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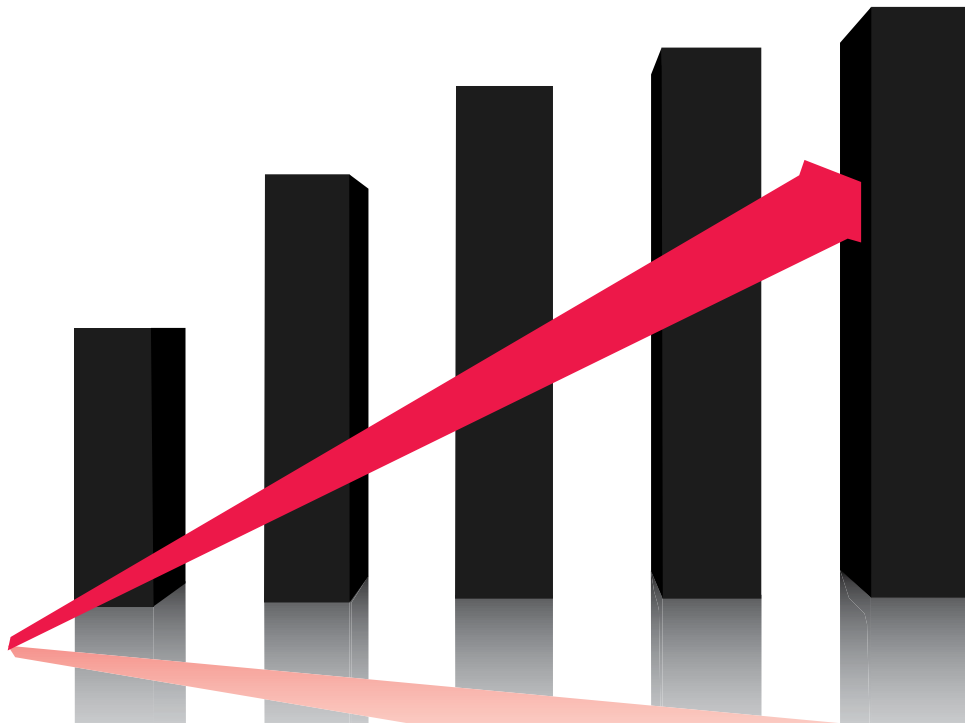
IFMA
Service Center
of Excellence

The Story Behind the Move

Page 18



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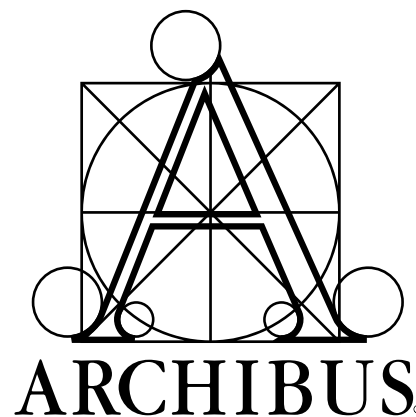
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ABOUT IFMA

IFMA is the world's largest and most widely recognized international association for professional facility managers, supporting 22,655 members in 78 countries. The association's members, represented in 129 chapters and 16 councils worldwide, manage more than 37 billion square feet of property and annually purchase more than US\$100 billion in products and services. Formed in 1980, IFMA certifies facility managers, conducts research, provides educational programs and produces World Workplace, the world's largest facility management conference and exposition. To join and follow IFMA's social media outlets online, visit the association's LinkedIn, Facebook, YouTube and Twitter pages. For more information, visit the IFMA press room or www.ifma.org.

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FMJ **BLOG**

Be sure to check out our new blog at www.ifma.org/publications/blog-fmj.com for news, discussions and more! The FMJ is also on Twitter and Facebook! Go online for more details.

Social **MEDIA**

To join and follow IFMA's social media outlets online, visit the association's **LinkedIn**, **Facebook**, **Twitter**, **Flickr** and **YouTube** pages.

**BEHIND THE COVER**

IFMA's Service Center of Excellence is a space filled with vibrant color accents, unique collaborative workspaces and technology that both empowers and inspires IFMA's workforce. It is a true representation of the modern workplace in every sense. This month's cover accompanies the feature article and is a collage of the various elements, rooms and areas that compose IFMA's Service Center of Excellence.

CHECK OUT THE NEW LOOK OF FMJ!

at www.ifma.org/fmj including VIDEOS, PODCASTS and other interactive resources!

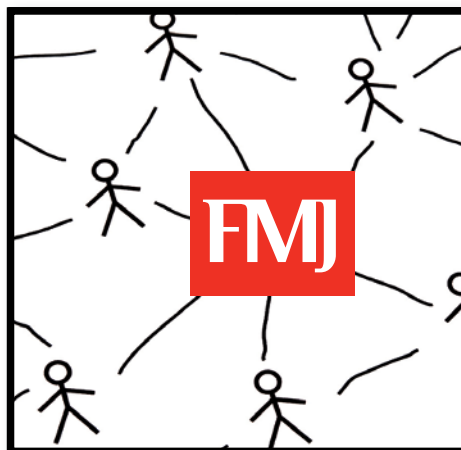
This **ISSUE:****Complementary article resources**

- "Workplace Highlights: The Strategy Behind IFMA's New Service Center of Excellence—Part 1" to accompany "IFMA New Service Center of Excellence: The Story Behind the Move" (p. 18)
- "IFMA Service Center of Excellence Grand Opening: Ribbon Cutting Ceremony" to accompany "IFMA New Service Center of Excellence: The Story Behind the Move" (p. 18)
- "IFMA Service Center of Excellence Grand Opening: Remarks" to accompany "IFMA New Service Center of Excellence: The Story Behind the Move" (p. 18)
- "Office Furniture, Environmentally Preferable" to accompany "It's Easy Being Green" (p. 52)
- "Rapid Prototyping Primer" to accompany "Service Design for a Better Workspace" (p. 28)
- "Workforce/Workplace Reports from the Families and Work Institute" to accompany "Happy, Healthy Working" (p. 39)
- "JAMES B. UTT MEMORIAL LIBRARY Schematic Design" to accompany "Saddleback College Transforms Students' Learning Experience" (p. 48)
- "Modeling and Benchmarking Performance for the Integrated Project Delivery (IPD) System (University of Wisconsin-Madison)" to accompany "Integrated Project Delivery at Owensboro Medical Health System" (p. 64)
- "Center for Ergonomics at the University of Michigan" to accompany "Incorporating Ergonomics to Maximize Comfort and Well-being" (p. 56)

FMJ **EXTENDED****Additional contributions**

This exclusive online FMJ section focuses on expanded FM coverage from a global perspective.

- "IFMA Service Center of Excellence: The Story Behind the Move—Testimonials" by AECOM/Strategy Plus, Watchdog Real Estate Project Managers, Jones Lang LaSalle Americas, Inc. and Perkins+Will
- "Workplace Strategy Presentation" by IFMA

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A modern office interior featuring two white desks with grey storage units underneath. Two black mesh office chairs are positioned at the desks. A large window on the right side of the room provides a view of a city skyline. A potted plant is visible in the foreground on the right. A red semi-transparent box is overlaid on the left side of the image, containing the text 'PARTNER WITH CORT'.

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Staff

Editor-in-Chief
 Andrea Sanchez
andrea.sanchez@ifma.org

Associate Editor
 Ryan Bellinghausen
ryan.bellinghausen@ifma.org

Writer
 Heather McLean Wiederhoeft
heather.wiederhoeft@ifma.org

Creative Design Lead
 Houston Dupré
houston.dupre@ifma.org

Advertising Account Administrator
 Diana Maldonado
diana.maldonado@ifma.org

Contacts

President and Chief Executive Officer
 Tony Keane, CAE
tony.keane@ifma.org

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Editor's COLUMN

Andrea Sanchez
 Editor-in-Chief, *Facility Management Journal*



Open office concepts continue to change and adapt to the ongoing evolutions in today's workplaces. Experts say the use of open office design elements is now growing at a double-digit pace—paving the way to the end of the traditional corner office and high-walled cubicle.

To foster productivity, open systems provide an environment where you can work individually and collectively in a variety of spaces. At IFMA's new Service Center of Excellence, staff has the capability to work effectively and productively, regardless of their location.

Our new home

When you go through the front doors of IFMA's new Service Center of Excellence, you enter the modern, hi tech, multi-windowed corner office of IFMA's 58 employees. Equipped with individual laptops, softphones, headsets, cloud-based software, Wi-Fi, VPN and video conferencing capabilities, each employee (Houston-based or remote) is empowered to work in the configuration that suits them best for the day (refer to the feature article, "The Story Behind the Move" on page 18).

Among the various advantages to collaborative working, I have witnessed the following already taking place within our first sixty days of occupancy:

- *A collaborative office combines different perspectives.* When individuals from various professional backgrounds come together to work on a project, the result is that all angles are considered.
- *A collaborative office encourages productivity.* Bringing together several different voices from various positions helps bring forth ideas that may never have come to the forefront before.
- *A collaborative office brings balance to decision making.* The influence of several individuals representing different teams helps ensure that decisions are made with everyone's interests in mind. Since each area has a presence around the table, biased decisions will be eliminated.
- *A collaborative office improves knowledge and project efficiencies.* If staff is able to recognize their synergies and leverage their daily interactions and experiences, greater insight into how the organization works is achieved—decreasing miscommunications and inconsistencies.

For more details and testimonials, refer to our IFMA Service of Center of Excellence additional videos and resources in the *FMJ* Extended online portion of the *FMJ*.

Lights, camera, action!

Los Angeles here we come! Join us at IFMA's Facility Fusion conference, taking place April 2-4 at the J.W. Marriott L.A. Live (page 35). The event will feature presentations on the future of FM leadership, making the most of difficult situations and how a breakthrough mentality creates breakthrough results. These will be delivered by bestselling author and CEO of Tomorrow's Leaders Institute, Steven Sensino; Garrison Wynn, founder of Wynn Solutions and author of *The Real Truth About Success*; and author Vernice Armor, the first African-American female combat pilot. In addition, don't miss the "Reth!nk the City Symposium"—a landmark discussion about the worldwide impact of urbanism on facility management.

As a reminder, don't forget to follow IFMA's conference via Twitter at <http://twitter.com/IFMA>; or tweet your way through Facility Fusion using the hashtag #FF2013. Photos and videos will also be provided in real time through IFMA's social media sites.

Embracing the future of work

I am proud to say that the production of *FMJ* is now 100 percent digital. This could not have been possible without forward-thinking and open-minded teammates, as well as leadership and members like you that supported the technological enhancements and flexible work structure that came with our new home.

Until next issue,

Andrea



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Chair's COLUMN

“There are risks and costs to a program of action. But they are far less than the long-range risks and costs of comfortable inaction.”

—U.S. President John F. Kennedy

Yo IFMA!

In this issue of *FMJ*, you will read several engaging articles and case studies that highlight the importance of interior design as an enabler of successful outcomes at a variety of organizations and industries.



Globalization—along with better, cheaper, faster, scalable, voice/data/video technology—continues to be a propelling force in our world. For facility managers, this environment may be viewed as either something we are driven by or as something we leverage to drive and accelerate our strategic plans. As FM practitioners, we focus our business practices related to the built environment

around the integration of people, place, process and technology. This globalization is also driving behavioral changes that further fuels dynamic changes where place meets process. The accelerator of this change is technology. In the middle of all this are people, the reason for creating the built environment and our ultimate client. These people—our clients—need and desire to balance their work and life.

Complicating all of the above is the need to create strategies that successfully support a physical and virtual presence in the workplace. As FMs engage our partners in interior design, the physical places that are created become the medium that either enables people to thrive or creates a barrier to performance. As we direct, create and manage the design of place by aligning people, place, process and technology to drive business performance and enterprise value, know that you are also helping to shape organizational behavior and culture.

As we know, the built environment directly contributes to or detracts from our overall well-being. Colors,

lighting and appropriately-positioned, ergonomically-correct furnishings all contribute to healthier bodies and minds. As practicing, informed facility managers, it is incumbent to ensure your organization is aware of these potential impacts and the capital planning process includes facility improvement projects that align with standards that support overall employee wellness.

While I am not someone who typically chooses colors or finishes (just ask my wife), I believe in most office or seating environments, a sense of uniformity in design is recommended to support cleanliness, clarity and expansive perception of the space. This is also effective in delivering expectations to employees about the intent.

Spatial configurations purposefully are designed and include integrated technology, environmental controls and furnishings as the norm. When these attributes are aligned with appropriate training, policies and procedures, employees and organizations thrive.

Whatever your organization or industry, your membership with IFMA provides unmatched opportunities to learn, connect and advance your role as an FM thought leader and to knowledgeably recommend interior design strategies that align with and drive your organization's strategic mission and vision forward.

I look forward to seeing you at IFMA's Facility Fusion conference. While there, don't miss attending the Cities Symposium either in person or virtually! For more information go to <http://facilityfusion.ifma.org>.

A handwritten signature in black ink that reads "Marc".



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President's COLUMN



Feb. 21, 2013, was a wonderful and exciting day for IFMA. We dedicated the first Service Center of Excellence in Houston, Texas, USA. The event marked the beginning of a new chapter in IFMA's progress forward. I encourage you to read the feature article in this issue of *FMJ*. As you do so, keep in mind this is the first phase of a global

strategy to better support our members around the world. The space is fantastic and embraces leading-edge thinking in the workplace. If you are passing through Houston, please come and see it.

I want to address an item that keeps coming up when professionals are considering membership in IFMA; that item is the term facility manager versus facility management. Many times, professionals say, "I really like what IFMA has to offer but I am not a facility manager." Yes, IFMA is the best professional home for facility managers in the world; however, IFMA stands for the International Facility Management Association.

Why is it important to differentiate between the term manager and management?

When I look at our member list, many members have job titles that are not "facility manager." Our founders knew we did not want to be limited by job title. They understood there are many job functions and titles within the workplace that include facility management duties in the job description. IFMA's credentials cover 11 core competencies that include many different disciplines. Some members are specialists in one or two of the competencies, while others are

required to be more generalists covering all of the disciplines. IFMA is a home for any professional who has a job responsibility that requires the use of more than one identified core competency. The job titles that can benefit from the facility management approach are endless.

Another reason why it is important to differentiate between the words manager and management is that we have many members who are dedicated to the facility management industry offering products and services that help fellow members provide solutions to their organizations. The professionals in this aspect of FM are extremely knowledgeable about facility management and dedicated to increasing the awareness of the benefits of a facility management approach.

Facility management is a discipline, a profession and an industry. Professionals in all aspects of facility management can benefit by being involved with IFMA. As they say, "Don't judge a book by its cover." I ask you not to judge a prospective member by her or his job title.

I would like to ask a favor from you. Please ensure your organization's human resource department includes a statement stating "CFM®, SFP® or FMP® preferred" when recruiting for any position that includes facility management duties and competencies.

See you at the Facility Fusion conference in Los Angeles, Calif., USA, April 1-5!

A handwritten signature in black ink that reads "Tony Keane". The signature is written in a cursive, flowing style.



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▲ KI installs largest solar energy array in Wisconsin

KI has completed installation of northeast Wisconsin's largest solar photovoltaic (PV) system at its Green Bay, Wis., USA, design and development facility. The new 115 kilowatt array—comprised of 480 PV solar panels, covering approximately 22,820 square feet of rooftop space—converts sunlight into electricity, producing approximately 152,640 kilowatt hours of clean energy annually while displacing 108 metric tons carbon dioxide emissions. The energy produced is the equivalent of sequestering carbon from 88 acres of forest or providing electricity to 13 U.S. households.

The solar PV system was funded in part by a Focus on Energy grant. Additional funding was made available for the project from a WPS Bonus Bid Program grant awarded to Eland Electric to promote renewable energy.

Sodexo releases Workplace Trends Report

Sodexo released its annual Workplace Trends Report, noting among dozens of findings key trends such as 86 percent of millennials entering the workforce now say they would consider leaving an employer whose values fell short of their expectations, clearly indicating that the emerging workforce is motivated by positive, people- and community-centric

workplace practices and initiatives. In fact, the report shows all four generations in the workforce see corporate social responsibility as a potential motivating factor at work.

The 2013 Workplace Trends Report from Sodexo offers fresh insight into drivers affecting the people, workplace environment and community impact issues faced daily by leaders and discussed and debated in board rooms across the U.S. and around the world. Among its leading trends, the report takes a deep dive into issues ranging from recruiting and mentoring talent to the corrosive effects of workplace bullying, and from the distinct benefits of sustainable working environments to integrated people and facilities solutions that deliver increased individual and organizational performance.

The 2013 report identifies 12 significant workplace trends:

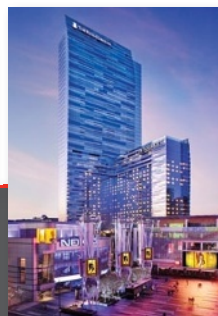
- The built environments crucial role in organization performance;
- Superstar recruitment—the power of community;
- Inspiring a connection to people, community and brand through CSR;
- A contemporary view of inclusion and its effect of psychological health;
- 21st century mentoring;
- Thriving in the cloud;
- Ushering in the new era of recognition;
- Facility management: A strategy, not a tactic;
- Data reporting out; predictive modeling in;
- International design and construction; a shifting paradigm;
- The changing office...literally; and
- Integration as the solution.

Leading indicators from the report cite, for example, that the way the marketplace engages with prospective employees today is vastly different than it was just five years ago. Today, social media and mobile communications dominate over traditional email campaigns. In fact, a recent study released by Jobvite found that 92 percent of U.S. companies used social media networks in 2012 as part of their recruitment efforts. Additionally, seven out of 10 employers report having successfully hired a candidate through social media, up from 58 percent in 2010.

While significant time and resources are spent on recruiting top talent, the report notes that once onboard, 35 percent of the U.S. workforce report being bullied at work—defined as repeated, harassing behavior that is deliberately intended to cause harm to individuals and prevent them from excelling at work, according to the Workplace Bullying Institute. This emerging issue is at the forefront of human capital management and represents a real workplace psychological health concern that can truly hurt a company's bottom line.

The report notes that facility management is essentially now a strategy and not just a tactic, or worse yet, an afterthought. Sustainability, an office feature once considered distinctive, has become table stakes. Whether it's economics, environmental consciousness or both, must-haves from clients, even those with no interest in green building, now include recycled products (including buildings), locally sourced and sustainable materials, energy-efficient HVAC systems, and better indoor air quality. The trend is an unmistakable shift toward offices designed to attract and retain top talent while emphasizing productivity over cost savings and quality of life per square footage.

Educational
events that IFMA
is offering you
in 2013



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Facility Fusion 2013
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April 2 - 4
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New Philips survey unveils worldwide innovation gap: Only 5 out of 10 people are satisfied with innovations currently available

Royal Philips Electronics recently released its "Meaningful Innovation Index" at the World Economic Forum in Davos, Switzerland. The "Meaningful Innovation Index" is a 5,000 person, multicountry survey looking at people's needs, attitudes and expectations regarding innovation.

Based on responses from five key markets, the survey shows that even with recent advances in technology, there is huge appetite for innovations that will make a real difference in people's everyday lives.

Philips' "Meaningful Innovation Index" looked at satisfaction with current innovations with what is truly important in people's lives and found that only 54 percent of people are satisfied with existing innovations in the areas they considered to be the most important to their lives. People's preferences across age groups and various life stages consistently point toward an innovation gap, indicating there is room for companies to innovate in 10

key areas of life: protecting the environment, saving money, stress relief, living independently as one ages, education, preventive health (preventing disease and illness), medical treatment, medical diagnosis, workplace efficiency and saving time.

People believe innovation will bring better health in the future:

- Almost three-in-five believe future innovations in medical technology will mean they will not be affected by serious illness.
- Sixty four percent of people expect to be able to manage their own health better through technology.
- The technology generation gap is more myth than fact—affinity to technology is similar across the age groups:
- Both young (18-24) and old (65+) generations consistently rank the same five areas of life as being most important to them: being happy, sleeping well, comfortable home to live in, a sense of

safety in home environment and communication with friends and family.

- 67 percent of seniors (65+) felt technology had made their lives better, while close to 74 percent of youth (18-24) feel the same way.
- The importance of living independently does increase as people get older but is a significant issue for all: 66 percent of seniors and 52 percent of youth are satisfied with products in this area.
- Citizens worldwide have high expectations of future innovations to change the way they live.
- Across the markets, almost three quarters (72 percent) believe technology will improve energy efficiency in their homes.
- Full survey results of the "Meaningful Innovation Index" are available at www.philips-thecenter.org.

American Society of Safety Engineers revises standard on preventing construction falls

Construction managers, as well as facility managers who are overseeing renovation and construction projects, may find a new construction safety standard helpful. In order to further prevent worker falls and fatalities on construction sites worldwide, the American Society of Safety Engineers (ASSE) has announced its "ANSI/ASSE A10.32-2012 Standard—Personal Fall Protection Used in Construction and Demolition Operations" is now available for use.

The release of the new A10.32 Standard comes in the midst of an ongoing fall prevention campaign by the Occupational Safety and Health Administration and the National Institute of Occupational Safety and Health that focuses on providing prevention

information and training materials on three major types of falls: from roofs, ladders and scaffolds.

