio

Sense of Urgency

- + Decisions are less driven by economics, but rather by urgency and a sense of purpose
- + Contractor companies view their work as mission critical—everything else is secondary—so CRE costs are perceived as less important and work environment may be neglected

Lease vs. Own

- + Lease expiration provides a call to action that owned properties don't have
- + Phased renovation budgets across a vast portfolio create inconsistency
- + Contractual / Project-based work has led to an ad hoc and decentralized approach for leasing space

Location

- + Real estate is often inherited or acquired in a reactive way as needs occur
- + Difficult to consolidate space given specialist nature of buildings or regions where work occurs (at least for manufacturing types of contractors)

In general, organizations with small, centralized portfolios that support contract- and computer service-based work often have standardized portfolios. But companies with large, decentralized portfolios and mostly contract-based bid work often lack this standardization.

Many companies find themselves with a hodgepodge collection of workplaces that are scattered across many sites that were inherited or acquired to satisfy immediate needs. Based on the specialized nature of buildings or regions where work occurs—especially for manufacturing-related contractors—it can be challenging to consolidate. The spaces are hard to track, maintain or upgrade. The ambiguities of contract awards, renewals and funding means they often are under- or over-utilized. And phased renovation budgets create inconsistencies across portfolios.

Some facilities may have been purchased or leased at unfavorable terms as companies scrambled to fulfill geographic contractual requirements. This project-based, contractual work often leads to ad hoc and decentralized approaches to leasing space. Lease expirations, however, do provide a trigger to make workplace changes that owned properties don't have.

Understanding Organizational DNA

Many defense contractors have adopted the traits of their clients. In the defense sector, employees often are mobile and working on-site with clients. Their primary clients tend to be government agencies or military organizations, which often have an aging demographic while being hierarchical, meeting-intensive and frugal when it comes to spending on space because they want to conserve taxpayers' money. But with the war for talent and need to attract tech-savvy employees, providing an inviting workplace is emerging as a new competitive edge.

Workforce demographics affect design because different generations often have different work styles. In the defense sector, there has been a significant shift from a workforce made up mostly of 40- and 50-year-olds toward attracting more technologically proficient staff in their 20s. This demographic shift changes the expectations for the workplace from being an entitlement or status symbol to more of "space providing a service" (as with Software as a Service, or SaaS). A younger, more mobile workforce expects the workplace to be a desirable environment that provides choices and variety.

Surveying the State of the Defense Workplace

Our survey of CRE leaders revealed several findings:

- + Eighty percent of companies have developed **global or regional space guidelines** for managing the workplace.
- + Seventy-five percent of respondents expect to **increase headcount** over the next three years. Two-thirds of those companies will absorb this growth without adding real estate.
- + Though the consensus points to a target of 175-200 USF/person, many are attempting to **reduce excess space**. Their new targets are still higher than those in other sectors (156 USF/person across industries⁷). Yet in practice, the average can be substantially higher (up to 275 USF/person).
- + The defense sector has embraced **workplace utilization measurement**. One-hundred percent of respondents actively monitor workplace utilization through a variety of methods (usually more than one). Until recent years this was not the case. The cyclical nature of contractual-based work had caused many to take a rapid deployment approach to space, with tracking and management of that space often being an afterthought. But over the past several years, many companies have significantly improved their space reporting, partly due to the emergence of the new accounting guidelines.

Procurement Influences on Corporate Real Estate Over Time



2001

**Massive
Growth**



2010

**Lowest Price
Technically
Available**



Today

Best Value

- + Except for meeting rooms and pantry/café areas, defense companies haven't given much attention to **amenity spaces**. Focus rooms and quiet areas are the fastest-growing types of amenity spaces, as they support a renewed emphasis on creating space that allows teams to collaborate while providing heads-down spaces for individuals to concentrate and focus.
- + **Legacy spaces** usually contain inefficient cellular layouts. The defense industry has traditionally viewed space as an entitlement and reflection of status. These cultural barriers to creating new workplace environments are particularly strong in organizations with high proportions of Baby Boomers and Gen Xers.
- + Many companies have a formal **distributed work policy**. Top drivers for the policy include optimizing real estate, attracting and retaining talent, saving money and improving employee engagement.
- + Some defense companies are beginning to use **unassigned space** to improve utilization. A recent Knoll study shows that 11% of all space is unassigned across all industries. But over the next five years, that amount of unassigned space is expected to grow to 32%.