According to the organization, the increased focus on fall protection on construction sites has been caused by the rise in injuries and fatalities due to on-the-job falls. In 2010, more than 10,000 construction workers were injured as a result of falling while working from heights in the United States, and another 225 were killed.

The purpose of the revised A10.32 is to provide minimum guidelines for fall protection equipment, to establish performance criteria for this equipment in construction and demolition, and to make recommendations

for use and inspection. To further protect the users of fall protection systems, the standard permits:

- Only full body harnesses shall be used for fall arrest. The fall arrest attachment point of the body harness shall be at the center of the user's back near shoulder level.
- Maximum arresting force imposed on the user's body shall not exceed 1,800 pounds.
- All equipment used in a fall protection system shall be compatible to limit force levels, maintain system strength and prevent accidental disengagement.
- Equipment serviced by the manufacturer or their authorized representative shall be capable of meeting all performance requirements of this standard.



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Industry**NEWS**

xpedx awarded ENERGY STAR® in four locations, surpasses goal for 2012

xpedx®, a leading business-to-business distribution company in North America, has been awarded the ENERGY STAR at its U.S. locations in Dallas, Texas, Grand Rapids, Mich., Nashville, Tenn., and Pewaukee, Wis. xpedx, an "ENERGY STAR partner," set a goal to earn the certification in nine of its facilities during 2012, and surpassed that mark with 10 facilities recognized.

xpedx's Dallas, Nashville, Grand Rapids and Pewaukee sites earned the ENERGY STAR by scoring in the top 25 percent of similar facilities nationwide for energy efficiency, based on the U.S. Environmental Protection Agency's energy performance rating system. These buildings use less energy, are less expensive to operate, meet strict energy performance standards and cause fewer greenhouse gas emissions than peer facilities. The four newly certified xpedx sites combined have more than 625,000 square feet of space.

In addition to the four new sites, xpedx also earned the ENERGY STAR at its U.S. distribution centers in Fairfield, Ohio, Hayward, Calif., Las Vegas, Nev., Phoenix, Ariz., Pittsburgh, Pa., and Reno, Nev., in 2012.

As an ENERGY STAR partner, xpedx is tracking its energy consumption and improving its operating costs through energy saving strategies. xpedx has also committed to highlight its achievements as recognized by ENERGY STAR, support the ENERGY STAR challenge to improve the energy efficiency of America's commercial and industrial buildings by at least 10 percent and spread the word about the importance of energy efficiency to its employees and communities where it operates.



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ABM secures government contracts in Iraq and Qatar

ABM, a leading provider of integrated facility solutions, announced that ABM Government Services has been awarded two separate task orders by the U.S. government under the US\$9.7 billion Defense Language Interpreting and Translation Enterprise (DLITE) contract.

In 2011, as the demand for foreign language services began to exceed the Armed Forces' ability to deliver them through its military trained linguists, the U.S. Department of Defense selected six contractors to compete for task orders under the five-year DLITE contract to meet the growing demand. Under the DLITE program, ABM has the opportunity to provide translation, interpretation and related language services to U.S. service personnel engaged in humanitarian, peacekeeping, contingency and combat operations around the globe.

On Jan. 4, ABM Government Services was awarded a three-year task order totaling approximately US\$35 million to provide linguists support to the Department of Defense Intelligence Command and Defense Security Cooperation Agency's Office of Security and Cooperation Iraq. ABM will operate from the Baghdad office from which it will manage approximately 200 linguists.

Additionally, ABM Government Services was awarded a three-year task order totaling approximately US\$12 million to provide linguists support to the Department of Defense Air Force Office of Special Investigation. The ABM office will be located in Qatar and will support 27 linguists in 10 countries in the region.



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IFMA Service Center of Excellence

The Story Behind the Move

BY ANDREA SANCHEZ



"Workplace Highlights: The Strategy Behind IFMA's New Service Center of Excellence—Part 1"

Photo credit: Joe C. Aker, Aker Imaging

In 1978, IFMA co-founders George Graves, IFMA Fellow, of Texas Eastern Transmission Corp.; Charles Hitch of Manufacturer's Bank in Detroit and David Armstrong, IFMA Fellow, of Michigan State University voiced a need for an organization comprised of facility professionals from the private industry. In May 1980, Graves hosted a meeting in Houston, Texas, USA to establish a formal organizational base from which a facility management association could be built. Three decades later, IFMA is the world's largest and most widely recognized association for facility management.

"Facility management is a great profession and you have a support system that will be with you. You go into it knowing you'll have to expand beyond the building. It's got a

What is a Service Center of Excellence?

A Service Center of Excellence is an organizational structure that provides thought leadership and proliferate delivery of information in specific areas of expertise and focus through training, best practices and organic knowledge sharing mechanisms.

IFMA's Service Center of Excellence in Houston is the first of IFMA's new approach to supporting members, customers and stakeholders. We envision establishing several strategic service centers of excellence around the globe to best carry forward the mission of IFMA.

future to it. There are a certain number of people that will be interested and we will need to accommodate them. Thirty years ago it would have been wonderful to have the resources that IFMA has today. Thirty years ago it was just the beginning of the facility as a heartbeat."—George Graves

IFMA operates from a centralized world service center facility in Houston, supporting an increasingly global membership base, representing 78 countries. Its challenges included legacy work processes and a physical environment that did not reflect the leading edge of the facility management profession.

Members expect and deserve timely and easy access to products, resources and staff across multiple channels anywhere, anyplace or time. Leadership pursued improved support for a diverse and global membership base through operational and commercial initiatives.

The outcome? The goal of IFMA's new Service Center of Excellence is to deliver an effective and satisfying work environment, support a distributed service model and implement strategies for long-term flexibility and operational sustainability.

Why move? Why now?

The lease expiration of the association's service center at 1 East Greenway Plaza in

Houston was set to expire Dec. 31, 2012. From that, IFMA's President and CEO Tony Keane and the board of directors agreed the association should embark on a journey to develop a new workplace and headquarters location. This lease expiration presented a unique opportunity to begin the strategic planning process with a clean slate and develop a workplace strategy that supports the way people work today, all while integrating the agility necessary to support how they will work in the future.

Some of the goals and commitments for the new workplace included:

- Providing an open and transparent relocation process;
- Not being limited by any existing space or location;
- Breaking the link between space and status;
- Being at least 25 percent more efficient than the previous workplace;
- Aligning with the IFMA strategy map to ensure long-term stakeholder value;
- Developing a strategy to guide decision making that aligns with the core themes of sustainability, operational excellence, global influence and community along each perspective of the balanced scorecard; and
- Providing a more effective and satisfying work experience.

The beginnings of a new work environment

The new work environment is the outcome of a best-in-class, robust process that included strategic partnerships with world renowned subject matter experts, sourced through a transparent and inclusive methodology that sets the benchmark for future engagements of its kind.

Discussions started with IFMA's executive leadership and membership weighing in to provide an answer to a seemingly benign, but ultimately very complex question:

"What is the purpose of IFMA's headquarters and how does it provide value to membership?"

The answer to that question resulted in a vision for IFMA's future workplace and development of a human resource, technology and facility global kit of parts that can be flexibly deployed to support any business need—anywhere and at any time.

The first deployment of the IFMA global kit of parts is the Houston Service Center of Excellence, which was derived through the collaborative efforts of world-leading partners including AECOM/Strategy Plus (formerly DEG), Jones Lang LaSalle Americas, Inc., Perkins+Will and Watchdog Real Estate Project Managers. Each of these partners were retained



"IFMA Service Center of Excellence Grand Opening: Ribbon Cutting Ceremony"



Photo credit: Joe C. Aker, Aker Imaging

through a transparent, inclusive bid process that was led by the IFMA Headquarters Relocation Project Steering Committee and supported by dedicated IFMA members (refer to <http://www.ifma.org/about/about-ifma/ifma-headquarters> for the full listing and further details).

The process focused on three E's—efficiency, effectiveness and expression:

- **Efficiency**—The new site is approximately 50 percent smaller in footprint than the previous location and is sustainably designed to support exponential business growth without increasing the footprint.
- **Effectiveness**—Strategically located, the new Service Center of Excellence enables continuity of operations and a seamless transition for membership and staff.
- **Expression**—The distributed workplace strategy (refer to the workplace strategy presentation in *FMJ* Extended section) developed in support of IFMA's vision, enables Service Center of Excellence practitioners the flexibility to work in ways that best supports the business and their personal needs.

Reinforcing the vision

According to IFMA's vision, the association strives to deliver an effective and satisfying work environment, support a distributed service model and implement strategies

for long-term flexibility and operational sustainability.

In order to reinforce this vision, several design principles were followed:

- Universal access to a variety of spaces;
- Visual connectivity and project-based teams;
- Concentrative space;
- Informal collaboration space;
- Flexibility—more multi-use space;
- Current footprint reduction; and
- Space provision that is not status based.

"It was extremely important for IFMA's senior leadership to define and provide a vision that identified IFMA's desired future state and its implications," said Thomas Mitchell, CFM, IFMA Headquarters Workplace Steering Committee chair. "The visioning process resulted in the IFMA executive committee's decision to head in a direction where the desired end result was the establishment of a Service Center of Excellence. IFMA's senior leadership demonstrated their investment to the project's success by their decision to commit the time, talent, and finances necessary to turn the vision of a Service Center of Excellence into a physical reality."

A wide variety of stakeholders were engaged with the goal of establishing the central design principles of the project. This began with conducting interviews with IFMA department heads to see how their groups currently worked and how a future workspace could better support them. In order to understand the larger organizational goals and aspirations that a future headquarters could support, steering committee members (who represent IFMA's board of directors) also were interviewed.

Along with these interviews, focus groups were conducted with IFMA staff to better understand the current state of IFMA headquarters and how the new workplace could better support the association's evolving methods of member service and collaboration. In addition, IFMA's global membership was engaged with a survey which asked about how they typically interacted with IFMA headquarters and how these interactions could be improved.

A workplace survey also was conducted with IFMA staff—covering topics from IFMA workspaces to performance gaps in the workspace. The survey was complemented with a time utilization study. In this study, trained observers made regular observations of the IFMA workspace over the course of a workday. Through this process, it was determined how individual and collaborative workspaces and amenities were utilized.

Top features of the new workspace

A collaborative community was the desired image for IFMA's new office. It embraces new workplace strategies that directed the design of the new work environment.

Signage

The entry leaves no question that "you have arrived" at the IFMA Service Center of Excellence. Veneer wood panel acts as a backdrop to offsets an 8'-0" layered translucent IFMA graphic. The entry and reception are part of the primary circulation path and are activated by staff and visitors throughout the day. Video displays built into the wall offer a glimpse into IFMA's history, current events and highlight past/present leadership of the organization.

Color

An international approach to color—red, blue, green and yellow—provides accents throughout the space and is supported by a neutral base palette. To ensure a timeless space, the flooring, millwork and primary wall colors are medium tones in warm neutral colors.

Lighting

Considerations for lighting were important in all areas to ensure work could happen anywhere in the space. Direct/indirect light fixtures were utilized to provide even light levels and reduced glare for users. Accent fixtures were included to highlight specialty areas like the reception area, break room, lounge and gathering areas. View to the outside can be experienced from almost anywhere in the office. Exterior windows bring daylight deep into the space. The lounge area takes full advantage of the natural light and panoramic view of the surrounding landscape.

Worksettings

Open work areas include groups of touchdown stations that allow for focused work or group collaboration. Work areas include low screens between users, but allow for easy collaboration between staff that can congregate within a pod as needed to work collectively or to focus on heads-down work while staying in tune with others.

Focus and meeting rooms

Open environments demand some space be dedicated to closed spaces that accommodate various tasks, both for the individual and groups. Focus rooms spread throughout the space allow for small meeting or singular work in a closed area. Meeting rooms allow for group meeting of six to eight people. All

rooms include glass panels to ensure transparency throughout the space and keep staff connected no matter what they are work on or who they are working with. Meeting rooms feature audio/video connections and visual write wall surfaces.

Technology

The entire space is Wi-Fi-enabled with incredibly fast speed. But if traditional connections are preferred, those are available at all open area worksettings, focus rooms and meeting rooms. Every staff member was also provisioned with laptops, VPN (virtual private network) and unified communications software, including telephone and audio capabilities.

Mobility

Trust among staff members and technology enhancement are two key ingredients for making a mobile work environment successful. Once those functions are established, the workplace itself needs to conform to the new paradigms that emerge. Focus shifts from the need for private personal space to an offering of various collaborative, in person, spaces. This doesn't mean that those spaces for focused heads-down work don't exist, but they can be smaller and co-located. This cohabitation of space also facilitates staff interaction and cross-communication between different departments and quickly can forge new bonds and understanding between staff.

The lounge

A bright open loft-like lounge area is open to everyone and adjacent to the multipurpose room and allows staff to opt for a relaxed den or café experience inside the office. The exposed structure overhead and colorful acoustical baffles along with the eclectic mix of lounge/café furniture makes this space friendly and available any time of day. Relax at lunch, catch the latest news story, connect to Wi-Fi and get some work done or gather a group for a cup of coffee—this space can handle it all.

Naming conventions

The space includes a thoughtful approach to the international nature of the organization through the graphic signage package. Work areas bear the names of continents, while closed focus rooms and meeting rooms bear country names from locales around the world where there is an IFMA presence.

FM Spotlight

Through the combination of observational studies, employee feedback and the validation of data in employee focus groups, the creation of a program for a future workspace that could more closely align with IFMA's vision of how it would work in the future evolved.

Transitioning into a collaborative, mobile office

Transforming the way a workforce group operates is not easy. The idea of an open, mobile and collaborative environment was presented by making good use of the results found on the workplace performance survey and time utilization study. Knowing that true acceptance to change only can come from within; the results of these studies show how employees viewed the past state of the organization, as well as themselves and what they see as a future. This presented a sound case for getting people open to the idea of this new way of working.

The new office showcases leading-edge mobility strategies for people and ideas both internally within the walls of the office and externally around the world. It features some of the best ideas and technologies drawn from the expertise of IFMA's 23,000 facility management members and offers a unique example of what the workplace of tomorrow might look like (refer to the sidebar, Top Features of the New Workspace).

"There's a reasonable expectation that a global association for facility management should run a state-of-the-art facility," said Keane. "I'm proud to say that the Service Center of Excellence in Houston meets and exceeds this expectation. Over the last few years, we've completely reinvented the way our facility supports our ability to provide the quality services our members deserve. We've put theory into action and we're pretty excited about the results."

A facility that supports human mobility offers a wide range of advantages. Operational environments change from week to week, while the day-to-day needs of individual employees change as well. By rethinking its traditional fixed office layout and liberating employees from assigned



Photo credit: Joe C. Aker, Aker Imaging

workstations, IFMA is helping to drive change instead of merely reacting to it.

Sustainability in action

The new global headquarters employs a number of innovative technologies and techniques to benefit the triple bottom line of people, planet and profit.

Some of the ways the Service Center of Excellence was designed to be sustainable.

- **Half the physical footprint**-One of the most visible improvements with the Service Center of Excellence is a dramatically reduced physical footprint. Through employee mobility, shared workspaces and smart design, the new IFMA headquarters requires only about half the useable square footage compared with the previous space. The smaller, smarter space not only reduces the environmental impact, but also saves money and increases productivity.
- **"Recycled" space**-One strategy the IFMA Service Center of Excellence uses to do more with less is applying the concept of recycling to physical space. Just like recycled plastic can be used for something else, modular and convertible office spaces created throughout the facility can be quickly and easily repurposed for multiple uses, allowing one room to serve the function that required two or more in the previous location.
- **Resource efficient**-Furnishings, finishes and fixtures were chosen with sustainability as well as aesthetics and function in mind. To increase efficiency, occupancy sensors were installed facility-wide to turn off lights when rooms aren't in use. IFMA will carefully monitor energy and water consumption in order to refine and improve conservation efforts.
- **Environmental connection**-To further connect people to each other and their environment, and to reduce the environmental and actual cost of lighting, the layout maximizes the penetration of daylight into the space while promoting line-of-sight views of the outside environment. This breaks down the indoor-outdoor barrier, and is further facilitated by using lower panels between workstations.
- **Smart location**-Even the location itself, in the heart of Houston's Memorial City, was chosen with sustainability in

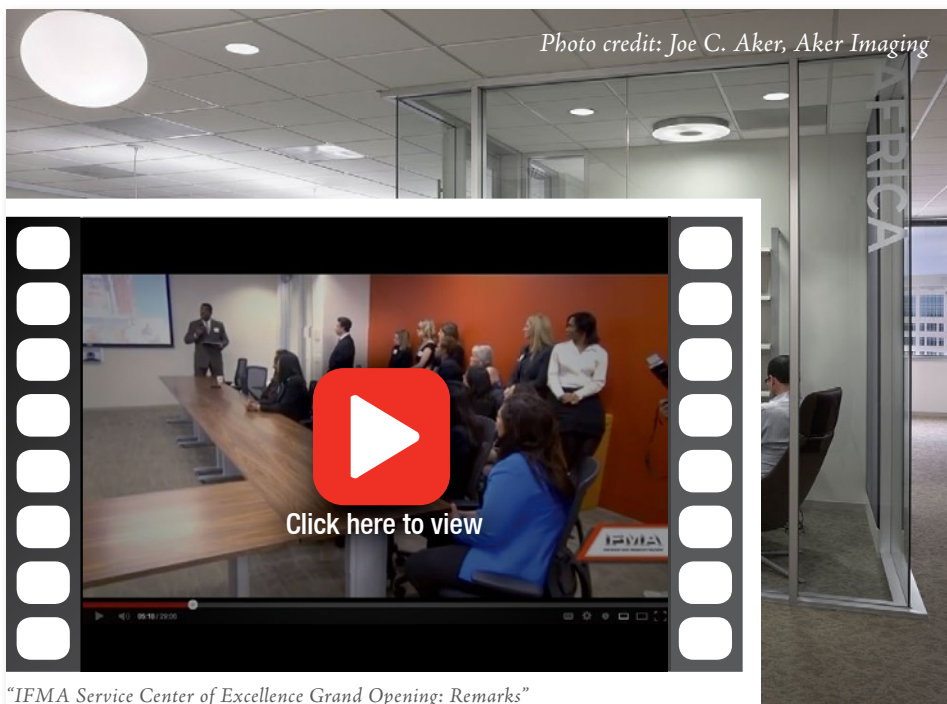


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"IFMA Service Center of Excellence Grand Opening: Remarks"

mind. The development density and community connectivity means that a host of amenities are within walking distance. The building itself is a high-performance, facility with an ENERGY STAR® rating of 98.

- **Commuter friendly**-By utilizing mobile technology, IFMA not only empowers mobility within the workplace, but outside of it. When it is not necessary to physically be in the office, employees can work remotely, allowing them to reclaim time lost in a daily commute while reducing fuel consumption and vehicle emissions thus lowering the carbon footprint.

A true world headquarters

The Houston Service Center of Excellence wasn't designed to be unique. In fact, it was designed to be easily copied. Additional service centers of excellence will be opened around the world, duplicating the original format where appropriate and bringing unique functionality when necessary. By disbursing specific organizational responsibilities around the world, and empowering them all to work together seamlessly, IFMA creates international collaboration and eliminates the need for useless duplication.

"The idea that a facility can actually shape the way people think and act is one of the core concepts of facility management," said IFMA Chair and Chief Elected Officer

Marc S. Liciardello, CFM, MBA, CM. "There's a reason the first word in our association's name is 'International.' The global scope of what we do is part of who we are, and that was evident in the earliest brainstorming sessions about what we wanted in IFMA's new Service Center of Excellence. To promote and support global thinking, we sought out leading-edge design theories and best practices from our 23,000 members and integrated them into the office. With careful strategic planning, our new facility is a powerful tool that shapes the way we work and think."

For more details, complementary videos, photo library and the workplace strategy presentation, go to <http://www.ifma.org/about/about-ifma/ifma-headquarters>. **FMJ**

Special thanks to the following for their contributions to the article: Marc S. Liciardello, CFM, MBA, CM, IFMA chairman and chief elected officer; Tony Keane, CAE, IFMA president and CEO; Thomas Mitchell, CFM, IFMA HQ Workplace Steering Committee chair; Mike Moss, IFMA COO; Jennifer Drai, IFMA director of project management services; Marina Badoian-Kriticos, IFMA director of sustainability; Jed Link, IFMA communications manager; AECOM/Strategy Plus; Watchdog Real Estate Project Manager; Jones Lang LaSalle and Perkins+Will.

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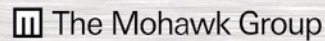
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IFMA Rebranding Update

Repositioning IFMA's Visual Footprint

BY STEWART DALLAS

Last issue I spoke about the importance of the IFMA logo/branding project and the opportunity that IFMA has to update its identity and image. Our partnership with the logo/design/branding agency Neiger Design is in full swing, and we are well on course to creating a new logo and refreshed brand for the association.

The project has many phases, including:

- Information gathering and project planning;
- Market research;
- Creative brief, brand positioning and concept work;
- Brand architecture;
- Development and refinement of the "family look"—our components, councils, chapters, alliances, etc.;
- Brand Usage Guide—how and when to use the new look; and
- Brand Book—a document that will help us all be brand champions moving forward.

We are currently completing our market research phase and moving into the creative and design concept work. Some of the elements of the research have included:

- *Staff intake sessions:* We conducted four detailed sessions at our offices in Houston, Texas, USA. In an enlightening exercise, staff members were asked to call out adjectives that described the IFMA brand. The answers ranged from professional, recognized and traditional,

to more forward-thinking concepts, such as sustainable and timeless. We discussed the strengths and weaknesses of the current logo; as well as the single most important message that the staff felt the IFMA brand should relate to.

- *World Workplace focus groups:* We conducted two sessions at World Workplace in San Antonio, Texas, USA, gathering feedback from participants on a variety of topics, including: what color IFMA best represents, what car we might be, the best (and worst) things about IFMA, what real or fictional characters represent IFMA, how people benefit from IFMA, and what IFMA could do more of in the future.
- *Telephone interviews:* We have completed many one-hour discussions with IFMA stakeholders, including chapter leaders, council members, board members, professional and associate members. The insights into what people think and want to see from IFMA moving forward are incredibly beneficial.
- *Quantitative research survey:* A survey was distributed to obtain feedback on the brand, our logo and future direction. We had almost 1,100 detailed individual responses.

All of this research is providing the IFMA project team with an extraordinary understanding of what our members and nonmembers think about the current

state of the association, and our plans for the future. By gathering your thoughts and opinions on all matters related to the organization, we can make intelligent decisions based on solid research regarding the brand, logo, colors and taglines. I would like to thank everyone who has taken part in the research. It is truly going to lay the foundation for the success of this project.

The next step is producing a creative brief, developing a brand position and moving into concept developments. We will then build out concepts, validate with more research, think about our brand architecture and move on.

The importance of the broad IFMA community in this process is vital for our success. We know that councils and chapters have their own identity—in many cases THE identity for IFMA members—and we want to help preserve and enhance that uniqueness moving forward.

This is a pivotal time for IFMA. Please feel free to contact me directly with any feedback, ideas or concerns you may have.

FMJ



Stewart Dallas is the director of marketing at IFMA. He heads up all aspects of IFMA's online and off-line marketing, branding, CRM, email, positioning and product promotion. He is a proud Scot and graduate of the University of Strathclyde Business School in Glasgow, Scotland, UK.



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Service Design for a Better Workspace

BY ALBERT DE PLAZAOLA AND PAUL SCHUETTE



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"Rapid Prototyping Primer"

The concept of service design has been evolving through the past decade. Service design is a truly interdisciplinary field. With one foot planted in the realm of management consulting and process design, service design takes its other cues from software development, risk management and supply chain management, to name only a few fields that actively inform it.

Service design: from retail to workplace

In its origins, service design has involved the distribution of products through the immaterial components of service. The typical example of service design starts with the concept of the customer and service provider, which typically involves a retail environment. It is this juxtaposition of the physical object and space versus the process that is performed within it, which begins to define the somewhat nebulous boundaries of the evolving discipline. However, service design has evolved far past a retail model. Its concepts have been applied to health care, transportation and corporate environments. Most importantly, it is the interactions between participants in a given system that anchor service design solidly as a field which blends an emphasis on process with end-users.

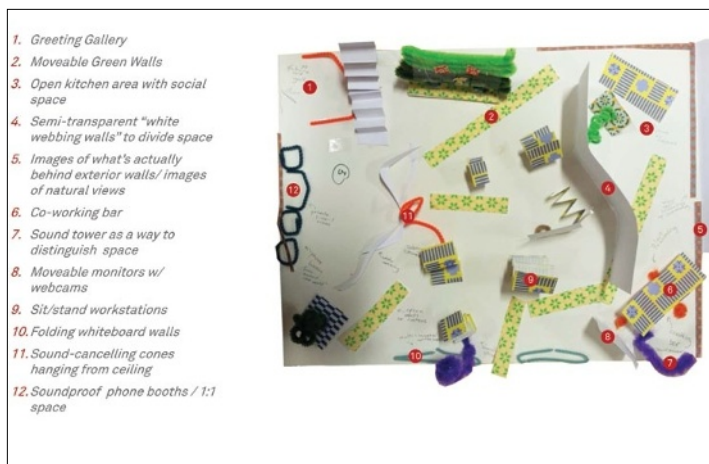


Figure 1

This focus on end-users is important for FM's to consider. While facility management has had a long history of engagement with end-users, service design offers a new set of tools to begin thinking about the synthesis of people, process, technology and space. Historically, many models of process management have been guarded as proprietary information. With an emphasis on open source development that has deep roots in software and interface design, the community of service design professionals have made a majority of these tools accessible. All of the tools outlined in this article are accessible on the Internet.

What is promising about this movement is that anyone who works with end-users has a vast array of tools to begin rethinking how users or employees are consumers of the workplace. If the workplace is a networked environment with diverse users, then we can think about how managers, administrators, directors, interns and vice presidents all become clients and customers of FM. In the same way that the retail sector understands the built environment is a critical component in providing a desired experience for the consumer, so too can the workplace enhance the employee experience, no matter rank, role or function. Consequently, these clients should have a say in how their workplace takes shape. That's why all of the tools outlined below place a strong emphasis on co-creation, and involve an active dialog between facility managers, designers and customer.

Rapid prototyping

Rapid prototyping is a method of engaging potential end-users of spaces, objects and

processes in an immersive design workshop. As a process, it functions as a quick, highly iterative, three-dimensional brainstorming session that allows end-users to collaborate on speculative designs. The intention behind a rapid prototyping session is to allow potential end-users to easily manipulate materials and collaborate without any prior training or skill with the material or process (refer to Figure 1: Rapid Prototyping Exercise with Institute for the Future).

The service blueprint allows end-users to work together and learn from one another.

Rapid prototyping workshops give the participants a method for working within a limited palette of materials as well as other constraints specific to the project. Through establishing these ground rules of limited materials and other constraints based on context, workshop participants can quickly collaborate and compare the end results of their efforts. While it most often is used in the realm of product design, rapid prototyping can be a powerful tool for engaging end-users with the process of visualizing and thinking spatially. Typically constraints are defined prior to a rapid prototyping workshop (the constraints of

a room, floor plate or building envelope, modeled to scale) so participants are able to scale their concepts against pre-defined and properly scaled boundaries.

The service blueprint

Originally conceived of as a way to breakdown and visualize all aspects of service delivery, service blueprints (refer to Figure 2: Example Service Blueprint) are visual schematics that allow for the description of users of a system. Typically, these visualizations focus on specific transactions that happen within a space over time.

These transactions are called touchpoints and describe specific interactions between system users. Frequently, the service blueprint incorporates an element called the line of interaction, a demarcation that outlines face-to-face interactions between customers and staff. A second marker called the line of visibility separates the "front of house"—space that is accessible to the customer—versus the "back of house" which is only accessible to staff. A third line of demarcation is called the line of internal interaction and separates interactions that occur in the back of house between staff.

While this tool has strong origins in visualizing services provided to retail customers, which could vary from a hospital to a grocery store to a bank, the tool itself is easily adaptable for a variety of situations. When used in a workshop setting, teams typically collaborate to create the service design blueprint together. Often what emerges is surprising. Many times, individuals that work in the same space are

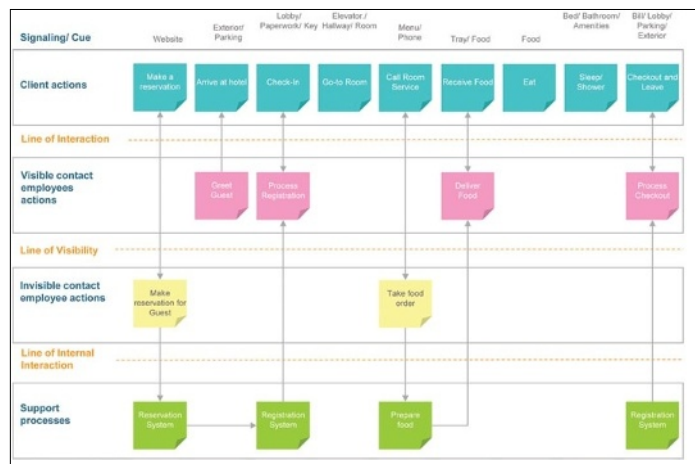


Figure 2

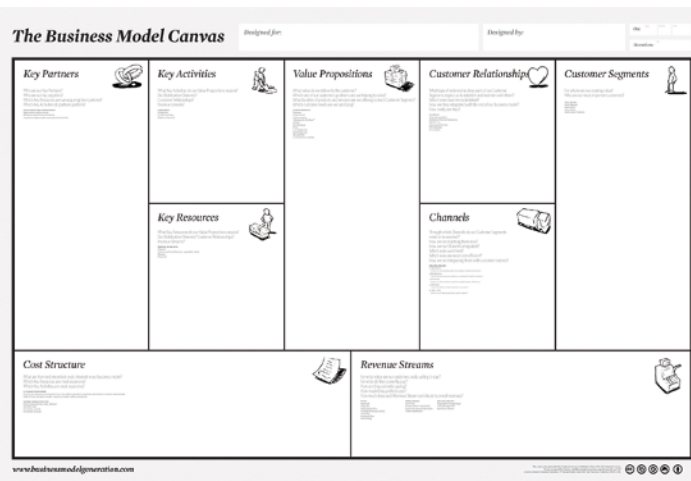


Figure 3

not fully aware of all of the processes that occur within that space. The service blueprint allows end-users to work together and learn from one another. Teams build consensus around process and space and through the process of visualization, understand inefficiencies and duplicated efforts within a system. In working through these issues, teams can often co-create new methods and begin to visualize a roadmap for process and spatial improvements.

The business model canvas

The business model canvas (refer to Figure 3) is a large printed table that typically is divided into nine different areas. As with any of the tools discussed thus far, this table can be modified depending on the nature of the organization. The canvas typically includes areas such as key partners, key activities, customer relationships and revenue streams. Each of these areas of the canvas asks a series of questions to prompt users to begin to brainstorm as a group.

The business model canvas serves as a tool for groups to collectively understand how their current business model is functioning and articulate an organization's core capabilities and aims, while also understanding strengths, weaknesses and potential areas for growth. While this tool does not focus on space per say, it give users a method for co-creating the current state of the organization and what it needs to do to get to its desired future state. This could have enormous implications for how space is designed.

Recognizing the relationship between workplace and service design helps facility management teams become organizational resources that help solve business problems. Using the workplace as a strategic asset to improve process and service models is not just good design, its good business. It requires a shift in the way FM teams often approach workplace projects by considering employees as consumers of their environment. Business guru Tom Peters suggests that designers (and by extension real estate and facility teams) should be less concerned about how design elements impact office space and more concerned about how their design supports and aligns with strategic goals and things like intangible assets. Service design might just be the way to get there. **FMJ**

The business model canvas is a large printed table that typically is divided into nine different areas.





Albert de Plazaola is a director at Strategy Plus with more than 13 years of experience in people-centered change management strategies specifically around workplace transitions. He understands that organizations are complex social structures whose ability to positively change and adapt are largely dependent on operational, cognitive and emotional factors. By leveraging a user-centric approach that considers these factors, as well as various models of analysis, de Plazaola moves beyond the typical motivations to explore how meaningful change can occur to foster greater organizational responsiveness, adaptability and innovation.



Paul Schuette is an associate director and architect at Strategy Plus, whose interests range from social research to sustainable building systems. His architectural experience spans the educational, government and urban design sectors. He currently focuses on defining and translating user requirements into design and understanding relationships between people and the larger communities in which they work. As a design researcher his work has spanned community driven urban planning, infrastructural systems and urban design and responsive environments. At Strategy Plus, Schuette focuses on UX research, organizational programming, and how the interplay between technology and space is changing work and learning environments.



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bwin.party Relocates London Office

BY ROY PARRISH

For facility manager Patricia Capper, relocating several hundred bwin.party staff into a cutting-edge new building in London's prestigious One New Change development has been the highlight of her career—and something of a learning curve. "I've never been involved in a project of this size before," said Capper. "But nothing was ever a worry. It was a case of planning well and bringing on board the right people to make it all happen. We had a great project manager, excellent interior designers and we got staff on board from the outset."

Formed in March 2011 from the merger of bwin Interactive Entertainment AG and PartyGaming Plc, bwin.party digital entertainment is a global online gaming company. The group has more than 3,500 employees in the United States, Europe and India.

In December 2012, its London, England office relocated from King William Street to nearby One New Change, a contemporary development on Cheapside in the heart of London. The previous building was 30 years old and had seen better days. "It was definitely having a negative impact on morale," said Capper. "Things had broken down, the air conditioner needed replacing and the bathrooms weren't nice. We were on the last leg of a seven-year lease and the landlord had little incentive to make anything but superficial repairs. People were very enthusiastic when they learned we were moving."



Preparing for the move

Capper's preparations for the move started about a year before the lease ran out. She began by researching real estate options. The key requirements were proximity to London, the ability to house more than 200 staff on one floor with an open plan aspect, and the right look and feel for the company's corporate branding.

Facility management, senior management and human resources worked together alongside design and build specialists Ranne Creative Interiors and a property agent to narrow down a list of more than 20 building options to just four. The 20,000 square foot One New Change space was chosen because of its open floor plan, great location, and a light and airy feel thanks to floor-to-ceiling windows.

With the new property secured, Capper worked closely with the design team to hold departmental workshops. These were for staff to voice their views on what they liked and didn't like about their existing office and what they would look for in the new space.

Some staff were vocal, others just wanted to replicate the ultra-trendy look of Google's London headquarters. To which Capper would reply, "Why do something that's already been done when we can brainstorm and design a workplace from scratch that fully reflects bwin.party's ethos. Why be led by others?"

The dot theme

The new office reflects bwin.party's ethos down to, well, a circular "dot." The recent merger, which introduced the dot between bwin and party, is echoed throughout the workplace. The dot theme starts with the huge circular coffers in the ceiling of the reception area, which are lit by LED light tape and give scale to the area. It continues in the large white circular Corian entrances to the four meeting rooms located conveniently near reception. This theme is echoed throughout the open plan space in the three bespoke free-standing offices for senior managers that are dotted throughout the space and feature circular white Corian entrances and curved glass. The bwin.party brand is at its strongest in the reception and meeting room suite, with the open plan area

beyond that having pockets of vibrant color and a fun, inviting environment.

The new office that reflects bwin.party's ethos down to, well, a circular "dot."

Interesting materials are another theme. Corian was chosen because it was the only material that could fulfill the design brief, providing a clean, seamless finish. In addition to the meeting room entrances, it is used in the statement reception desk, complemented by Boss Magic chairs for visitors. Elsewhere, the poured resin on the floor of the reception area is partnered by Desso carpet tiles in the meeting rooms and Bolon woven vinyl floor in the open plan area. The flooring was chosen for its ability to reflect light, durability and practicality.



For the working environment, Vitra Joyn desks and Herman Miller Mirra chairs were selected. There is also plenty of hot-desking space and casual working areas for more transient workers and visitors.

The huge floor plan also is broken up by a selection of breakout spaces. Burgundy and gray Bene Parcs Toguna freestanding pods with integrated lighting, combined with yellow Bene Parcs American diner booths, are complemented by wing chairs all of which create color, interest and differentiate team areas. The space is given further color and delineation by stylish Bisley storage cupboards in a variety of colors. Another wayfinding technique is a continuous LED light strip—Vane Led from Future Designs, a recessed linear system that takes the visitor



In the new building, everything is state-of-the-art and energy efficient and the building's recycling program has been embraced.



from reception to the farthest flung corner of the office.

Incorporating staff feedback

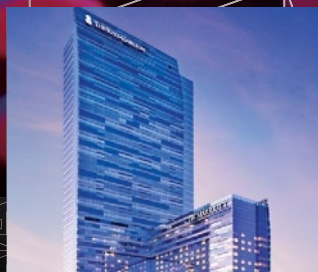
Where possible, bwin.party tried to cater to staff feedback. In the King William Street building, staff had enjoyed a football table in one of the breakout spaces, but at One New Change, following requests, a whole games room with pool and a ping pong table has been introduced. This is adjacent to a café-style area with stackable Boss Starr chairs in orange, light blue and yellow set against soft-edged white tables from Wiesner Hager where staff can prepare their own meals, and sit and chat. These all can be moved aside for bwin.party's regular town hall meetings. The

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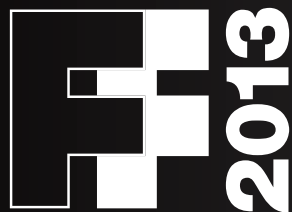
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ceiling coffers from the reception area have been adapted and the curves more extended to create a light and inspiring space in the café area.

For Capper, getting buy-in from staff was key. "I don't think people like to be told 'this is how it will be.' People like to feel that they have a say in their environment. They feel empowered by that." Her people-centric approach seems to have paid off.

"Now people walk into work on a Monday morning with a smile on their face. It's had a dramatically positive impact on morale and on communication across the company."

In the old building, staff had been spread across two floors, with limited integration between floors. That has all changed. The move to an open plan single floor has been a great leveler. Now managers and staff alike sit out in the open in their teams, and people from different departments are opening up conversations with colleagues they might never have bumped into before.

While some managers were skeptical about having their private offices taken away, most staff were on board. It helped that regular

tours were available for anyone wanting to see the progress of the fit-out and staff could monitor progress via her online transfer folder. Further buy-in was fostered by having move champions who paid regular visits and report back to their team. Staff could visit the ideas center where everything from fabric samples, color swatches and pictures of the desks were on display. They even had the chance to test some of the new furniture.

Clearing out the old offices could have been an arduous task, but bwin.party motivated staff using a novel approach. For about six weeks before the move, on a Friday afternoon for half an hour, lively music was pumped out across both floors. In that time, people were expected to start clearing out their trash; just one crate per person of personal belongings would be transferred to the new building.

An eye on the environment

As far as possible, the project has been managed with an eye on the environment. In the old building, waste was recycled and much of the old furniture went to a local children's hospice. In the new building, everything is state-of-the-art and energy efficient and the building's recycling program

has been embraced.

As well as being a hit with staff, the project has undoubtedly been fulfilling for Capper from a personal perspective. Some FMs might beg to differ, but she compares her job to running a giant household. Staff is, essentially, her work family and she does her best to look out for them and to cater for their needs.

"I can't make a difference to the relationship people have with their managers. I can't do anything about their salary. But I can do my best to make their surroundings personal and comfortable. My job isn't just about making the lights work. Really, it's about people and making sure they're happy. I think this project has achieved this. It's been a real success." **FMJ**



Roy Parrish is the managing director of Ranne Creative Interiors, a specialist interior design, build, consultancy planning service. He has more than 15 years of experience in the design and build and fit-out sector having worked for Vitalis in Moscow and the IOR group in the U.K. as well as setting up and running Harrow Green Design and Build, before launching Ranne in 2009.



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*"Workforce/Workplace Reports from
the Families and Work Institute"*

BY JULIÈ A. GAUTHIER, IIDA LEED AP AND ROSHELLE RITZENTHALER, LEED GREEN ASSOCIATE

Working together, three workplace initiatives—wellness, mobility and sustainability—are finding meaningful purpose in the office by offering clear economic advantages for the organization as a whole while providing distinct and notable benefit to a business's number one asset—its people. Wellness programs are not new to the business world, but the acknowledgement of the benefits of an active lifestyle finally are being recognized and purposefully incorporated into workplace activities that encourage movement throughout the day, offer options of where and when to work, and contribute to sustainable goals. Combined, these programs appeal to both the physical health and the overall mental well-being of individual workers. Organizations are awakening to understand they can maintain the talent needed to succeed and encourage behaviors that contribute to an inviting and positive office environment at the same time.

Workplace wellness strategies

One can make a case for the need of workplace wellness strategies based on the fact that the number of jobs requiring moderate physical activity has dropped from 50 percent in 1960 to just 20 percent in 2012. The perils of sitting are well documented,



as is the increasing realization that sitting is the new smoking of our generation. Recent research has revealed that adults who spend four or more hours per day sitting have an 80 percent increased risk of death from cardiovascular disease compared to those who spend less than two hours a day sitting.

From the micro focus of combatting the “sitting shift” in many office environments to the macro effect of sick days on health care insurance premiums, the simple truth is that good health is good for the economy. Researchers are increasingly linking poor worker health to poor economic outcomes, such as lower productivity higher absenteeism, shorter life spans and slower economic growth. For example, data from the National Study of the Changing Workforce show that 35 percent of employees who say their overall health is “excellent” are highly engaged on the job, compared to 23 percent of those who say they are in “poor” overall health. And 68 percent of employees who say they are in “excellent” health report they are “not at all likely” to leave their job, compared to just 45 percent of employees who say they are in “poor” health.

Mobility strategies are work practices that include technology to support workers anywhere/anytime. These allow for flexibility in work schedules that contributes to positive attitudes about the organization, the transfer of belief in the individual, and, ultimately, the worker’s perspective of her/his own work product contribution. Both onsite and external mobility programs provide staff with options that encourage more activity throughout the day and likely more loyalty to their employing organization. Older, more traditional paradigms in management styles are slowing change for some businesses, but more organizations are embracing mobility as a means to attract the best workers and keep the talent already in-house. A shift in management attitudes is resulting in a move toward results-based measurements for performance and productivity, making room for self-directed work and increasing amenities in the workplace that support active lifestyles. Businesses benefit by providing mobile flexibility for employees as identified by HR managers in a survey by Society for Human Resource Management (SHRM). Fifty-eight percent of HR managers reported that programs

that allow employees to better balance work and life will be a key factor in attracting and retaining the best people.