Increased Emphasis on the Workplace

With the current emphasis on finding efficiencies across the U.S. federal government and throughout the Department of Defense, it's more important than ever for defense companies to leverage the power of the workplace as a business asset and to create environments that foster collaboration and innovation. And the recent push to improve security and space efficiencies has led to executive orders and Base Realignment and Consolidation (BRAC) efforts across the country which create an opportunity to rethink how space is designed.



Spaces can be planned to encourage more collaboration and active working styles. Image courtesy of Knoll.

Supporting Attraction and Retention

Science, technology, engineering, mathematics and management (STEM+M) workers form the backbone of the defense sector. Defense companies also are counted on as leaders in innovation, economic growth, global competitiveness and security. Yet the industry is being challenged by an increase in retirements among Baby Boomers and a shortage of trained technical graduates at a time that skill requirements are becoming increasingly sophisticated.

Ten percent of the defense sector's workforce is eligible for retirement. While the industry's overall retirement rate is very low – just 10% of those eligible to retire in a year actually do so – finding new hires with the requisite knowledge will be a challenge.

- + At Boeing, 56% of the engineers are at least 50 years old.⁸
- + An IBM study found that 39% of defense companies predict that a shortage of qualified labor will have an extreme impact on growth.⁹

Of the 50,000 defense industry hires in 2015, 13% were new college graduates, 8% were returning active-duty military personnel and 15% were poached from other aerospace and defense organizations.¹⁰ But attrition looms large. The sector has always had to deal with the nomadic nature of its work and fluctuations in government needs and funding.

A new threat for defense companies is that their people are leaving to join tech-driven companies like Uber,

Predominant Elements of Organizational DNA in the Defense Industry

Industry

- + Highly competitive
- + High stress
- + Speed to solutions critical

Regional Influences

- + Large presence in the Washington, D.C., metropolitan area
- + Urban settings leverage local amenities
- + Suburban, rural locations require more on-site amenities and services to meet the needs of teams

Cultural

- + Customarily tend to be formal and controlled (managed by presence)
- + Off-site contractors tend to be more entrepreneurial (managed by performance)
- + Often adopt the culture of the host agency

Organizational Structure

- + Traditionally very hierarchical
- + Highly structured with low levels of collaboration
- + Layered
- + Characterized by oversight
- + Permission-based
- + Competitive
- + Hard-driving and achievement-based

Work Style

- + A wide range of tasks
- + Often mobile and working on-site with clients
- + Specific to the government customer they support
- + Both on-site and remote workers
- + Highly concentrative
- + Meeting-intensive

Demographics

- + Historically more Boomers but aging downward with a tech focus
- + Predominantly male, with the proportion of women steadily increasing over the past decade
- + Mix of contractors and full-time employees

Tesla, Facebook and Google. None of the large defense companies made Fortune's list of 100 Best Companies to Work For.¹¹

Mitigating Stress While Maximizing Well-Being

Health and well-being are critical to employee productivity and engagement. Spaces that promote mindfulness, in



For staff to thrive, the workplace must provide integrated technology and spaces for information sharing.

Image courtesy of Knoll

which employees are calm and present in the moment, are valuable to defense companies attempting to help employees improve their emotional intelligence, self-awareness and capacity to manage distressing emotions—particularly for those working on mission-critical assignments. Practicing mindfulness also reduces stress, lowers blood pressure, improves memory and lessens the chances of depression and anxiety.¹²

Agility and Flexibility

The accelerating rate of change challenges organizations to innovate and quickly bring new products and services to the market. Occupying workplaces with flexibility to accommodate growth, churn and technology advancements is important as projects constantly ramp up and wind down.