Mobile work options

On-site mobility increases the potential for coworkers to socialize. Two-thirds of people would turn down a job offer with a pay raise to stay working with people they liked and respected. For on-site staff, mobility strategies could include the ability to move and being untethered around the workplace keeps people from sitting for long periods. A few examples of optional work environments include standing workstations, walking meeting or conveniently placed communicating stairs to encourage vertical circulation and less use of the elevators. Shared amenities, such as work/mail rooms, that require users to travel from their personal work space (where they are likely sitting) to retrieve prints, supplies and other information not only encourage movement during the work day, but are good strategies for reducing real estate and promoting colleague interaction that allows for those happenstance exchanges that spark new ideas for many high performing organizations.



For those not required to be on-site, mobile work gives the opportunity to move around town or the house throughout the day; time gained from not commuting (i.e. sitting in traffic) can be shifted to other activities that maintain health or reduce stress (i.e. workouts or family activities). A study commissioned by Microsoft in May 2011 explores attitudes toward flexible working among 1,500 full-time and part-time employees in office based roles in 15 European countries found that most businesses have embraced flexible working strategies for employees. The study revealed that “56 percent of flexible workers believe they work more productively away from the office, and 48 percent say this is because they can fit their work around personal commitments” and that would direct their decisions about where to work—a combination of work in the office and away from the office.

Sustainability, at its revealed core, is about the best stewardship of resources. It follows naturally the pursuit of sustainable design interventions integrate and amplify strategies on physical movement and material health. Simply put, what’s good for the environment is good for people too.

Choosing to walk, bike or take public transit instead of driving to work is a positive choice for the environment. Lesser known is the correlation that the use of public transit is linked with healthier lifestyles. Studies have shown that obesity rates are inversely related to the use of alternative transportation.

Further, a study of New York City residents found that body mass index ratings tend to decline significantly with increases in subway

use, bus stop density, population density and mixed-use amenities in their neighborhood. Choosing locations for our workplaces that provide access to public transportation, bike routes and local businesses positively affects both people and the planet.

Healthy lifestyle choices

The overlap between sustainability and active lifestyles was explored extensively in the creation of NYC’s Active Design Guidelines. Communications, including posters freely available on NYC 311, encourage building occupants to, “Burn Calories not Electricity. Take the Stairs!” Effective public awareness campaigns such as these have been shown to increase the use of stairs by 50 percent, with the potential to reduce early weight gain. Bringing similar strategies to the workplace requires an approach by FM and operations leadership, with the support of change management professionals and tools, that roll out change in the organization’s policies that make it clear to staff that new models and process for wellness, mobile work and sustainability are supported, encouraged and part of an effective workplace.

In addition to healthy lifestyle choices made throughout the day, health also is influenced by unsuspecting environmental attributes. For example, access to natural light and views not only contributes to LEED credits, but research also has proven this has the potential to significantly reduce stress and chronic headaches.

Indoor air quality also has the potential to significantly affect the health and productivity of building occupants. According to the U.S. Environmental Protection Agency

(EPA), many indoor environments have pollutant levels of two to five times higher and occasionally more than 100 times higher than outdoor levels due to occupant activities, building materials and ambient conditions.

This is significant considering Americans spend an estimated 90 percent of their time indoors, between work and home. These pollutants enter the body through the skin, inhalation and digestion and end up in our blood stream. We only are beginning to understand how environmental pollutants link to a myriad health problems including cancers, developmental disorders, immune deficiencies, reproductive complications and asthma. Designers and facility managers must understand the ingredients that make up our building materials and free indoor environments of known or suspected toxicants.

Making it a priority

Maximizing productivity and talent retention, while reducing stressors and distractions in the workplace, are consistently at the top of many businesses’ priorities. Contrary to past management and ownership perspectives, they no longer are viewed as mutually exclusive or obtainable only at the sacrifice of one for the other. Increasingly, recognition is being given to the powerful solutions found in the overlap between wellness, mobility and sustainability. **FMJ**

References:

1. Parker-Pope, Tara. May 2011. “Less Active at Work, Americans Have Packed on Pounds.” New York Times: Well Blog.
2. Science Daily. Jan. 2010. “Sedentary TV Time May Cut Life Short.” Science News.
3. Aumann, Kerstin, and Ellen Galinsky. 2008. “The State of Health in the American Workforce: Does Having an Effective Workplace Matter?” 2008 National Study of the Changing Workforce. New York, NY: Families and Work Institute.
4. Society for Human Resources Management, SHRM Research Spotlight: Workplace Flexibility in the 21st Century. October 2010 SHRM. Retrieved from http://www.shrm.org/Research/SurveyFindings/Documents/10-WorkFlexFlier_FINAL_Spotlight.pdf.
5. OnePoll. 2012. “New research reveals job satisfaction is determined by our work colleagues.” Retrieved from <http://www.jobsite.co.uk/insider/research-job-satisfaction-work-colleagues-10961/>

6. Microsoft and Vanson Bourne, "Attitudes Toward Flexible Working" Summary Research Report (http://download.microsoft.com/download/C/0/B/C0B1D53A-BAD3-4116-BF71-1EE19B538153/Microsoft%20NWOW%20Flexible%20Working%20Survey_Summary%20Research%20Report.pdf).
7. David Bassett, John Pucher, Ralph Buehler, Dixie L. Thompson, and Scott E. Crouter (2008), "Walking, Cycling, and Obesity Rates in Europe, North America, and Australia," *Journal of Physical Activity and Health*, Vol. 5, pp. 795-814. Retrieved from <http://policy.rutgers.edu/faculty/pucher/JPAH08.pdf>
8. Andrew Rundle, Ana V. Diez Roux, Lance M. Freeman, Douglas Miller, Kathryn M. Neckerman and Christopher C. Weiss (2007), "The Urban Built Environment And Obesity In New York City: A Multilevel Analysis," *American Journal of Health Promotion*, Vol. 21, pp. 326-334. Retrieved from http://www.activelivingresearch.org/files/Rundle_AJHP_2007.pdf.
9. Veitch, J.A.; Newsham, G.R.; Mancini, S.; Arsenault, C.D. "Lighting and Office Renovation Effects on Employee and Organizational Well-Being." September 2010.
10. EPA. "Questions about your Community: Indoor Air" <http://www.epa.gov/region1/communities/indoorair.html>
11. EPA. "An Office Building Occupants Guide to Indoor Air Quality." <http://www.epa.gov/iaq/pubs/occupgd.html>
12. Perkins+Will Transparency Site (<http://transparency.perkinswill.com>).
13. Schwartz, Ariel (2012), "Is your Building Filled with Junk that Makes it Hard to Breathe?" Fast Company. Retrieved from <http://www.fastcoexist.com/1680378/is-your-building-filled-with-junk-that-makes-it-hard-to-breathe>.



Julie Gauthier is a licensed interior designer with Perkins+Will. She is based in Houston, Texas, USA, and has more than 17 years of experience designing corporate office environments.



Roshelle Ritzenthaler is a knowledge research coordinator for Perkins+Will. She is based in Chicago, Ill., USA.

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Brett G. Andrews, CFM
Hanesbrands Inc.
Winston Salem, N.C.

Joseph D. Ashurst, CFM, FMP
University of Utah
Salt Lake City, Utah

Valerie Bates, CFM
LexisNexis
Alpharetta, Ga.

Martin A. Bentivengo, CFM
Fermi National Accelerator
Laboratory
Batavia, Ill.

Cindy A. Bode, CFM, CFMP
U.S. Foods
Rosemont, Ill.

Robert H. Buchanan III, CFM
RHB OF TEXAS
Waco, Texas

Nicholas D. Cluff, CFM
The Church of Jesus Christ
of Latter-day Saints
Lincoln, Neb.

Matthew W. Crocker, CFM, FMP
Crossgates Inc.
Harrisburg, Pa.

Patrick Daniels, CFM
San Antonio, Texas

Richard Darby, CFM
Metro
Los Angeles, Calif.

Eric Duclos, CFM
Salt Lake City, Utah

George A. Evans, CFM
The Church of Jesus Christ
of Latter-day Saints
Halifax NS FM Group
Halifax, NS, Canada

Thomas J. Fountaine, CFM
Family Healthcare
Centers of San Diego
San Diego, Calif.

Michael A. Garemko, CFM
Fiserv Inc.
Norcross, Ga.

Samuel R. Head, II, CFM
KVIE Public Television
Sacramento, Calif.

Ray Hogan, CFM, P.E.
Western Regional
Housing Authority
New Minas, NS, Canada

Jeremiah Holman, CFM
CBRE
Columbus, Ohio

Fredrick J. Hull, CFM
CPB (The Church
of Jesus Christ of
Latter-day Saints)
Page, Ariz.

Ryan Hunter, CFM
Equinix
Secaucus, N.J.

Karen E. Irvin, CFM
Quintiles Transnational
Corp.
Overland Park, Kan.

Steve C. Keene, CFM, FMP
Cushman&Wakefield/
NorthMarq
Shoreview, Minn.

Jason K. Killian, CFM
SL Monument Park
FM Group
Salt Lake City, Utah

Cynthia Kusumadewi, CFM
Colliers
Singapore

Ron E. Lasater, CFM
Franklin Templeton
Investments
Rancho Cordova, Calif.

Michael J. Lesage, CFM
Stoel Rives LLP
Portland, Ore.

Fraser Main, CFM
TM Facilities Management
Pty. Ltd.
Melbourne, Victoria,
Australia

Denise Martin, CFM, FMP
Pearson
San Antonio, Texas

Susan Morris, CFM
The Vanguard Group
Charlotte, N.C.

Oluwashina G. Oliyide, CFM
Alphamead Facilities &
Management Services
Lagos, Nigeria

Stephen Pitts, CFM
Cardno-Tec
Charlottesville, Va.

James M. Skiena, CFM
Nixon Peabody LLP
Chicago, Ill.

Todd Squellati, CFM
Exponent Inc.
1 Menlo Park, Calif.

Amy C. Stanley, CFM
Methodist Healthcare
Germantown Hospital/JCI
Germantown, Tenn.

Ethan L. Tecklenberg, CFM
Quintiles
Morrisville, N.C.

Eric J. White, CFM
Bellco Credit Union
Greenwood Village, Colo.

The following people were awarded the Sustainability Facility Professional™ (SFP™) designation:

Brenda Chan, SFP, FMP
B.C. Securities Commission
Vancouver, BC, Canada

Andrew O. Highsmith, SFP
Dr. P. Phillips Hospital
Orlando, Fla.

Terry Karsten, SFP, FMP
Talisman Energy Inc.
Calgary, AB, Canada

Eric Mendez, SFP
Host Hotels & Resorts
Bethesda, Md.

Don A. Reitano, CFM, SFP
Alkermes Inc.
Waltham, Mass.

John C. Ritter, CFM, SFP
San Diego Gas & Electric
San Diego, Calif.

Samuel P. Swearingen, SFP
Green Alexandria, Va.

Suzanne Wharton-Lake, FMP, SFP
Springfield, Va.

The following people were awarded the Facility Management Professional (FMP®) designation:

Terry J. Awls, FMP
Health Care REIT
Toledo, Ohio

Loren Babb, FMP
Youth in Need
Saint Charles, Mo.

David Bean, FMP
The Horsham Clinic
Ambler, Pa.

John C. Benson, FMP
University of Alberta
Edmonton, AB, Canada

Darren K. DesRosiers, FMP
DENS Facility Services
Waltham, Mass.

Ignatius Delpont, FMP
Graceland Hotel, Casino
and Country Club
Secunda, Mpumalanga,
South Africa

Michael J. Dougherty, FMP
Childrens Hospital
of Philadelphia
Philadelphia, Pa.

Heather Elema, FMP
Cadillac Fairview
Calgary, AB, Canada

Edgar Espino, FMP
Houston, Texas

Sam Fisher, FMP
Brigham Young University
Liberty Lake, Wash.

Shane Ferguson, FMP
Sodexo Canada
Calgary, AB, Canada

Frederick Florian, FMP
Metals USA
Bear, Del.

Bruce Francis, FMP
Los Angeles World Airports
Los Angeles, Calif.

David Garwood, SFP, FMP
Johnson Controls Inc.
Milwaukee, Wis.

Trevor T.D. Gayler, FMP
Sodexo Canada
Fort McMurray, AB, Canada

Patricia Grady, FMP
Tinley Park, Ill.

Kim Guerrero, FMP
Northwestern Mutual
Milwaukee, Wis.

Jenna Halverson, FMP
Vancouver, BC, Canada

Fatima A. Hashim, FMP
Los Angeles World Airports
Los Angeles, Calif.

Howard H. Horning Jr., FMP
Los Angeles World Airports
Los Angeles, Calif.

Kim Humphrey, FMP
Sarasota County
Government
Sarasota, Fla.

Jerome Ingrande, FMP
Thomson Reuters
Carlsbad, Calif.

Mansoor Ishaq, FMP
Los Angeles World Airports
Los Angeles, Calif.

Kim W. Lem, FMP
Wesgroup Properties Ltd.
Vancouver, BC, Canada

Antun Losonc, FMP
IKEA
Philadelphia, Pa.

Dennis T. McElhare, FMP
Wesley Enhanced Living
Philadelphia, Pa.

Michael Mikane, FMP
Los Angeles World Airports
Los Angeles, Calif.

Fred A. Mills, FMP
Calgary, AB, Canada

Jeff Moore, FMP
South Texas Blood
and Tissue
San Antonio, Texas

Gregory M. Nagy, FMP
Los Angeles World Airports
Los Angeles, Calif.

Jignasha R. Pandya, FMP
Los Angeles World Airports
Los Angeles, Calif.

Cory A. Paxton, FMP
Brigham Young University
Provo, Utah

Brian K. Pendleton, FMP
Los Angeles World Airports
Los Angeles, Calif.

Suzanne N. Peralta, FMP
Vancity Credit Union
Vancouver, BC, Canada

Sherry Perkins, FMP
L-3 Communications
Santee, Calif.

Serena M. Price, FMP
TD Ameritrade
Omaha, Neb.

Kristen Pruitt, FMP
Illinois Agricultural
Association
Bloomington, Ill.

Mark L. Raines, FMP
The Ensworth School
Nashville, Tenn.

Mark Sanchez, FMP
Gordon & Betty Moore
Foundation
Palo Alto, Calif.

Maria T. Sarullo, FMP
Los Angeles World Airports
Los Angeles, Calif.

Daniel Shackleton, FMP
Conestoga College
Sinking Springs, Pa.

Weifeng Shen, FMP
Goodman Consultancy
Shanghai
Shanghai, China

Susan Simpson, FMP
BarclayCard U.S.
St. Wilmington, Del.

Keith Smith, FMP
Los Angeles World Airports
Los Angeles, Calif.

James Stark, FMP
Nasittuq Corp.
Ottawa, ON, Canada

Jennifer Tan, FMP
Vancouver, BC, Canada

Lottie L. Thomas, FMP
Bridgepoint Education Inc.
Denver, Colo.

Mark J. Tullai, FMP
Los Angeles World Airports
Los Angeles, Calif.

Michael G. Tyler, FMP
Vanguard
Valley Forge, Pa.

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Chatsworth, Calif.

Victor A. Baldorado, CFM
National Education Association
Washington, D.C.

Fred Lee Caver, CFM
Hancock Whitney Bank
Fairhope, Ala.

Nathan D. Christensen, CFM, FMP
Jones Lang LaSalle
Boston, Mass.

Gregory D. Clark, CFM
The Church of Jesus Christ
of Latter-day Saints
El Cajon, Calif.

Kenneth J. Coll, CFM
Mechanicsville, Va.

Ross L. Dapper, CFM
The Church of Jesus Christ
of Latter-day Saints
Lake Forest, Calif.

James A. Delgado, CFM
St. Louis, Mo.

Raymond H. Dove III, CFM, FMP
Board of County Commissioners
Naples, Fla.

James A. Driscoll, CFM
Janssen Pharmaceutical
Raritan, N.J.

Carl J. Eriksen, CFM
QBE the Americas
New York, N.Y.

Colby Fillippelli, CFM
Jones Lang LaSalle
Randolph, Mass.

Stephen Foster, CFM
Odessa, Fla.

Ian R. Fuller, CFM
Dey Pharma
Napa, Calif.

Carlos A. Hernandez, CFM
Pasadena Facilities Management Group
Arcadia, Calif.

Darrel L. Hohmann, CFM
The Church of Jesus Christ
of Latter-day Saints
San Angelo, Texas

Andrew Hunt, CFM
Raba Kistner Facilities Inc.
San Antonio, Texas

Ronald B. Kalich, CFM, SFP
Kaiser Permanente
Oakland, Calif.

Mike W.W. Lackey, CFM
Lackey De Carvajal Cx
San Antonio, Texas

Catherine D. Lee, CFM
University of Virginia, Housing Division
Charlottesville, Va.

William Martin, CFM
HMS
Irving, Texas

Adam Nasr, CFM
ARAMARK Education K-12
Belmar Board of Education
Belmar, N.J.

Roger Nichting, CFM
CH2M Hill
Denver, Colo.

Anthony Ortery, CFM
The Menninger Clinic
Houston, Texas

A.V. Panya, CFM
Tetra Tech
Oak Ridge, Tenn.

Lori J. Pescherine, CFM, FMP
DRAFT FCB
New York, N.Y.

Bruce Ruoff, CFM
Smith & Nephew Inc.
Arlington, Tenn.

Shunsuke Sakurai, CFM
JX Nippon Real Estate Corp.
Chiyoda-ku, Tokyo, Japan

Cecilia W. Sebatindira, CFM, FMP
International Finance Corp.
Germantown, Md.

Robert D. Sensenig, CFM
The World Bank
Washington, D.C.

Susan W. Sessler, CFM
Greensboro, N.C.

Matt Shively, CFM
Equinix
Ashburn, Va.

Layne D. Stark, CFM
The Church of Jesus Christ
of Latter-day Saints
Amarillo, Texas

Joanne M. Trask, CFM
Partners Healthcare System Inc.
Wellesley, Mass.

Vijay Prakash Uniyal, CFM
General Motors
Bangalore, Karnataka, India

Hector Valdez, CFM
The Church of Jesus Christ
of Latter-day Saints
San Diego, Calif.

Maria C. Vickers, CFM
Advanced Micro Devices Inc.
Boxborough, Mass.

Patrick Warren, CFM
Schenectady, N.Y.

Ira Warshauer, CFM
Schlumberger
Sugar Land, Texas

Warren Weitz, CFM
Equinix
San Jose, Calif.

Steven A. Wheat, CFM
The Church of Jesus Christ
of Latter-day Saints
Los Angeles, Calif.

David Winston, CFM
The Church of Jesus Christ
of Latter-day Saints
Yukon, Okla.

Mark J. Wisniewski, CFM
The Church of Jesus Christ
of Latter-day Saints
Wrightwood, Calif.

The following people were awarded the Sustainability Facility Professional™ (SFP™) designation:

Arturo Acosta, FMP, SFP
Raytheon Co.
El Paso, Texas

Vincent Del Borrello, SFP
Johnson Controls
Davie, Fla.

Scotty L. Brown, SFP
U.S. DOE
Folsom, Calif.

Jared R. Call, CFM, FMP, SFP
Intuit Inc.
Plano, Texas

Gregory Carothers, CFM, SFP
Toyota Motor Sales USA Inc.
Torrance, Calif.

David Garwood, SFP, FMP
Johnson Controls Inc.
Milwaukee, Wis.

Radha Kalaria, FMP, SFP
Sodexo
Edison, N.J.

Sherif Khaled, SFP
The American University in Cairo
Cairo, Egypt

David J. Kuiper, CFM, SFP
Herman Miller Inc.
Zeeland, Mich.

Mitchell D. Holman, SFP, CFM
Fluor Corp.
Greenville, S.C.

Ramzi F. Qumsieh, CFM, FMP, SFP
Projacs International
Doha, Qatar

Kato Smith, SFP
U.S. Department of State
Helsinki, Finland

Terry L. Spain, SFP
San Diego Gas & Electric
San Diego, Calif.

Paul Whitman, Jr., SFP, FMP
Gibbsboro, N.J.

The following people were awarded the Facility Management Professional (FMP®) designation:

Frank Antonucci, FMP
Administrative Office of Pa. Courts
Harrisburg, Pa.

Michael Arnold, FMP
Catholic Diocese of Pittsburgh
Pittsburgh, Pa.

David Auton, FMP
Hartland, Wis.

Crista Binder, FMP
Los Angeles World Airports
Los Angeles, Calif.

William B. Boyd Jr., FMP
Schlumberger
Oklahoma City, Okla.

Craig Brown, FMP
Newmark Grubb Knight Frank
Hartford, Conn.

Kippi Cleavinger, FMP
SBM Offshore
Houston, Texas

Zenette D. Duffy, FMP
America's Choice/Pearson
Washington, D.C.

Shawn P. Emmons, FMP
SRC Inc.
North Syracuse, N.Y.

Burke Gulbranson, FMP
College of New Caledonia
Prince George, BC, Canada

James Hollingworth, FMP
Stittsville, ON, Canada

Brian Jackson, FMP
Savvis Inc.
Santa Clara, Calif.

Tyrone Jessamy, FMP
Los Angeles World Airports
Los Angeles, Calif.

Marvin Jordan, FMP
Goodmans Bay Corporate Centre
Nassau, Bahamas

Pinchieh Kamikubo, FMP
Los Angeles World Airports
Los Angeles, Calif.

Karly Lang, FMP
Pinellas Park, Fla.

Jordan D. Lauriola, FMP
Compass Group Canada
Pickering, ON, Canada

A.J. Maree, FMP
Daejeon, South Korea

Bradley D. Martin, FMP
PCI Gaming
Montgomery, Ala.

Pamela A. McQuillen, FMP
Penn West
Calgary, AB, Canada

Jaime O'Keefe, FMP
DSM Nutritional Products LLC
Lexington, Mass.

Gail Olson, FMP
INL
Idaho Falls, Idaho

William Olson, FMP
Elsevier
Philadelphia, Pa.

Collins Osayamwen, CFM, FMP
SheltercareFMconsult
Central Abuja, Nigeria

Leonel Paixao, FMP
James Madison University
Harrisonburg, Va.

Merita Pleasant, FMP
Peoria, Ariz.

Ronald E. Prebianca, FMP
Coventry Health Care Inc.
Saint Louis, Mo.

Timothy Seifert, FMP
Dongducheon-shi, South Korea

Dave Simpson, FMP
Durham Regional Police Service
Whitby, ON, Canada

Susan Smetana, FMP
Los Angeles World Airports
Van Nuys, Calif.

Sorin D. Stef, FMP
Toronto Community Housing Corp.
Toronto, ON, Canada

Victor C. Stewart, FMP
Cobb EMC
Marietta, Ga.

Christopher T. Takai, FMP
Los Angeles World Airports
Los Angeles, Calif.

Levi Toney, FMP
San Francisco Ballet
Oakland, Calif.

Jason Ujobagy, FMP
Uline
Breinigsville, Pa.

Kane Webb, FMP
Calcasieu Parish Police Jury
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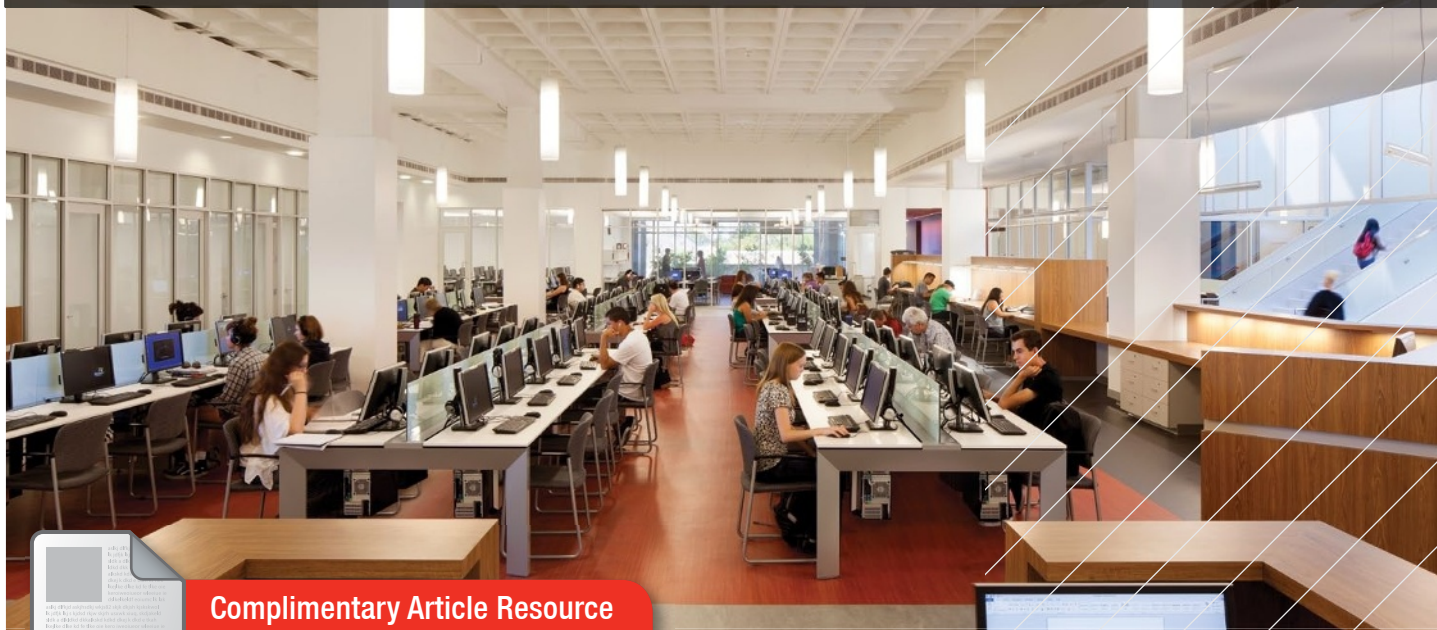


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"JAMES B. UTT MEMORIAL
LIBRARY Schematic Design"

BY MAX HOLLAND

In the not-so-distant past, there was a time when college and university libraries were filled with row upon row of books and periodicals. Computer labs may have been relegated to the corners of certain floors, with only a few individual workstations available among the seemingly endless stacks of books. Fast forward to the present, and the look and purpose of campus libraries has changed dramatically.

Today, libraries are becoming a communication hub for many college and university campuses. No longer used primarily for research and study purposes, the students and staff:

- Collaborate on group projects;
- Find quiet, individualized work spaces;
- Meet with organized school groups and plan activities;
- Attend classes; and
- Housing multiple campus programs or departments.

Ten years ago, school leaders at Saddleback College in Mission Viejo, Calif., USA, made the decision to not simply renovate, but to completely transform the James B. Utt Memorial Library to accommodate what they envisioned as the future of research and learning. Their vision was to, "Create a new paradigm of social collaborative learning; a one-stop learning and research center where students could gather, learn and meet," said Sean Kim, project interior designer for gkkworks, the architecture firm responsible for the project. "At that time, the campus' leadership was forward-thinking and recognized that neither students nor staff had to be tethered to desks or offices to work or study. They wanted to create a place that addressed how students wanted to study and not how society expected them to study."



There were three goals for the space:

- Not to lose any instructional space;
- Include space for student services such as the college radio station KSBR and newspaper *The Lariat*;
- Create a comprehensive college-wide and academic support environment that brings together several services from across campus, including the:
 - College tutorial center;
 - Reading lab;
 - Writing center;
 - Language lab; and
 - College reference/information competency.

“It was important to not only keep the existing classrooms we had in the library, but to also include those from two other buildings on campus and then bring student services together under one roof. Combined, these two changes alone would help students reduce the time spent moving between classes and throughout campus for learning services. It would centralize much of the learning process,” said Kevin O’Conner dean, liberal arts at Saddleback College.

The ups and downs in the economy over the past 10 years were responsible for several starts and stops in the project.

However, this gave the college, architecture and design teams opportunities to learn more about emerging technologies and trends and identify which solutions would best fit the needs of students and staff. The more than 81,000 square foot facility includes classrooms on the lower level, a learning resource center with new media and technology on the ground floor and a traditional library on the upper level.

“Because of the delays in the process, one of the challenges with this project was keeping the momentum and direction moving forward. We would be on track for six months then have to stop for a year or more,” said O’Conner. “With so many starts and stops it was difficult to keep the vision, enthusiasm and integrity of the project in place.”

Challenges

Working on a project for a decade can create its own set of challenges, and in this case, there were several design elements that needed to be addressed, such as:

- Repurposing the existing 40-year old building;
- Adding 4,500 square feet of additional education space;
- Campus ban of carpeting;
- Lack of acoustics;

- Creating a visual and physical connection between floors;
- Inadequate daylight and artificial light; and
- Providing a diverse landscape of spaces.

By repurposing the existing building, the college hoped to show students that dynamic, new ideas are possible within existing frameworks. The library and Learning Resource Center increased usable space by 4,500 square feet and is home to the fine arts, media technology, liberal arts, online education and learning resources, as well as the school newspaper, five computer labs, two large conference rooms, and faculty and staff offices.

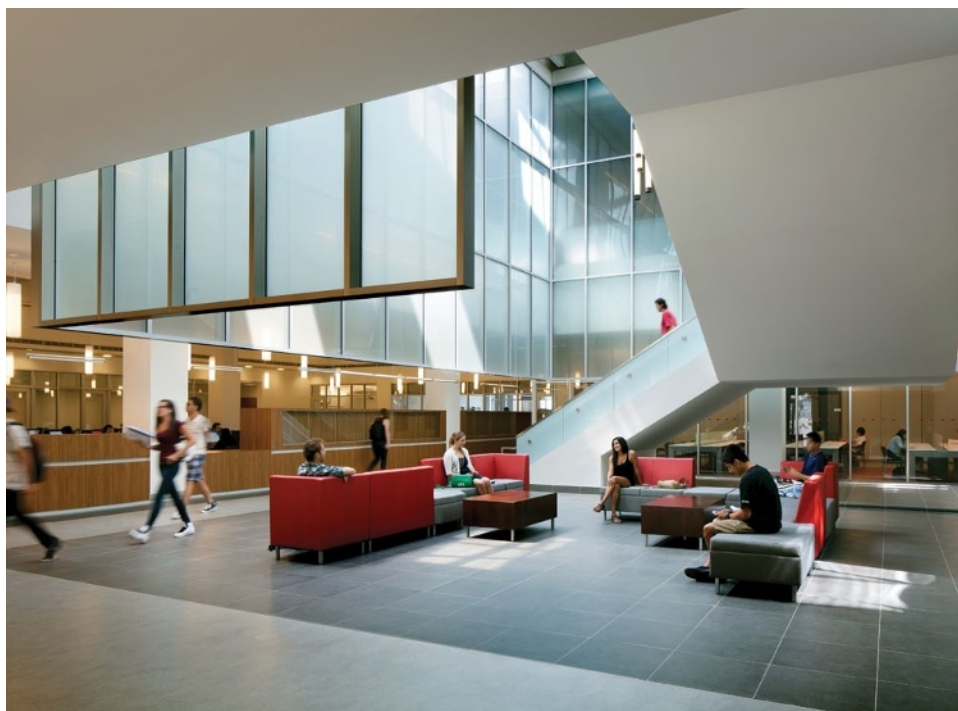
The unifying element of the facility is the monumental staircase located within the central portion of the ground floor. The stairs are enclosed within a day-lit translucent glass cube, which offers additional lighting throughout the building and creates a connection between floors.

To overcome the acoustical challenge of not having carpet installed, the team chose sustainable resilient linoleum flooring for the first two levels and a vinyl plank tile for the third. But, to further control acoustics, high noise-reduction coefficient-value ceiling tiles were selected to provide sound absorption.



To create the open and more social space desired by the college, lighting played a major role. Infusing daylight deep into the learning environment with soft-diffused light during the day provided the solution to inadequate daylight in the building. The multiple levels of lighting and variety of light fixtures enhanced and supported the variety of studying experiences available. The floating cube between the ground and upper floors, with the open plan, enables students to instantly see learning from the main entrance, while providing intuitive circulation to the floor above. Although there was not a sustainability program in place when the project began, through high-performance glass, diffused light, thermal wall assemblies and a rated cool roof, the demand for cooling decreased 15 percent.

The central area of the building, on the ground floor, is where students gather to listen to music, read, study and hangout between classes.



Kimball® Office products were already being used throughout the campus in private offices for faculty and department heads, and the college's only furniture standard was for task seating. However, for the purchase of furniture, Saddleback followed the California Multiple Award Schedules, which offers a variety of products at prices that have already been assessed and deemed reasonable. Because of the school's existing history with Kimball Office, the design team called upon the company's services for much of the library and learning resource center's furniture.

To maintain a level of consistency throughout the facility, "we decided to use one

universal seat, the Kimball Office Event™ chair, for individual and group study areas and computer tables. This decision eliminated librarians from needing to search and reset furniture constantly. Except for a few offices and conference rooms, all chairs are the same,” said Kim.

The central area of the building, on the ground floor, is where students gather to listen to music, read, study and hangout between classes. This is the area most visible and serves as a hub for students and groups to meet before moving to other areas of the library or campus. “The cube is the icon of the library,” said Kim. “We created the lobby and study lounges to look more like a cool and hip living room, using Kimball Office

In some cases, what may have taken months to receive, may now only take a few weeks,” said Kim. “Although there were delays in the process, all of our manufacturers and dealers helped us install products in phases, which reduced confusion and kept the project moving forward.”

Measuring success

Since the new James B. Utt Memorial Library and Learning Resource Center opened in late summer 2012, the facility and its design team have been recognized with the:

- 2012 American Institute of Architects, Orange County, Award of Honor
- 2012 American Institute of Architects, San Fernando Valley, Award of Citation

Within two months of the library and Learning Resource Center opening, the facility had become a learning and social hub on campus, tripling the normal student and visitor traffic in the opening semester.

“Through social media and the library’s website, we’ve been able to get a good reading on students’ and the community’s reaction to the transformation of the library,” said Kim. “As soon as the building opened, we started receiving rave reviews and comments from students and alumni via Twitter and Facebook. One student said the library looked like those found on large university campuses, not local community colleges, which was a great endorsement of our design and programming. When



Villa™ lounge, because this is how students study in their dorms or at home. The line’s flexibility helped us to create a diverse landscape of learning.”

Installation

Heavy construction began taking place during the spring 2010 semester and the facility was closed until the beginning of the fall 2012 semester in August.

Because the project was 10 years in the making, it was difficult to know when manufacturers could submit purchase orders and estimate delivery and install dates. “From the time we began working on this project, until it was completed, the manufacturing process for so many products changed dramatically.

However, students’ comments may be proving just as valuable to college leaders and the design team.

“On the first day the building opened in fall 2012, it was at capacity with students who instinctively understood how to use each level and find what they needed. The space does an excellent job of communicating the intentions of each level so students know where to go for what they need,” said O’Conner. “I’ve been impressed with how all of the design elements have come together to produce the desired outcome. There’s a sense of clarity, calm and spaciousness that previously did not exist.”

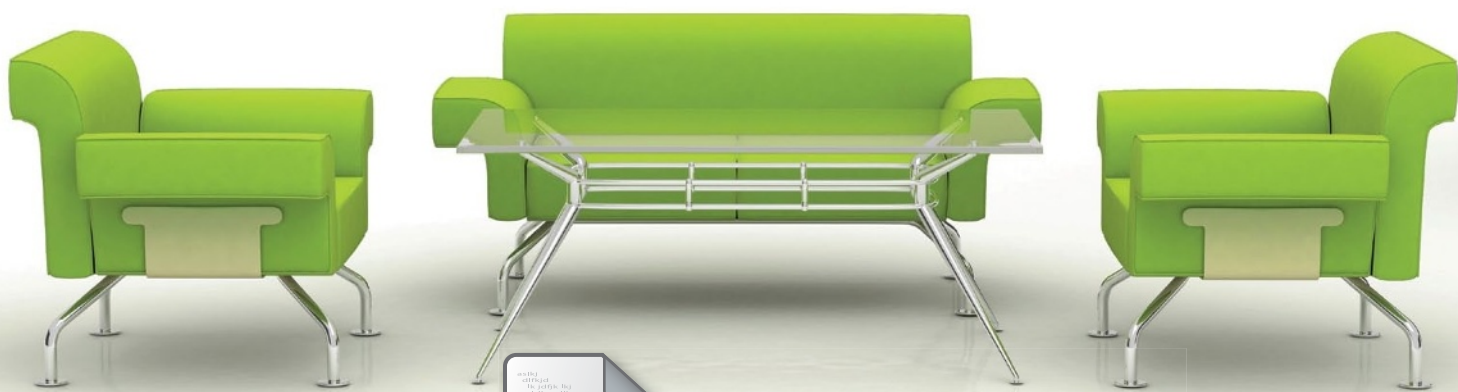
they are in the Learning Resource Center, they think beyond the notion of a two-year community college.” **FMJ**



As director of vertical markets at Kimball Office, Max Holland stays in front of key issues and trends across each of the company’s product focus markets. Holland has 19 years of industry sales and marketing experience, including seven years of business development strategy experience in education, health care and finance markets.

It's Easy Being Green:

Considerations for Sustainable Furniture



Complimentary Article Resource

"Office Furniture, Environmentally Preferable"

HTML

BY JOHN MICHAEL

Promoting a building's sustainability is becoming an increasingly common task for facility managers. While it may seem daunting, there are simple ways to create an environmentally friendly built environment.

One way to do this is by using sustainable furniture to help meet environmental building goals. This can lead to creating a healthy, sustainable workspace that building occupants find more attractive and appealing. According to a American Society of Interior Design study, employees who were pleased with their physical workplaces were 31 percent more likely to say they were satisfied with their jobs.

Environmental certifications

According to the Federal Times, the number of green certification projects skyrocketed in 2012 by more than 50 percent. To design an environmentally preferable

space, FMs should incorporate furniture and design solutions that comply with a company's sustainability goals, as well as meet third-party environmental certification requirements considered important to that company. Third-party environmental certifications and standards help evaluate green design, construction and operations across many different types of buildings. Regarding furniture, certifications such as GREENGUARD-certified products, which improve indoor air quality, and Forest Stewardship Council certified wood products, which promote sustainable forestry, can help a building attain particular certifications and standards to achieve an environmental goal.

Furniture fabrics and finishes

Evaluating how environmentally preferable a furniture piece is involves examining the percentage of recyclable or renewable content in that product's makeup, as well

EVALUATING FURNITURE FOR A HEALTHIER INTERIOR

You may not be able to see indoor air pollutants, but that doesn't mean they're not there. According to the U.S. Environmental Protection Agency, levels of indoor air pollutants may be two to five times—and occasionally more than 100 times—higher than outdoor levels. Items within your building, such as a desk, may seem innocuous, but the finish on that desk may be releasing formaldehyde into the air, a chemical described by the U.S. National Toxicology Program as a human carcinogen.

Material selections in a building's indoor environment can cause serious health hazards that many aren't aware of. Associated health issues include asthma, pituitary and hormonal problems, and cancer. There are easy, immediate and sustainable steps you can take to reduce and eliminate the use and generation of hazardous substances in your building, which can start with evaluating your current furniture selection.

If it's been a while since you've evaluated your furniture, it's probably time to do so. Your current upholstery materials and furniture finishes may have serious health hazards. Consider making sustainable furniture choices, which ultimately creates a healthier building environment. Taking action to create a more sustainable and healthier workplace can help organizations demonstrate their commitment to employee well-being—all while decreasing absenteeism, increasing productivity, inspiring healthy living and defraying cost. Now that is a healthy return.



as the fabrics and finishes used. The first part of evaluating a piece of furniture is to look at the percentage of renewable or recyclable content in its makeup—this includes fabrics and finishes used, which is becoming an increasingly important factor in the sustainability equation.

The following are some suggestions for evaluating an item's sustainability, in regard to fabrics and finishes:

- Look for fabrics with natural and bio-based fibers, as well as recycled content. Many new fabrics will advertise their environmentally preferable production.
- Consider polyvinyl chloride-free upholstery. Traditional vinyl and polyvinyl chloride materials have associated environmental and health hazards, including cancer, and immune system and neurological damage. Upholstery free of these materials is often durable and easy to clean, allowing for a prolonged life as well as preventing mildew and bacteria.
- Choose environmentally friendly finishes, when possible. Some wood product manufacturers are reducing waste and harmful solvents, which helps prevent off-gassing (what occurs when volatile organic compounds, such as formaldehyde, evaporate and are released into the air, often triggering allergies and chemical sensitivities) that can help improve indoor air quality.

The supply chain

As sustainability priorities evolve, companies are considering how products are manufactured, packaged and shipped. Consider where the product comes from; when possible, FMs should work with manufacturers and furniture dealers promoting environmental responsibility throughout the entire product life cycle. Consider the following questions to better evaluate a company's manufacturing and distribution methods:

- Does the company use fuel efficient transportation for distribution and deliveries?
- Does the company utilize renewable energy sources, such as solar power?

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- If the company has strategically located distribution centers, are customers getting their products from the closest location?

Reuse and recycle

There is an emphasis today on reusing and recycling old furniture, rather than simply throwing it out. It's easy to forget about the end-of-life processes for items purchased, but it's a very important consideration in a product's life cycle. FMs have options when it comes to handling old furniture.

When it comes time to replace the old with the new, consider partnering with a used furniture broker who will buy your furniture

and recycle it or have it refurbished and resold. Additionally, many organizations will accept old furniture as a donation and will reuse it in places of need, either domestically or internationally.

Pleasing aesthetics

Sustainable furniture designs can complement an overall environmentally responsible design. This spans everything from flooring to wall coverings to ceiling and lighting—all which have environmental options that are trending right now.