Trends Impacting the Defense Workplace

The needs for the defense industry workplace will continue to change in response to several significant trends impacting these companies. These trends present four scenarios, each with a unique set of issues, and their potential effects on workplace design:

Work and Cybersecurity

The sharp increase of global cyberattacks, recent government announcement about plans to increase the number of troops supporting the war effort in Afghanistan, rise of the Populist movement and overall heightened global tensions will likely escalate defense spending.

Top 10 States by Total Defense Spending

Rank	State	Defense Spending
1	Virginia	\$53.0 billion
2	California	\$49.3 billion
3	Texas	\$37.9 billion
4	Maryland	\$20.5 billion
5	Florida	\$17.6 billion
6	Pennsylvania	\$12.7 billion
7	Georgia	\$12.6 billion
8	Washington	\$12.6 billion
9	Alabama	\$12.2 billion
10	Massachusetts	\$12.2 billion

Total for Top 10 States	\$240.7 billion
Total for United States	\$408.5 billion

This 2015 Department of Defense Office of Economic Adjustment study shows where the largest defense spending is focused domestically. Source: *Defense Manpower Data Center and Chmura Economics & Analytics*.

CASE STUDY

Sealed Air Charlotte, North Carolina 350,000 sq. ft. / 1,400 employees

Sealed Air's new corporate campus in Charlotte brings together 1,400 employees from multiple locations. It includes two LEED Gold-certified office buildings and a LEED Gold research facility. HOK led the interior design and provided sustainability consulting.

Drivers

- + Foster a positive workplace culture
- + Promote cross-divisional collaboration and facilitate interdisciplinary research
- + Re-imagine how employees work

Tactics

- + 100% unassigned individual workspace
- + Promote collaboration and interdisciplinary research by developing laboratory programs based on a "functional clusters" concept instead of creating divisional boundaries
- + Create agile-workplace neighborhoods where employees select from a menu of collaborative open and enclosed meeting spaces as well as focus rooms for heads-down work
- + Campus designed to be collectively 'owned' by all employees with amenities that include a cafeteria, outdoor dining, coffee shop, fitness center, walking trails and innovation center
- + Use of wood from the site for furnishings, plants and two ponds on the campus

Outcomes

- + Innovation center for showcasing Sealed Air's products to clients with a highly flexible open space to accommodate up to 40 visitors
- + Touchscreen technology allows staff to display products in use at global locations
- + Display areas have sliding doors that can conceal or showcase equipment tailored to specific visitors
- + Highly-flexible, breakout-hospitality spaces can be configured for large group gatherings or small-focus group discussions
- + High-tech workplace and R&D facility counterbalanced with 'high-touch' elements that bring outdoor and organic elements inside
- + Integration of daylight and views

Issues

- + The biggest threats today are cybercrimes and terrorism. This is changing the profile of the people defense contractors are hiring.
- + Fortification of U.S.-based mission-critical facilities and renewed hardening of critical facilities.
- + Physical security requirements will focus more on crime prevention through environmental design and response-enhanced design (CPTED-RED) practices, subtle security and hiding in plain sight.

Impact on Design

- + Site selection and design of a building and its interior must enable CPTED-RED principles.

- + Space may continue to reflect the hierarchical nature of the military agencies as a way to accommodate security and privacy concerns.
- + Limited mobility as security requirements and computer-intensive work tether many to their secure space.
- + More tech-enabled spaces will appeal to a younger demographic and support how they work.

Mergers and Acquisitions

The government and its aerospace and defense contractors are seeing new competition emerge from commercial launch companies such as SpaceX. To that end, the Defense Intelligence Agency recently launched an initiative called NeedpeDIA.¹³ The goal is to directly

advise what the agency needs to attract nontraditional contractors and form new partnerships.

At the same time, profit margins within the sector are decreasing as talent costs continue to rise. Established companies are seeking fresh ways to maintain their leadership positions. To do this, many are looking at mergers and acquisitions.

Issues

- + A sharing economy may lead to partnerships and collaborations between former competitors.
- + Though proximity to government agencies is desired, the limited amount of space means companies need to be nimble.
- + Accelerating speed to market requires breaking down silos.

Impact on Design

- + Work environments will need to be highly accessible.
- + There will need to be more space to support mental breaks and help employees recharge to concentrate on focused work.
- + More elements supporting health and well-being will be introduced to promote movement, options and choices in the workplace.

Spaces that promote mindfulness, in which employees are calm and present in the moment, are valuable to defense companies.

Emerging Technologies

(AI / IoT / Drones / Autonomous vehicles)

As we move into the era of ideas and innovation, the ability to quickly create new ideas and products is imperative. Companies will be looking for more 'thinking' and fewer 'things.' For staff to thrive, the workplace must provide integrated technology and spaces for information sharing.

Issues

- + The rapid advancement of technology will continue.
- + AI will reduce the number of staff required for analysis and computational functions.
- + The Internet of Things (IoT) will enable buildings to function more autonomously.
- + Autonomous vehicles will diminish the need for on-site parking and alter employee arrival and departure experiences.

Enabling Knowledge Transfer: Engaging and Motivating Workers

Effective workplaces engage and motivate knowledge workers by fostering the following objectives:



Social Cohesion



Trust



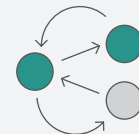
External Information



Perceived Supervisory Support



Common Vision, Goals and Purpose



Information Sharing

Impact on Design

- + The advancement of technology will fuel a demand for more tech-savvy employees.
- + Jobs will shift away from analytical and computational functions toward more cognitive and reasoning-based skills.
- + The IoT will free facility managers to focus less on operations and spend more time creating experiences that draw people to a building.
- + Parking lots will be repurposed as green spaces.
- + Parking garages will be recaptured for use as staging areas for autonomous vehicles and as tenant space.
- + Building entries will be redesigned to add drop-off and pick-up zones.

Planning Strategies and Design Features

Though it varies with each organization's core function—be it manufacturing, providing a service or consulting—defense companies tend to fall somewhere between two predominant organizational structures: hierarchical or market/hub.

A hierarchical organization customarily uses a formal structure based on rank and often is less collaborative. Based on this model, the defense industry historically has been a bastion for traditional offices.

CASE STUDY

Valorem Consulting Kansas City, Missouri 14,500 sq. ft. / 150+ employees

The leaders at Valorem Consulting, a Kansas City-based technology company, envisioned their renovated headquarters building as a progressive space that could grow and change as quickly as the company itself. The 14,500 sq. ft. office has more than 150 employees who have embraced the flexible environment.

Drivers

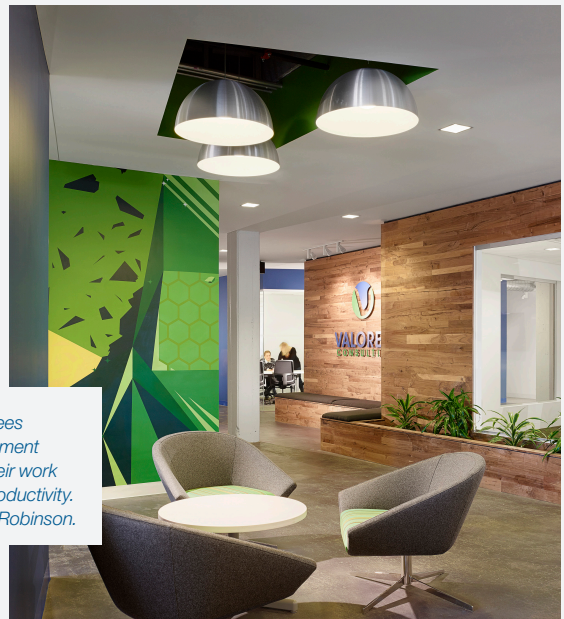
- + Promote an innovative culture and fast-paced work environment
- + Support flexible, nimble delivery processes with a higher density environment
- + Engage and inspire employees to improve performance and retain top talent