As expected, sustainability doesn't only apply to furniture; there are other factors to be mindful of. Start with low or no volatile organic chemical paint options on surfaces, as well as environmentally preferable flooring or carpeting options. When it comes to lighting, it's always optimal to maximize natural light—not only does it make building occupants happier, but it also cuts down on energy usage costs. Additionally, avoid fluorescent lights and try adjustable LED lighting to help decrease eye strain.

Ultimately, keep in mind that wanting to be sustainable doesn't mean you can't emphasize aesthetics as well. Creating an inviting, sustainable space not only will help a building meet its environmental goals, but also make building occupants excited about being there. **FMJ**



John Michael is vice president and general manager for Business Interiors by Staples. Business Interiors by Staples is part of Staples Advantage, the business-to-business division of Staples Inc., and provides furniture and design solutions to help organizations create more comfortable, productive and aesthetic environments.

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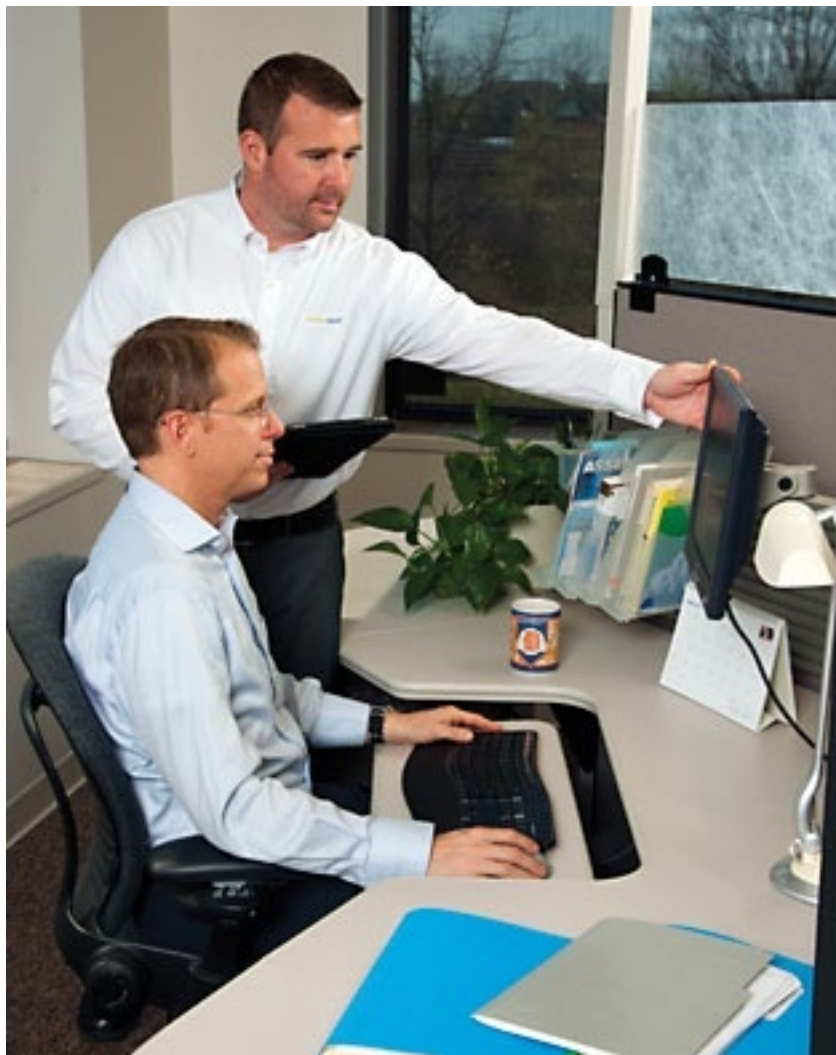
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Incorporating ERGONOMICS to Maximize Comfort and Well-being

BY BLAKE MCGOWAN, CPE

The way in which we complete office work has changed dramatically over the past few decades. For instance, face-to-face conversations have been replaced by emails, and computerized spreadsheets have improved the accuracy and speed in which accounting tasks are completed.

The office desktop also has changed. Heavy, permanently placed computer monitors have been replaced by portable laptops, mobile devices and tablets. New technology has allowed work to be conducted anytime, anywhere, and in half the time. Our workplace now is considered "on the go." Webinars, virtual meetings and smartphones make work efficient and cost effective. Just when one technological advancement is implemented, comprehended and achieved, another one hits the market and takes the workplace by the horns. Ultimately, though, work still is done by people, and the more that is understood about how people interact with their work environment (proper ergonomics), the more likely employees will be productive, comfortable and healthy for years to come.



Distributed work strategies

In addition to how work is performed, where work is performed has changed. More organizations are promoting a distributed-work strategy (IFMA, 2009). It allows work to be completed at varying times and from multiple locations, such as in the office, home, telework centers, coffee shops or airplanes. Due to this flexibility, work always is being performed someplace. The tools required to keep employees working, whether they are in the office or not, are being provided by the employer. Employees like the flexibility and organizations like the results. Because this type of work environment appeals to three-quarters of workers under the age of 30, the trend for teleworkers and telecommuting will continue to grow.

Corporate management recognizes this trend and realizes that less physical workspace is necessary. Rather than providing a traditional office or cubicle,

solutions such as stay areas, collaboration zones and huddle rooms are being incorporated inside and outside of business environments. As a result, some companies experience a decrease in rent or lease property costs.

Within this strategy is a popular workspace concept called hoteling. In this concept, employees reserve workspace in the main office facility where there are fewer office spaces than staff. Studies show that workspace utilization peaks around mid-morning when approximately one-third of employees are at their desks. An additional 20 percent of employees are present, but in conference or meeting rooms. Thus, half of all workers are not physically present. Some may work from home, others may be with customers or may work from other offices. Due to these factors, companies are starting to measure the true workspace requirements; in doing so, they may reduce capacity to minimize costs.

For those employees who spend most of their time at the main office facility, they may have recognized a change in the office. The physical workspace of the office environment oscillates between different ideas and theories. Should the office be an open environment or one with cubicles and meeting rooms? Should it promote collaboration or privacy? The debate as to which environment is best continues, but the prevailing approach is for an open and collaborative workspace.

The fundamental principle of how work is performed should be based on ergonomic principles—fitting the work environment to the person.

Challenges in open spaces

Not all workspace changes and theories are positive. Unfortunately, in an open environment with few walls, some employees complain of being constantly distracted, disrupted by noise or uncomfortable completing work in view of all colleagues. According to a 2008 Asia-Pacific Journal of Health Management study, the transition from traditional office floor plans (i.e., comprised of private offices and organized rows of cubicles with six-foot-high panels) to open workspaces has shown increases in employee blood pressures and higher turnover. There also have been reports of lower productivity and higher stress with open floor plans. According to a 2007 study by the Center for the Built Environment, most employees are bothered by noise (e.g., others speaking) and the lack of privacy (e.g.,



others listening) with the latter being the more concerning for employees.

Despite that, the trend in office workspace design—to promote more networking—is on the rise. Cubicles and low dividers have been removed, and replaced with large tables and open work surface. Collaboration has trumped privacy.

Fitting the work environment to the person

Regardless of all the advances in technology and physical workspace design, the fundamental principle of how work is performed should be based on ergonomic principles—fitting the work environment to the person.

In recent decades, attempts have been made to improve the fit between office equipment, furniture and the person. Do you remember the first personal computer of the 1970s and 1980s? There were several influential companies that understood the importance of implementing ergonomics when designing equipment and workstations. Some early examples include:

- Designing equipment for anthropometry (to the measurements of the human): Chairs were designed with a full range of height adjustability to accommodate the full range of the population. Seat pan cushions were designed with adequate width, depth and the classic “waterfall” front edge to fit the varying body sizes.
- Providing adjustable workstations: Adjustable-height terminal bases

were designed to raise or lower the height of the visual display terminal.

- Educating employees on how to organize the workstation: Employees were taught the proper placement of the keyboard (directly in front of the monitor) and the large central processing unit (CPU) to provide adequate work space and leg clearance.
- Educating employees on maintaining proper posture: Employees were instructed to sit in what is now referred to as the “90° posture.”
- Providing additional equipment to overcome discomfort: Foot rests, copyholders and headsets became more common.

Ergonomics should not be disregarded. No matter where work is performed, and no matter the equipment that is used.

During the 1990s and 2000s, the physical workspace continued to change as job demands and computer processing speeds increased. As employees spent more time at their desktop computers, several equipment enhancements were introduced to improve comfort and to reduce the risk of injury. During this time period, new equipment was introduced including:

- Fully adjustable chairs with the ability to adjust up and down, in and out, with tilt options, back supports, headrest, armrest, etc.
- Chair to accommodate 100 percent of the population, from the smallest female to the very large male in both weight and height.
- Fully adjustable workstations with height-adjustable keyboard trays, work surfaces, and monitors.
- Curved keyboards—some good, some bad and some just weird!
- Innovative mouse designs to improve performance and comfort, such as the roller mouse and vertical mouse.
- Specialized wrist rests for keyboard and mice to relieve pressure and provide support.
- Glare and privacy screens to prevent eyestrain.
- Height adjustable monitor risers and the fully adjustable support arms for flat screens, to allow proper viewing angles.

With the release of Microsoft’s Windows 95 operating system, things changed again. The laptop computer started to gain tremendous popularity. Employee work behaviors and practices began to change. The ergonomic principles and workstation setup guidelines were challenged or disregarded. How many people actually take the time to connect their laptops to external mice, keyboards and monitors? Not many.

Even today, ergonomics should not be disregarded. No matter where work is performed, and no matter the equipment that is used, proper biomechanics must be practiced. Repetitive actions, forceful movements and constrained postures all contribute to work-related musculoskeletal disorders (WMSDs). WMSDs cost the U.S. economy billions of dollars each year. Most injuries can be prevented by adhering to ergonomic principles.



Proper physical workstation setup

Proper physical workstation setup is important to optimize health and comfort.

The following approach simplifies the workstation setup:

1. Eyes to source

- Locate a monitor directly in front of the worker and in-line with the keyboard.
- Place the monitor approximately an arm's length away from the body (typically, this is 18 to 30 inches away).
- Adjust the height of your monitor so the top of the display is at or slightly below eye level.
- Clean the display often to remove dust or smudges.
- Use glare or privacy filters to allow for proper postures.

2. Hands to input device

- Locate the keyboard and mouse on the same surface and at the same height.
- Position the keyboard and mouse at or slightly below elbow height.
- Use a thin and flat keyboard to promote neutral wrist postures.
- Center the keyboard with the "H-key" at the center of the monitor to reduce wrist deviation.
- Consider using a keyboard without the numeric keypad to place the mouse closer to the center of the workstation. This will reduce arm reaching and shoulder discomfort.

- Try using a vertical style mouse (i.e., where the thumb is more vertical) to reduce wrist discomfort. Minimize the use of traditional flat mice (i.e., where the thumb is horizontal).

3. Body to chair

- Choose a chair with a seat pan size that match body type. There are small and large chairs available.
- Adjust the height of the seat pan to place thighs parallel with the floor, with the keyboard and mouse at elbow height and feet on the floor.

4. Feet to floor

- Use a foot rest to properly place feet flat on the floor, if needed.

Optimizing the office environment

In addition to these personal workstation adjustments, it is also important to optimize the office environment. This may include:

1. Lighting

- Provide sufficient luminance for office work. It is recommended that 200 to 500 lux of luminance be provided.
- Provide task lights to assist with light.
- Consider the age of the employee. If under the age of 40, select an illumination level from the lower third of the given range. Those aged 40 to 55, select an illumination level from the middle third of the range. For those aged 56 and over, select an illumination level from the upper third of the range.

2. Temperature

- Ambient temperature should range between 68° to 74.3°Fahrenheit during the warm season.
- Ambient temperature should range between 73.4° and 78.8° F during the cooler season.
- Relative humidity of the air in the workstation should range between 30 percent and 60 percent.

3. Noise

- Maintain a balanced noise criteria (NCB) rating between 38 and 43 decibels
- Noise may be reduced by using carpeted floors, ceiling acoustical tiles, draperies and sound-absorbing/isolating partitions or other sound-absorbing materials.

- Separating noise sources from the work environment with walls or partitions, or by covering equipment with an acoustical enclosure also effectively reduces noise.
- As people age, the ability to process auditory information, such as speech, and to filter out background noise declines. Hearing loss averages 2 percent to 3.5 percent per year throughout life.

Keeping up with change

It is clear the office environment has changed, is changing and will change. But so do individuals. To keep up with tomorrow, FMs must redesign the workplace to meet the needs of its occupants. Whether it is in a collaboration zone or office cubicle, work continually should be designed to fit people. As mentioned above, as workers age, their basic needs change. According to a Humantech study of 47,000 office ergonomic surveys, the two most prevalent office issues were visual/auditory privacy and acoustic interruption. The second two issues reported were chair adjustments and lumbar support.

Facility managers should be aware of the reported issues and develop corresponding action plans. Just like the changes in office equipment and physical workspace that has been observed in our lifetime, so have the needs of employees. The challenge is, "What are we going to do about it?" **FMJ**



Blake McGowan, CPE, is a managing consultant and ergonomics engineer for Humantech. With more than 10 years of experience, McGowan has facilitated thousands of employee-driven continuous improvement

projects and hundreds of complex product design and manufacturing solutions.

He has achieved recognition as a Certified Professional Ergonomist (CPE), and is a member of the Human Factors and Ergonomics Society (HFES), the American Industrial Hygiene Association (AIHA) and the AIHA Ergonomics Committee.

BMS:

The BRAIN of the Modern Facility



BY STEPHEN PLECHY

What is a BMS? How do you know if you need one? How do you select a BMS? These are just a few of the questions facility managers ask in their quest to improve their facility's efficiency.

BMS stands for building management system, a computer-based control system that optimizes efficiency and occupant comfort. BMS also is known as a building automation system or energy management system. A BMS eliminates the hassle of manually switching equipment on and off that control key parts of a facility such as mechanical equipment and lighting. In addition, a BMS can provide a precise degree of control over the facility environment such as air temperature, humidity, air distribution and carbon dioxide levels, providing critical alarm notifications alerting of failures.

A BMS can be broken down into three basic components—controllers, field devices and networks. Microcomputer controllers receive

specific programmed commands from the field devices in order to take accurate actions that control a facility's operations. Field devices are the components that send and receive data in order to monitor a facility locally or remotely. This communication between devices is essential since without measuring and monitoring, they cannot be in control of a facility. Networks ensure communication exists between devices as well as provides the ability to access the information from anywhere in the world.

Determining what BMS is right for a specific facility doesn't have to be challenging or stressful as long as three key components are kept in mind when selecting a system: building size, function and benefits.

Building size

It is a common misconception that only larger facilities or businesses benefit from an automated system. A building management



system targets any size facility, and time and effort are saved by having a machine programmed to run the daily operations. Even smaller buildings can save money by creating more efficient means of operating and maximizing the facility's potential through a BMS.

Function

A BMS' functionality varies from basic to complex depending on how many systems are tied into it and how many inputs and outputs a facility requires. Many systems can be tied into the system including mechanical, lighting, fire alarms, elevators and security. BMS control over all of these systems might be necessary for large buildings with critical tenants such as pharmaceutical laboratories, but for most commercial office buildings, a more basic system capable of controlling the mechanical and lighting systems is ideal.

Most organizations have a records management department or employees that are responsible for records management activities. They are an excellent resource to help determine if an item is a record and how long it should be retained.



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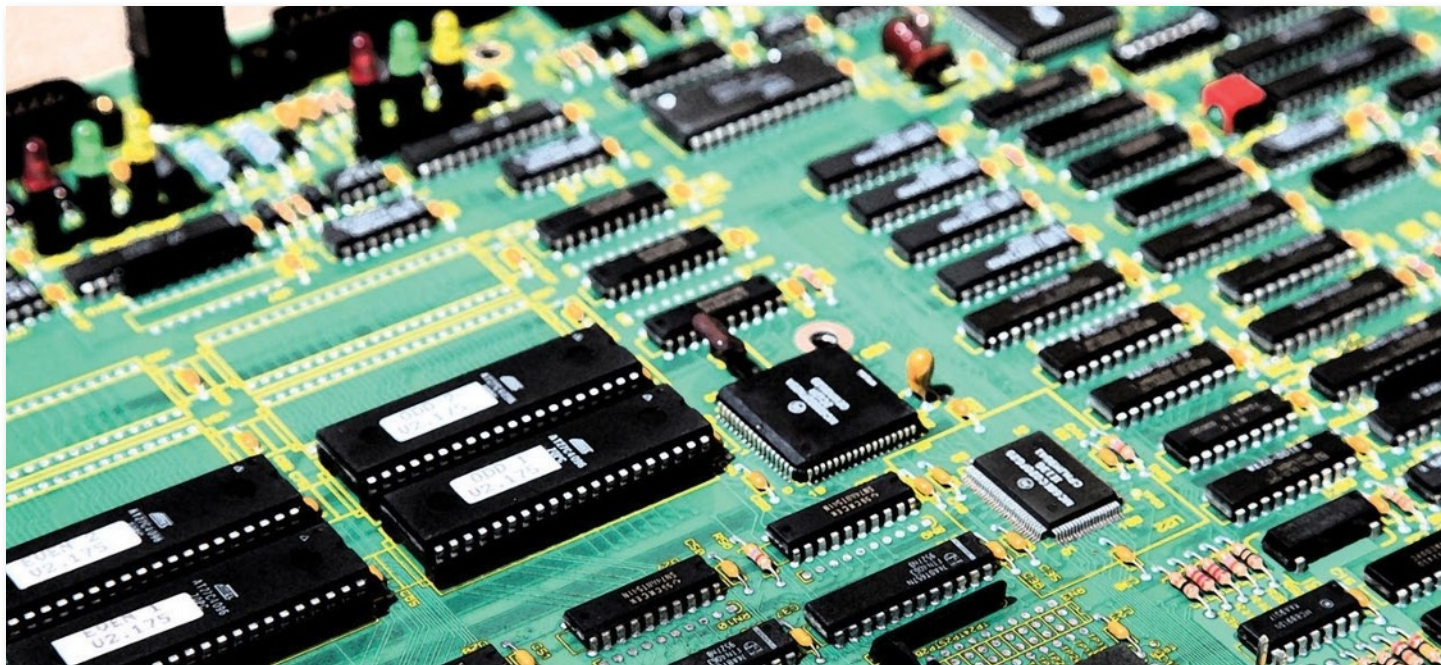
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Benefits

Once a building management system is installed and programmed with the proper algorithms, it can optimize the facility by regulating airflow as well as turning on and off devices. Additionally, a BMS allows the facility manager to quickly and easily know the status of the building equipment and other systems tied into the BMS. Many systems can provide remote access through a secure login allowing a facility manager to have access to the facility anytime from anywhere.

There is no need to take time out of a busy schedule to manually track a facility's equipment. BMS technology can provide reports on both the history and current status of the equipment. The intricacy of the data that is available depends upon the BMS' complexity, such as the amount of set points and the amount of systems tied into it.

There are many benefits of installing a BMS; perhaps the most significant is energy savings. When the Capgemini Group installed a BMS, it resulted in energy reduction of 16.7 percent with total savings of approximately US\$400,000 over a three-year period. The BMS monitors and controls the facility's operations in order to conserve energy; as a result, the facility's utility consumption has been lowered and comfort conditions enhanced within the facility.

BMS technology can provide reports on both the history and current status of the equipment.

Next step

A BMS and its installation costs vary depending on the amount of control points and the complexity of the systems tied into it. To purchase a BMS, contact local mechanical providers. The potential providers should interview you, assess the facility and your needs, conduct a thorough walkthrough of the facility and provide a proposal that includes not only the price quote, but also system specifications. The quote also should include the estimated energy savings and payback period. The provider should be able to provide a service and maintenance program to ensure the BMS always is running at its optimum efficiency with a 24-hour call center in case after-hours' issues occur.

A BMS may require a significant investment to install and implement, but there are ways to offset this cost. For example, research

available incentives from local utility providers and rebate programs offered by the state. In addition, consider the energy savings when evaluating the cost/benefits. Ultimately, installing a BMS is an investment in a facility's future as it can revamp a facility while creating a better atmosphere for occupants in the short- and long-term. A BMS changes the way a business operates and helps to achieve more efficient, comfortable operations. **FMJ**

References:

"Trend Helps Capgemini Take Control of its Energy Usage." Web. August 2012.



Stephen Plechy is a controls manager at GSH Group, a multi-national facilities services and energy management provider with U.S. headquarters in northern New Jersey. Plechy has significant BMS expertise including software programming, overseeing BMS installation and system monitoring and maintenance.



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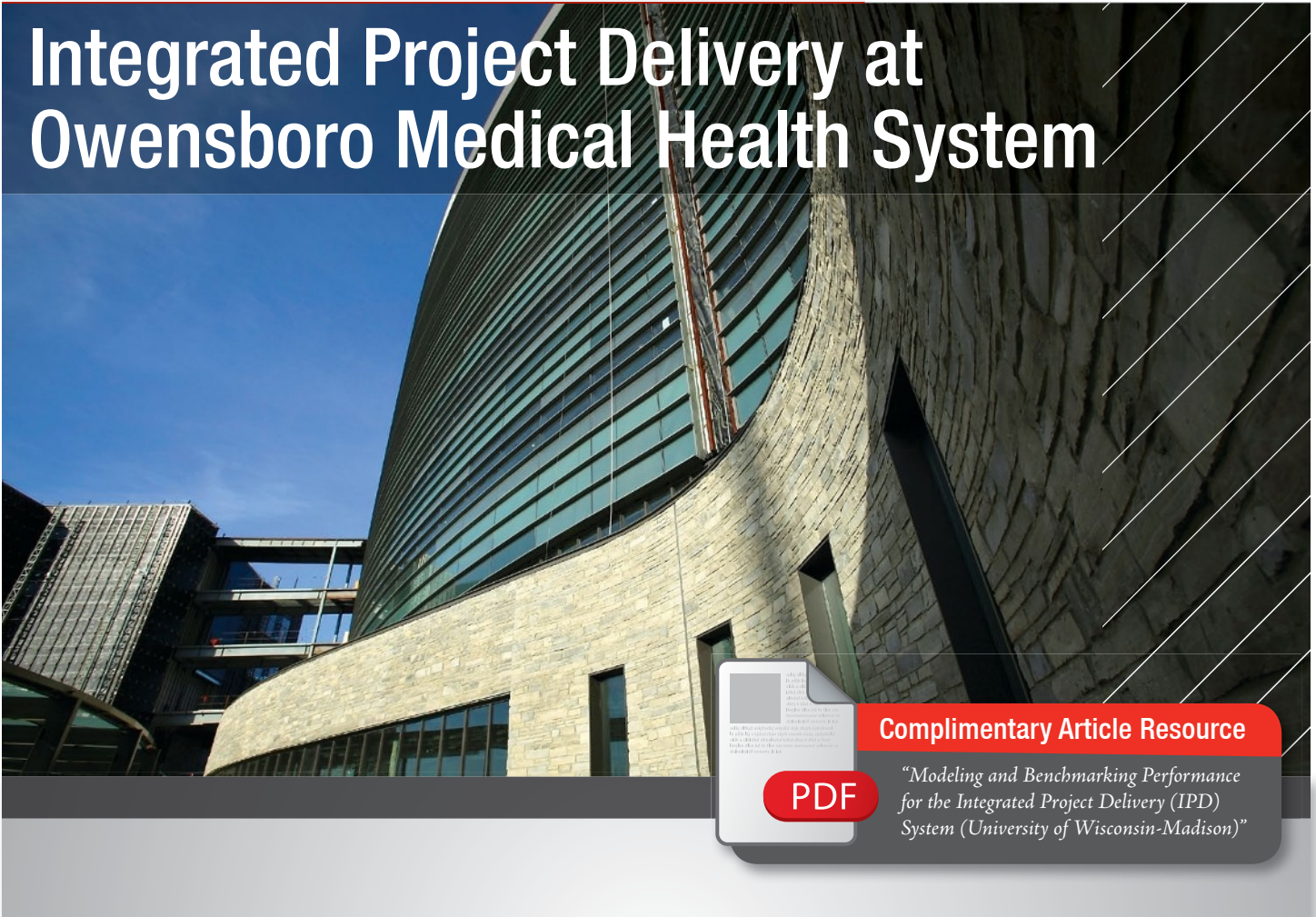
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"Modeling and Benchmarking Performance for the Integrated Project Delivery (IPD) System (University of Wisconsin-Madison)"

BY TIM MCCURLEY AND LINDA SADLER

The Owensboro Medical Health System (OMHS) in Owensboro, Ky., USA, is building a replacement facility consisting of a nine-story, 780,000 square foot hospital and a three-story diagnostic and treatment building on a 160-acre site. Scheduled for completion in 2013, the project has utilized the integrated project delivery (IPD) method. While IPD can be beneficial to an entire project and all building team members, it has proven especially helpful for the technology design and deployment on this project.

KLMK Group (KLMK) served as owners' representatives on the project. In addition to mechanical, electrical and plumbing engineering services, Smith Seckman Reid (SSR) provided technology engineering services. The following describes the IPD experience for this project, and how one hospital is being built better as a result.

Technology is slowly but persistently gaining clout in facility design and construction. Its importance in the modern business world is undeniable, and while many have observed this for years, health facility budgets are starting to support the claim as well. The OMHS project spent approximately US\$30 million on hospital technology; this figure comes remarkably close to the amount spent on mechanical and electrical, and is well more than what was spent on plumbing. Technology is the present and the future, and those who have spent their careers in construction are making mental room for technology to claim its rightful place next to mechanical, electrical and plumbing engineering services.



IPD overview and tactical differences

The IPD method is based on the premise that earlier and increased collaboration among a greater community of stakeholders as a means to capture their collective intellect and experience will result in a construction project that better meets the needs of that facility's users.

One expression of IPD collaboration is the use of "component teams," in which people representing the owner, architect, engineer, contractor and subcontractors are placed into groups that focus on the building's main systems. For OMHS, the component groups included site, structural, envelope, interior, thermal control, power and technology.

As opposed to the traditional design process, IPD component groups provide more space and time for each of these chief functions to plan in a way that focuses solely on the group's function. When the technology component group met, they focused only on technology needs, which gave technology a greater voice in the process. Additionally, the component teams include representatives from all the main project players and all dis

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ciplines, so more questions can be answered during the meeting, allowing for decision making to proceed more quickly and with greater team support. For the architect, the difference between hearing personally from a designer about specific concerns and reading about those concerns in the form of meeting

minutes is like night and day. Meeting minutes lack the emphasis, nuance, gravity and countless other dimensions of communication that a face-to-face meeting provides.

An example of the technology component team at work at OMHS involved the decision to use rack-mounted uninterruptible power supply (UPS) or a centralized UPS. While there are pros and cons to each option, having both technology and electrical disciplines and an owner's representative present during this discussion resulted in a decision that was sound and satisfactory to the whole team, not just the technology consultants. With IPD there are fewer "shots in the dark," because there are more opportunities to receive input when and where it is needed.

Another collaborative process used by IPD is the integration session, during which the entire project team focuses on a specific space. During the OMHS design, an integration session focused on the communications rooms gave the technology function a chance to express its needs earlier in the process, which resulted in less frustration



from technology engineers who traditionally come in after design is fairly far along and have to indicate significant design changes to accommodate critical needs. Another integration session involved the placement of copy machines. Getting exact dimensions of the specified copiers years before the ground even was broken meant that space for those copiers could be allocated early, allowing for proper planning of surrounding casework and overall space planning. Using mockup rooms with cardboard cutouts of devices, equipment and furnishings was a tactic used during OMHS design to more fully experience a space before setting the design in stone.

The “pull schedule” is another chief difference between traditional design and IPD. Conventionally, design and construction are driven by deadlines set by facility owners who are trying to meet community expectations, financial obligations or other drivers. Those deadlines then set the schedule for design and construction professionals, who typically find these deadlines hard to meet. By contrast, IPD uses a pull schedule to set deadlines, starting not with a date, but with the tasks to be achieved. Working backward from goals, dates then are set and a master schedule is conceived. It’s a slight paradigm difference, but the end result is a schedule which the project team can adhere more realistically.

Target value design is the IPD method of budget development, and like the pull schedule, takes an old process and reverses

the flow. With target value design, each component team is given a budget by the construction manager who bases the budgets on years of experience with similar projects and knowledge obtained from the owner on the specific project at hand. As opposed to traditional design, in which designs drive the budget, with target value design, budgets drive the design.

The IPD philosophical difference

Component groups, integration sessions, pull schedules and target value design are all tactical differences between IPD and traditional design, but the more significant difference is philosophical. Traditional design is highly top-down, hierarchical and linear. With each step away from the top, the players know less and less about the full picture, resulting in a silo effect where the lack of a complete picture brings about inefficiencies and uninformed judgment. With IPD, leadership is more equally shared among participants, and the process is more circular and collaborative. This circularity gives players a greater voice and, as importantly, it gives them a better view of the total project. When professionals know more about what they are working on, they perceive better; they make better decisions.

A strong example of this trust, and a big IPD win for the OMHS project was the management of the technology piece. Although technology is on its way to being considered equal to mechanical, electrical and plumbing as a chief building system, fully coordinated and BIM modeled,

the health care industry still operates in somewhat of limbo territory where technology is concerned. Technology traditionally was managed by the owner because, until the last 10 years, it covered minor support systems such as phone, data cabling, coaxial cabling and nurse call. It wasn’t that complicated, and it didn’t involve life support. It often was done after all other work was done and was expected to tuck in wherever it could.

Today’s technology systems are highly integrated with multiple other building systems, some of which directly affect human life. Coordinating with all the other cabling activity going on in the ceiling is intense work. However, the increasing use of technology throughout a hospital hasn’t been proportionally matched by an increase in attention and oversight on the design side. Technology suppliers and contractors have found themselves operating independently on the fringes of a project, often with little supervision or collaboration.

At OMHS, the owners understood the importance of technology and its need to be treated with greater priority. Without much industry precedent, they looked to their IPD team for a solution. KLMK challenged the IPD team to develop a solution to effectively manage the installation, coordination and turnover to OMHS, all within the tight budget that had previously been set through target value budgeting. Through the IPD integrative, collaborative process, SSR and Turner Construction, the construction

manager, devised a plan for SSR to manage the technical oversight under the supervision of Turner. By taking on the role of technology contracting, SSR brought cohesion to the contractors for nurse call, security systems, audio/video systems and others, giving them a single point of contact who could coordinate their efforts within the component team context. The benefits of this coordination were many, but one example is the alignment of all cabling contracts, which allowed all cable to be pulled together. When one team pulls cable after another team already has pulled cable, the first cable nearly always sustains damage from the pulling of the second cabling, damage that causes confusion, delay and repair costs.

Pulling the cable together, which only could happen with someone managing all the cabling contracts, avoided the cost of multiple pulls and any subsequent damage. The constant connection between the construction manager and the multiple technology providers made a huge difference in the ease of which technology was deployed at OMHS.

Is it a good fit

Not all projects are perfect fits for IPD. For IPD to be successful, there must be a high degree of trust among team members, and an owner must be ready to relinquish a certain amount of control. Where the goals and style of the owner and the project team members are a good fit for IPD, the project can reap significant rewards. Where the owner isn't truly ready to rely on the intellect, experience and wisdom of all team players (and if team players aren't able to rely on each other), IPD would be an exercise in frustration.

It may appear that IPD involves much more time in meetings, and that most likely is true. However, IPD meetings have a far more productive nature, they get to the heart of matters more effectively and with the buy-in of a greater portion of stakeholders. While the overall process may not always be easier, it's undoubtedly a better process and ultimately, one that results in a better facility. Such is the case at OMHS, which will open in summer 2013 as a thoroughly well-designed facility. **FMJ**



Tim McCurley is a principal consultant with KLMK Group, a provider of solutions focused on the continuous improvement of the healthcare facility development process. For 10 years, he has assisted clients with their capital facility projects, including project scheduling, budget development and management, contract negotiation, team management and coordination.



Linda Sadler is a project manager and Technology Systems Design Consultant with Smith Seckman Reid, Inc., engineering design and facility consulting firm. She has 10 years of experience planning and designing the entire spectrum of medical communications systems, specializing in low voltage infrastructure design, security design, door hardware coordination and OR video integration systems for health care facilities, with expertise in procurement and construction administration services.

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As we prepare to roll out the updated Certified Facility Manager™ Exam in mid-2013*, I am excited to note the new FM Learning System has been released. This program was developed by IFMA and a team of subject matter experts to encompass current knowledge, best practices and trends in facility management, covering all core competencies. In addition to preparing professionals for the CFM Exam, the Learning System is an excellent professional development tool and an indispensable

on-the-job resource. For those that have earned their Facility Management Professional and Sustainability Facility Professional™ and are eager to pursue their CFM, a special loyalty program has been developed just for you.

To learn more about the learning system, please go to <http://www.ifmacredentials.org/cfm/lis>. To learn more about the loyalty program, you may contact the

customer service team at +1-877-866-1367 (USA/Canada) or +1-651-256-2821 (outside North America).

Another new education opportunity that will be made available starting in March is a webinar series on building information modeling (BIM). The information collected in a BIM model represents a shared knowledge gained by the design team, the constructor and past operators of a facility. This information can be invaluable to a facility manager. This webinar series is produced by the BIM Lifecycle Operations Community of Practice and IFMA as a means to raise awareness in BIM and the voice of the owner, operator and facility management community.

The webinar schedule currently includes:

June 12, 2013, at 8 a.m. PST

US\$49 members/US\$69 nonmembers

<http://ifma.peachnewmedia.com/store/seminar/seminar.php?seminar=16556>

Sept. 11, 2013, at 8 a.m. PST

US\$49 members/US\$69 nonmembers

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Nov. 3, 2013, at 8 a.m. PST

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Another new education opportunity that will be made available starting in March is a webinar series on building information modeling.

In addition to the BIM webinar series, a new book titled "BIM for Facility Managers," edited by Paul Teicholz will be officially released with a book signing at Facility Fusion in April 2013. The book covers the value of BIM including how it can be linked to FM systems to achieve very significant life cycle advantages. Additional highlights include guidelines for using BIM with FM that have been developed by owners such as the General Services Administration, a detailed description of how to use the COBie2 to collect and communicate facility equipment information for FM systems and a review of the contractual issues that are involved with BIM FM integration. *(Continued on next page)*



The book also contains six real-life case studies including the Texas A&M Health Science Center, the USC School of Cinematic Arts and the State of Wisconsin Facilities—each case study covers the technologies, processes and problems that were addressed and the lessons learned. The book will be available through the IFMA bookstore starting in April 2013.

On a final note, if you haven't checked out the IFMA Education Knowledge Center in awhile, I encourage you to take a minute and check out all the great new offerings. The On Demand Recording section has been updated with a number of workshop sessions offered at the World Workplace 2012 Conference & Expo. These are great for CEU points and CFM maintenance points.

- Facility Management and Business Continuity: Two Sides of the Same Coin!
- Adding Value Through a Work-Life Balance Initiative. Case Study Kellogg
- The Ultimate Savings: Life Cycle BIM for Facility Management
- Linking FM to Organizational Strategy: How To Develop a Strategic Facility Plan in the New Normal
- Building a Smarter Budget
- Sustainability Reporting: the Role of the Facility Manager in Measuring and Managing Energy, Carbon and Water

- Slicing through the Noise: Powerful Communication for Leadership and Professional Success
- Communicating in a Crisis
- From Manager to Leader: What Makes the Top 2% Successful
- Ergonomics Programs For FMs: Why Ergonomics Needs to be in Facilities

For registration and more details regarding these conference recordings, please go to <http://www.ifma.org/knowledge> then click the On Demand Recordings tab on the top navigation.

For registration and more details regarding this webinar series, please go to <http://www.ifma.org/knowledge> then click on the webinar tab on the top navigation.

Cathy A. Parick

** June 2013 date is subject to beta testing being completed within the allocated time period. If necessary, any changes to the release date will be announced on IFMA's website at <http://www.ifmacredentials.org/cfm>.*



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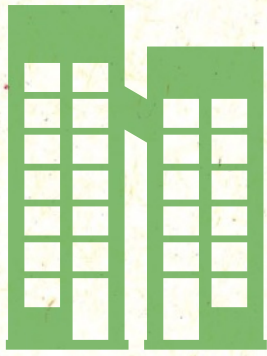
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The Situation

William Broome and his colleagues strive to operate The Westminster Schools as responsibly as possible and set a good example for the students in terms of sustainability and reducing carbon footprint. In addition to some of the sustainability initiatives that were already in place to reduce water and energy use, Broome decided that earning the Sustainability Facility Professional would be a worthwhile investment.

The Approach

After learning about the SFP through the IFMA newsletter and at local chapter meetings, Broome realized that—unlike the LEED Green Associate—the SFP was truly designed *for* facility managers. He felt that the content was specific to everyday FM operations, in contrast to the LEED program, which leaned itself to architecture and engineering positions.

As a LEED Green Associate, Broome assumed that he could take the SFP pretest and come out with passing scores on the first try; but he was shocked to discover how different the two programs really were. It wasn't until he read all chapters thoroughly and utilized the study materials that he actually passed the tests.

*"The LEED Green Associate test required mainly memorization, whereas the SFP really engaged you to dive in and **learn**, using real-world situations. This isn't material that you're going to forget once you complete the test—the SFP program is designed to ensure that."*

The Results

Having a Sustainability Facility Professional on staff has actually served as a marketing tool for The Westminster Schools—it's proof that the school engages in responsible and smart facility operations. On a personal level, Broome believes that earning the SFP was a huge step in the right direction for the future of his career.

"Given the way the sustainability movement has taken over in the industry, the SFP is going to make an employee that much more indispensable to their company. I would recommend this program to any facility manager."

"As both an SFP and a LEED Green Associate, I can tell you that I've found the SFP Credential Program to be far more beneficial. There are companies that want to reap sustainability savings, but don't necessarily want to deal with the paper work, points and records that come along with LEED—that's where the SFP comes in."

William Broome, CFM, SFP, LEED Green Associate
Director of Facilities
The Westminster Schools
Atlanta, Ga.

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What is Environmental Psychology?



BY BILL CONLEY CFM, CFMJ, LEED AP, IFMA FELLOW

The advent and momentous force of sustainability and the emphasis on measuring, monitoring, verifying and reporting has captivated the attention of facility managers and professionals in the built environment. However, if some care isn't exercised, facility management could become a numbers game, devoting all—or too much—attention to the quantifiable aspects of facility management, to the detriment of those qualitative benefits for which FMs are responsible.

Whether it is designing alternative workplaces, reconfiguring existing space or just evaluating current workplace conditions, there is more to serving employee needs than just supplying them with a seat. A balance should be maintained in providing services to customers. People still are a vital component of facility management and the care and comfort of personnel goes beyond the absolute necessity for the well-ventilated, clean workplaces delivered through sustainable operations.

A focus on indoor environmental quality, as part of sustainable operations, is a key component in maintaining and improving productivity. Green cleaning, chemical monitoring and proper ventilation rates all contribute to healthy working spaces.



However, emotional and mental well-being is another primary consideration when providing space for employees. FMs can contribute to a productive work force on these levels as well.

Well-being in a complex society

Environmental psychology, as it can be applied to facility management, covers such dissimilar issues as common property resource management, wayfinding in complex settings, the effect of environmental stress on human performance and human information processing. It aims at individual well-being in a complex society. The discipline is both problem oriented and value focused, attempting to improve the quality of life in a workplace to ensure optimum performance. Environmental psychology can be best summarized as a combination of different sciences that focus on the interplay between human beings and their surroundings.

Part of this equation is human factors and ergonomics which ensure health and safety in work settings while facilitating productivity. These take into account a user's capabilities and limitations to ensure those activities,

functions and the environment suit each user. Essentially, it is the study of designing workspaces that benefit both the human body and a person's cognitive abilities. The two terms, human factors and ergonomics, can be used interchangeably when referring to the human condition in the workplace.

Ergonomics

Ergonomics is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system. Ergonomics applies theory, principles, data and methods to optimize human well-being and overall system performance. Usually, the term conjures up the physical setup of a workstation. However, there is much more to the discipline than the position of a mouse and the height of a chair. According to the International Ergonomics Association, there are other domains of specialization in this field.

Cognitive ergonomics refers to mental processes and the affect external stimuli have on mental workload, decision making, reliability and work stress. It deals with how

humans interact with themselves and others, their workspaces, and the resources and constraints that populate those spaces. Organizational ergonomics is concerned with business structures, policies and processes. To satisfy the needs in this subgroup, communication, teamwork, working times, participatory design and inclusion need to be adequately addressed.

Environmental ergonomics deals with the impact that external factors, such as climate, pressure, vibration and lighting, have on production and workflow.

An effective facility should maximize freedom of behavior, mobility, flexibility and the ability to work with minimal distractions. Some other considerations regard use of space, and contrasting needs of privacy and socialization. A detailed knowledge of the kinds of activities, programs and patterns of human interaction both now and in the future is necessary for successful facility management.



In order to assist employees to become high performance achievers, there are some concepts that facility managers should understand and try to satisfy in their buildings.

Proxemics

In order to assist employees to become high performance achievers, there are some concepts that facility managers should understand and try to satisfy in their buildings. One of these is proxemics. In the mid-1950s, anthropologist Edward T. Hall wrote "The Hidden Dimension" which developed and popularized the concepts of personal space and the more general name for this field: proxemics. Proxemics was defined as the study of how people unconsciously structure micro space—the distance between each other while conducting daily transactions. It postulates that everyone has a comfort zone in which they feel they have adequate space in which to live, develop or function. Space needs in a workplace, then, are subjective based on individual innate feelings.

Environmental psychologists have theorized that compromising this subconscious need, as well as overall density and crowding, can have an adverse effect on mood and even cause stress-related illness. Accordingly,

environmental and facility designs could be adapted to minimize the effects of crowding (or its perception) in situations where it cannot be avoided. Factors that augment the feeling of space comfort within buildings include:

- Providing increases in cognitive control over aspects of the internal environment, such as light switches and temperature control;
- Conducting a cognitive appraisal of an environment and feelings of crowding in different settings;
- Doors to divide spaces and provide access control;
- Room shape;
- Windows, particularly operable ones, that provide a view as well as light;
- High ceilings;
- Using partitions to create smaller, personalized spaces within an open plan office; and
- Creating a defensible space.