Tactics

- + Unassigned seating to enable mobility and collaboration
- + Informal meeting and working at traditional workstations, large bar height tables, lounge seating and two-person enclaves
- + Amenities including pool and ping-pong tables, treadmill desks and a kitchen stocked with healthy snacks promote relaxation, activity and engagement

Outcomes

- + Moving away from assigned workstations and incorporating employee-centric amenities
- + The company's space has become synonymous with its values and staff have been given the freedom to tailor their work environment to maximize productivity



Valorem Consulting employees embrace the flexible environment and find freedom to tailor their work environment to maximize productivity. Photos courtesy of Michael Robinson.

Workplaces that engage employees at the local level help drive employee attraction, retention and productivity.



Image courtesy of Knoll

A market/hub structure is more competitive and collaborative. With the shift to tech-oriented services and a new emphasis on cyberwarfare, the overall industry trend is toward a market/hub structure supported by open, collaborative environments. This structure prioritizes workplace environments that promote teamwork and speed to innovation.

The ideal solution may be to provide a variety of settings or neighborhood-choice environments. Creating spaces that offer the benefits of new planning models while retaining blocks of space for unassigned, private enclaves accessible to all can strike a balance for companies wary of adopting a completely new workplace environment.

Companies must determine the right mix of space for their people based on their organizational DNA, business strategy and long- and short-term objectives. But here are general principles and design implications that each should consider.

Fostering Future Flexibility

The ability to adapt to unforeseen organizational change is one of the strongest drivers and success factors for workplace programs. Flexibility and options for ease of future modifications due to growth, churn and technological advances are vital in this industry.

The emergence of coworking space presents a new opportunity for the defense industry. While the cyclical nature of many defense contracts and the need for rapid deployment supports the use of shared offices, there are concerns about intellectual property and information security. With this in mind, the preference is for space a

PROJECT SPOTLIGHT

New Workplace Standards Support Engility's Merger

When Engility acquired rival services contractor TASC, the company had the opportunity to significantly rationalize its corporate real estate portfolio through the creation of new workplace standards.

Legacy sites were underutilized, contained outdated furniture and had a high proportion of cellular workspace that didn't support the technology company's work processes or help it compete for top talent. Engility leveraged the real estate savings achieved from the standards to invest in creating a more modern workplace that would attract and keep the best people.

Ninety percent of its new headquarters work environment is open, and the executive suite uses glass and low panels to promote transparency and collaboration. Amenity spaces such as the pantry and informal meeting areas were moved to the perimeter to increase access to daylight across the floor plate and introduce opportunities for reflection and informal interaction.

Engility initially introduced the workplace program at its flagship location in Chantilly, Virginia. As its largest property, it offered the potential for the most return on investment for the standards. It also served as a test case and model for Engility employees in other locations. After initially targeting a standard of 175 SF/person, Engility is now planning to improve efficiency by introducing activity-based working. This will streamline space allocation to 135 SF/person without negatively impacting collaborative or amenity spaces.

company can control and solely occupy. But coworking does have a place for road warriors (including individual contractors, consultants and traveling/remote employees), temporary offices and locations for which there is a need for quick entry and exit strategies. And the growing desire to bring elements of coworking into the corporate work environments will likely lead to a renewed focus on designed human-centric spaces that foster community and enable mobility.

Enabling Knowledge Transfer

Informal areas with soft seating provide acoustic and visual privacy. These spaces encourage mentoring and meetings that help employees build organic networks. Formal training or learning centers with ample breakout and collaboration areas accommodate different styles of learning and can be easily transformed into “innovation spaces” for brainstorming and idea generation.

Managing Privacy and Security

Growing concerns regarding information security, cybersecurity and guidelines to secure data are driving some people back to their offices. For security reasons, the defense industry needs its workspaces to also have multiple backup systems. But these practices are at odds with the benefits a dispersed workforce can have on business continuity plans and enabling a company to continue to operate if a single location is taken out. Strategically spreading the portfolio across different locations helps ensure business continuity.

The highly competitive and confidential nature of the defense industry has driven many contractors to retain private space. Going forward, those spaces will likely continue to get smaller, move inward and have more glass. But contrary to a popular belief, enhancing security doesn't necessitate building high walls or partitions. Maintaining clear sight lines and the ability to monitor a space remains important.

Supporting Attraction and Retention

Workplaces that engage employees at the local level, even while complying with company-wide standards, help drive employee attraction, retention and productivity.

Workplace amenities contribute to employee satisfaction. But as employee demographics change, so must the amenities catering to different lifestyles and stages. In the near future, amenities will focus more on well-being, relaxation and recreation, with companies providing meditation spaces (predicted 26% growth), game rooms (19% growth) and outdoor work and recreation spaces (18% growth).¹⁴ Though these amenities accommodate the needs of all generations, they can be especially appealing to Millennials and Gen Zs interested in wellness and work-life balance. Childcare will become an important amenity for Millennials, many of which are starting their families later in life and have two parents working.

PROJECT SPOTLIGHT

The MITRE Corporation's Agile Space

This not-for-profit operator of federal research and development centers continuously optimizes its organization to put its government sponsors and their missions first. Space is no exception. Its workplace research identified several opportunities for the work environment to better support its employees, sponsors and stakeholders.

- + Existing facilities challenges presented barriers, as MITRE did not have enough of, or the right type of rooms, to support its collaboration needs.
- + Though new technology and work process had created numerous de facto mobile workers, MITRE's workspace, policies and provisioning lagged behind.
- + Some employees lacked adequate space to support their core-work activities. The facilities appeared dated and did not project the best image to support employees and retain top talent.
- + Recognizing that office space was underutilized due to the increase of mobile workers, MITRE decreased the amount of individual workspace and increased the number of collaboration spaces.
- + The company engaged its IT group to help identify the needs and develop the right technology solutions for collaboration rooms.

In 2013, MITRE rolled out new workplace standards to optimize its real estate portfolio, improve its ability to serve sponsors and increase space utilization and flexibility. The new workplace standards provisioning streamlined the size, number, and allocation of support spaces and improved use of collaborative technology.

The standards also defined ways for the organization to promote its work and sponsor missions throughout the facilities. The new workplace standards were piloted in several facilities with the MITRE portfolio. Change management and design review services helped ensure a successful transition to this new type of workplace. MITRE now leverages its conferencing and lab space as a strategic advantage and a lure to bring its customers to the campus, stating “the auditorium, ACME Lab and SEAL Lab are incredible spaces for MITRE to engage our customers.”

Instead of expanding the amenities they offer, some companies are moving from suburban campuses to urban areas. These vertical campuses use the city itself as an amenity. The specific amenities provided by vertical campuses typically are shared among different organizations rather than just belonging to one. Companies in urban areas can also take advantage of the city's amenities, including restaurants, parks, fitness centers and retail outlets.

Maximizing Well-Being

Workplace design can promote positive mental and emotional health through the creation of quiet areas, technology-free zones and meditation rooms. These spaces can aid in providing a sense of place for employees, particularly within large organizations. People can connect with each other and their surroundings: visually, culturally, socially and environmentally.

Looking Ahead

Government mandates, new technologies and the demands from a new generation of workers will continue to alter the defense industry, making its exact future difficult to predict. But for savvy organizations, now is the time to prepare the workplace for the changes ahead. Flexibility will be essential. The built environment will play a significant role in helping organizations adapt to volatility while attracting and retaining the right talent, maximizing well-being and cultivating a culture of innovation. ■

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HOK's WorkPlace practice designs environments that help organizations and their people succeed. The world's leading companies and institutions trust HOK's WorkPlace specialists to manage the strategic planning, design and construction of all types of work environments. Our team has extensive experience helping organizations with real estate portfolios ranging from single sites to multiple locations worldwide.

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Through research, Knoll explores the connection between workspace design and human behavior, health and performance, and the quality of the user experience. We share and apply what we learn to inform product development and help our customers shape their work environments.

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