Having an area of personal territory is a key feature of many facilities. Having such a defensible space can reduce the negative effects of crowding in work environments. Creation of personal space is achieved by placing barriers and personalizing space, even in an open office design. This increases cognitive control by distinguishing personal boundaries and, therefore, being able to manage the level of density and crowding in the space.

Another aspect of employee comfort in an office environment deals with familiarity and orientation. Keeping inter-related departments close or in a contiguous arrangement in an office helps employees get work done faster and improves communications between working groups. This practice eliminates the wasted time it takes to traverse large areas on a regular basis and to locate co-workers.

Wayfinding supports the same concept relating to ease of getting to the right place in the minimum amount of time. It would



include the use of signage and other graphic communication, but clues inherent in the building's spatial grammar and logical space planning also facilitates expeditious workflow.

Stimulation

People function optimally with moderate levels of stimulation. A lack of stimulation generally leads to boredom while too much stimulation can cause distraction and possible cognitive overload. This tends to interfere with the processes that demand effort or concentration. Becoming over-stimulated makes it impossible to focus attention and interrupts ongoing, planned actions and patterns. The levels of stimulation can become influenced by properties of interior settings such as intensity and complexity. Loud noises, bright lights, and unusual or strong smells increase stimulation and lead to distraction.

Lighting

Different lighting levels are required to illuminate different spaces. For example, a hallway requires a different lighting level than an office or a workstation. Historically, a lighting engineer simply applied the same level of illumination design to all parts of the building without considering usage. Facility managers should be attuned to different needs in the facility while being aware of the overall affects lighting has throughout.

Beyond the energy factors being considered, it is important not to overdesign illumination. While energy is surely wasted by over-illumination, too much light can lead to adverse health and psychological effects such as headaches, stress and increased blood pressure. Additionally, glare can decrease worker efficiency.

Daylight also benefits employees in the workplace. Sunlight generally makes people happier and more energetic, as it provides a vital boost of vitamin D and serotonin, both of which positively affect mood. Greater reliance on natural light reduces energy consumption, favorably impacts human health, and improves workplace and academic performance. Based on research at Carnegie Mellon University, daylighting appears to improve productivity and reduce absenteeism by at least 20 percent.

Noise

Noise is an unwanted sound and can increase environmental stress. Although it has been found that control and predictability are the greatest factors in stressful effects of noise, context, pitch, source and habituation are also important variables

Noise in the workplace is bothersome. Ringing phones, conversations and the general hustle that can occur in an office

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Paying attention to people's needs is an important part of facility management; just as important as tracking building performance.

can interrupt employees' concentration and make it difficult for some to perform their appointed tasks. Several studies have reported that exposure to chronic noise can cause disrupted reading ability, memory impairment and increased stress responses. There also is mounting research to suggest chronic noise exposure has adverse effects on cardiovascular health and other outcomes.

According to the results of an online study by Occupational and Environmental Medicine, as many as 21 percent of workers endure continuously high noise levels in the workplace.

Beyond that, noise can pose a safety risk by reducing concentration and increasing worker injuries. Repeated exposure to high levels of noise in the workplace can cause permanent hearing loss. Standards set by the Occupational Safety and Health Administration (OSHA) indicate that continued exposure to noise more than 85 dBA eventually will harm hearing. Organizations must develop effective noise strategies to reduce the level of noise in their workplaces.

Plants

At one time, it was commonly espoused that certain plants in the workplace would clean the air, theorizing the carbon dioxide-

oxygen cycle would improve indoor quality by removing particulates from the air. The theory proved true; however, the effect was minimal in the office.

During these experiments, while it was noted that the air wasn't cleansed enough to make a difference, contact with vegetation, in a variety of circumstances, was shown to be highly beneficial to well-being. Results showed a consistent pattern of effects that are diminished when plants are absent. Emerging evidence developed, suggesting that in office settings, exposure to plants and views of vegetation reduced both psychological and physiological stress, restored capacity to focus, contributed to more positively toned moods and improved performance on a variety of cognitive tasks.

Quality counts

Paying attention to people's needs is an important part of facility management; just as important as tracking building performance. Unfortunately, many of the impediments to a productive worker are not as obvious as what can be found in charts and graphs. When planning, or dealing with, the interior design of a workplace, it would behoove a facility manager to understand and be aware of those intangible areas of a facility that always can't be seen, but definitely can be felt. **FMJ**



Bill Conley, CFM, CFMJ, SFP, LEED AP, IFMA Fellow, is owner/CSO of CFM2, a facility management and sustainability consulting company based in Orange County, Calif. Conley has more than 35 years of experience in the facility management profession and has been a proponent of sustainable operations for more than 20 years.

Conley has served on the IFMA board of directors, is a recipient of IFMA's distinguished member of the year award and has twice received the association's distinguished author award.

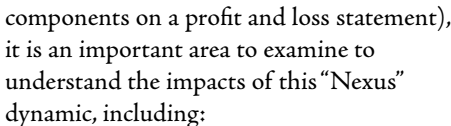


SPACE INTELLIGENCE for the Evolving Workplace

BY NANCY JOHNSON SANQUIST, IFMA FELLOW, AIA ASSOCIATE

Welcome to the new age of 21st century space planning and management. To match changing business processes and practices, new types of professionals—including business analysts, scientists and even urban strategists—are taking advantage of new FM technologies to utilize the latest in mobile, geospatial and building modeling capabilities. These space strategists are mobile, interdisciplinary, connected and very collaborative with great communication and problem-solving skills. Not surprising, they work as effortlessly in San Francisco as they do in Prague or Rio de Janeiro. The information they work with known as “Big Data,” is more complex and not only comes from traditional data sources, but streaming in from videos and sensors. They are learning best space practices from their colleagues through Twitter feeds, Facebook friends and LinkedIn connections.

What has brought about this “New Age?” It is the “Nexus of Forces,” which have come together to create a technology-immersed environment emerging during a very complex and unpredictable economic period. Converging is social, mobile, cloud and information, transforming how people use technology in both work and play. Since real estate, both owned and leased, is the largest category on a corporate balance sheet (and one-third of the largest cost



- increasing the need for flexibility in reconfiguring building space.

- New focus on sustainability: support for sustainable practices must be in line with the social responsibility goals of an organization.
- Emphasis on risk mitigation: an increasing requirement for risk mitigation in all business aspects, including real estate.

Facility managers can meet this critical cost reduction imperative through the application of space planning and management technologies.

In order to cope in these changing business environments, it is necessary to deploy space planning and management technology applications. In their three decades of use,

the technology of computer-aided facility management (CAFM) and integrated workplace management system (IWMS) has changed and advanced significantly, but the main reason for implementation has not: that reason is cost reduction. This has been confirmed in the latest global research published by RICS: “Almost 80 percent of facilities groups are measured first on performance of budget. But while nonfinancial metrics like service levels achieved, cleanliness, sustainability performance, and employee satisfaction are important, financial results clearly dominate management thinking.”

Facility managers can meet this critical cost reduction imperative through the application of space planning and management technologies. Today with a CAFM or IWMS solution, space planning and management data is integrated with lease, operations and maintenance, and project management information, for a richer RE and FM database to maximize the performance of a real estate portfolio. Therefore, space planning and management applications, integrated with the other modules in the CAFM and IWMS suite of products can help an organization:

- Reduce costs;
- Increase effectiveness of the real estate portfolio for the business;
- Decrease carbon footprint and support sustainability;
- Increase effectiveness of FM and CRE staff; and
- Increase accuracy and agility of decision making for FM and CRE strategic planning.

Reduce costs

Reductions are possible related to the costs of acquiring, managing, changing and operating space. To do this, a facility management group must have accurate data on the amount and use of existing space in its real estate portfolio. A best practice toward achieving this is to create strategic occupancy plans. The problem is many organizations do not have the accurate space information necessary to create these plans:

- Inaccurate data is stored in old technology systems (or those built in-house), software support and R&D is lacking,



and there are few resources to maintain current, accurate information.

- Existing data does not support improved best practices and, therefore, is not adequate for the strategist, planner or space manager.
- “Phantom” vacancies occur due to the gap between what an organization thinks it has for unused space compared to what it actually has. Measuring space utilization is one of the most important, but often illusive areas of data collection.

A CAFM/IWMS solution allows users to track space by integrating CAD visualizations of floor plans with the data associated with each space or neighborhood (group of spaces) on each floor in each building an organization owns or leases. This data also could be fed by a building information modeling (BIM) system. This space inventory becomes the supply side of the database. Understanding the current space inventory—and how it is being used or not used—then can be compared with a demand forecast created in association with business units. The result is a gap analysis that can be used for strategic planning. This analysis often allows strategic planners to reduce costs by 10 percent to 15 percent in the portfolio by understanding the utilization and efficiency of space in order to:

- Sublease or dispose of excess space;
- Increase density of space through workplace strategies (telecommuting, hoteling, etc.);
- Consolidate operations in a building or buildings;
- Consolidate or co-locate multiple locations in a geographic region; and
- Identify areas where a more cost efficient layout or office reconfiguration can improve space efficiency.

The advantages of having space management applications together with operations and maintenance in the same CAFM or IWMS system is that total cost of occupancy can be calculated and all inefficiencies with a cost component can be identified so space savings can occur. The Open Standards Consortium for Real Estate has created an Occupancy Cost Exchange Standard that begins to solve the problem of identifying consistent cost components across a portfolio for ease of sharing and benchmarking between different RE and FM vendors, consultants and occupants.

Increase effectiveness of the real estate portfolio for the business

All of the real estate in an organization's portfolio should support the people who work in those buildings to enable them

to achieve their business goals. Therefore, by truly understanding space capacity, utilization and requirements, this enables the RE and FM teams to provide the right space at the right time at the right price in the right location for each business unit. As mobile work takes on more of a role in the workplace, the many different types of solutions and locations for working should be tracked and accounted for by a space inventory and analysis.

Accenture's use of a type of yield management technology is an example of a new concept using mobile devices to locate the right type of space in the right location when a worker needs it. The pool of space is from offices, hotels or any other source of workspaces. Workplaces then are made available on a reservation basis. Accenture workers gets a card which they use to procure space outside of the “official workplace,” which also keeps track of how these third places (number one being company space and number two the home-based office) are being utilized.

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By having this accurate, up-to-date space information, when unpredictable events occur, like downsizings, mergers or acquisitions, a space planner is ready to solve the problem knowing she/he has trusted data to make critical and costly real estate decisions. This is the case with a global pharmaceutical organization whose real estate and facility director was told he had to take millions out of the real estate portfolio during a merger. He actually has exceeded the cost-savings goal (now US\$220 million) by implementing a CAFM database and putting effective analytical processes in place to respond to the challenge.

In addition, with an accurate space inventory, benchmarking can be performed both internally between sites and externally with other companies. Cloud technology is allowing CAFM and IWMS software vendors to be able to mine their customers' Big Data sets to provide them with analytics on how their portfolios are performing in comparison to other peer or non-peer organizations.

Decrease carbon footprint and support sustainability

It has been estimated in the United Kingdom, for example, that office utilization is approximately 40 percent: this means that organizations are wasting 52.5 million tons of excessive CO₂/year (Building Research Establishment). It has been compared to requesting six to 10 of a staff to go to the office, not do anything for the day and go home. By utilizing space management technology, data can be collected (either manually through surveys on a mobile device or through RFID sensors) on how space is being used by different organizational units

on all the floors in the buildings. When this data is linked to operations and maintenance information (including energy consumptions and costs), as well as lease information, the TCO can be understood and compared to actual utilization.

Increase effectiveness of the FM/CRE staff

The skill set of RE/FM professionals also is changing in the new disruptive work environment. These new abilities demand CAFM and IWMS tools to support the new roles of space planner, workplace strategist, real estate portfolio analyst, and real estate and facility data scientists. Believe it or not, this last role of a data scientist has been called the sexiest job of the 21st century and combines business acumen with scientific and analytical practices.

While productivity is a hard metric to measure, an increase is very evident when changing from manual space planning and management to using electronic tools. By being able to marry visualization of floor plans (CAD and BIM data) with information about spaces on space plans, much time can be saved by better understanding the capacity and use of the portfolio. In addition, by doing electronic "what if scenarios," more versions can be created when a stack or block plan can be manipulated in a matter of minutes for better planning effectiveness.

Today's CRE and FMers are required to do more advanced analytics on the portfolio, which can be accomplished by using CAFM/IWMS tools integrated with geographic information systems which enable you to view use patterns or cost across location boundaries to analyze the portfolio in more depth than ever before. Staff can perform this type of work with the use of mobile devices, particularly on a tablet.

Understanding the impact

The new age of space planning and management is here and it is imperative that all real estate and FM professionals understand the impact of the Nexus of Forces on an organization. It requires that FMers:

- Understand exactly what data you need to track, then determine the best way to retrieve it (hopefully

electronically), analyze it, measure it, visualize it and report on it.

- Deploy mobile technologies throughout your organization and start taking advantage of space planning and management apps being created for smartphones and tablet devices.
- Jump into the world of social media and access the numerous LinkedIn RE and FM professional groups and start tapping into the latest in new space strategies and design concepts.
- Implement the latest space planning and management apps in the cloud for faster start-up time, ease of maintenance and ability to benchmark space practices with other organizations.
- Investigate the new type of skill sets needed to work in this New Age and get interdisciplinary training in other areas of business, technology and science.

It may sound like a tall order, but in today's competitive world of talent acquisition and retention, the accomplishments listed above soon will be a requirement, not an option.

FMJ

References:

1. The 'Nexus of Forces' is a Gartner concept that appears in many research notes which can be accessed through a subscription at www.gartner.org (2012 and January 2013).
2. James P. Ware and Paul Carder, Raising the Bar: Enhancing the Strategic Role of Facilities Management, a RICS Research Report, London: 2012, p. 31



Nancy Johnson Sanquist, IFMA Fellow, AIA Associate, is a vice president for Manhattan Software located in Del Mar, Calif., USA. She is the author of many real estate and facility management publications and co-edited "Work on the Move" for the IFMA Foundation in 2011.

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Clean, Sanitize or Disinfect?

Elements for New Standards of Cleaning

BY ROBERT KRAVITZ

Winter 2012-2013 has Americans facing one of the worst outbreaks of influenza in recent years. While public health officials are coping with ways to handle this situation, including encouraging office workers, students and others to take precautions such as properly washing their hands as frequently as possible, what appears to be lacking is an emphasis on how effective cleaning and cleaning standards to address real world cross-contamination issues can help protect human health.

A recent study by Staples Advantage found that 80 percent of U.S. workers report going to work sick. Even if ill workers follow instructions, germs likely will spread to surfaces these workers touch. When others touch these surfaces before they are properly cleaned, cross contamination begins. The outcome is healthy workers get sick because of ill workers.

Facility managers must deal with these workplace realities, and the best way to combat this situation in the long term is not necessarily to intensify cleaning when, for instance, there is a serious flu outbreak. Instead, effective managers can create a new set of cleaning standards that are designed to provide workplaces that are pathogen free and do not contribute to workers being ill throughout the year—at least as much as possible.



Understanding the differences

Understanding the differences between cleaning, sanitizing and disinfecting is critical to keeping facilities clean and healthy. In most facilities, surfaces are cleaned on a regular basis. However, these areas are not usually sanitized or disinfected. In many situations, cleaning is all that is required to remove soils from surfaces. However, if the soil contains contaminants such as germs, health-risking pathogens and/or bacteria, regular cleaning may not be sufficient. In order to remove or destroy these surface contaminants, the area must first be cleaned and then sanitized or, if more killing power is needed, disinfected.

While there may not be total agreement related to the percentages of germs and bacteria that are eliminated after a sanitizer is applied to a surface and allowed suggested dwell time, when used properly sanitizers reduce the number of microbes on a surface, usually to a safe level to protect health, but not to the level of a disinfectant. This is especially true when the chosen disinfectant is designed specifically to kill the type of microbe found on a particular surface.

A disinfectant, which is used as the next level of cleaning, is designed to kill pathogens, germs and bacteria on most surfaces. Disinfectants commonly are used to clean restroom fixtures and surfaces as well as high-touch areas, such as doorknobs, light switches, elevator buttons and call buttons in hospitals, especially during times of increased public health concern.

In most cases, a manager's new set of cleaning standards does not call for the use of disinfectants, especially in all areas of a facility. Instead, more conventional cleaning chemicals and sanitizers, used in specific locations such as restrooms and food service areas, should be acceptable. Even though they are effective when needed, disinfectants are powerful cleaning chemicals and potentially can harm the user and the environment. For most facilities, it is best to use these products sparingly and only when there is an internal (facility focused) or public health concern.

Understanding the differences between cleaning, sanitizing and disinfecting is critical to keeping facilities clean and healthy.

Proper equipment

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regular basis. However, these areas are not usually sanitized or disinfected. In many situations, cleaning is all that is required to remove soils from surfaces. However, if the soil contains contaminants such as germs, health-risking pathogens and/or bacteria, regular cleaning may not be sufficient. In order to remove or destroy these surface contaminants, the area must first be cleaned and then sanitized or, if more killing power is needed, disinfected.

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Cleaning methods

As important as the proper selection and use of chemicals is to setting up a new set of cleaning standards, in many cases the actual cleaning method or system used may be just as critical, if not more so, for protecting health. Possibly, this is best explained when comparing the effectiveness of hand sanitizers with that of hand washing with soap and water.



DISINFECTANTS 101

Disinfectants are designed to kill a wide variety of pathogens and microorganisms on surfaces. However, different disinfectants are designed to kill different types of organisms. FMs are advised to read product labels and become familiar with which pathogens and microorganisms a disinfectant is designed to kill. Disinfectants must meet requirements and guidelines established by the U.S. Environmental Protection Agency (EPA), must be registered with the EPA and must have an EPA registration number on their labels. Regarding use, facility managers and cleaning professionals are advised to always read and follow label directions. For instance, in most cases, a surface must be cleaned first and then disinfected—a two-step process often overlooked. Invariably, they also must dwell on a surface and remain wet on that surface in order for the disinfectant to work effectively. If the disinfectant dries, it should be re-applied.

In recent years, hand-sanitizing systems have surfaced in many public locations, such as grocery stores, banks and office buildings. These systems often are marketed to the public as a way to “wash your hands” when traditional soap-and-water methods are not available. Hand sanitizers typically contain chemical ingredients that under laboratory test conditions are designed to kill 99.9 percent of the germs on a surface. As a result, many people believe when it is not possible to wash their hands, a hand sanitizer can provide equal protection against germs and bacteria.

While hand sanitizers can offer a degree of protection, they do not necessarily rid hands of potentially harmful germs and bacteria found on the skin. In fact, recent studies indicate that the physical action of washing with warm water and soap and drying hands with paper towels, agitation, a key element in all cleaning, is what is helping to remove germs and bacteria from hands.

According to Barbara Almanza, an associate professor at Purdue University who teaches safe sanitation practices to workers, hand sanitizers may even be ineffective at reducing a significant amount of bacteria on hands, at least to help protect human health. Almanza agrees that the most effective way to clean hands and stop the spread of germs and bacteria is with traditional hand washing.

There are certain similarities between washing hands to help stop the spread of germs and bacteria and hygienically cleaning surfaces, especially in restrooms and food service-related areas. The method makes the difference. For instance, when it comes to floor cleaning, scientific studies presented at a Cleaning Industry Research Institute

symposium indicate that using a no-touch (spray-and-vac) cleaning system can be as much as 60 times more effective than cleaning with a microfiber flat mop.

There are many reasons why no-touch equipment outperforms microfiber flat mops. Primarily, as the mop head becomes soiled, it begins to spread, and not remove, soil and contaminants on the floor. Another key reason is the way no-touch cleaning systems are designed to operate. These machines utilize a pressure-wash feature, which creates agitation necessary to loosen and help remove contaminants from surfaces. Some all-in-one units, such as the spray-and-vac system and dispense-and-vac systems, are equipped with squeegee-assisted vacuum recovery of moisture and soil so users can completely remove these health risks from the area.

A new set of cleaning standards requires facility managers to re-evaluate the cleaning methods used in their facilities. Conventional systems such as mops, buckets, sprayers and cloths that were acceptable in the past may simply not be effective enough at addressing today’s public health concerns, recordkeeping. Government oversight related to employee safety and environmental issues has exploded over the past several decades and will continue to be a challenge for facility managers.

Putting the new standards into action

There are two key elements of a new set of standards designed to keep facilities hygienically clean year-round: chemicals and equipment. A third important aspect involves communicating the new set of standards to cleaning professionals and, in some cases, building users as well. This

requires familiarizing all cleaning workers with the new standards and the goal, which is preserving the ongoing health of the facility at all times.

Further, communication requires that cleaning workers thoroughly understand which cleaning chemicals are to be used on each specific surface and, most important, why. Additionally, if the facility manager is transferring from conventional to more advanced cleaning methods such as those discussed earlier, custodial workers must be trained on how to use the equipment effectively and, once again, must understand why the new systems are being adopted.

Finally, the success of a new set of cleaning standards involves the people working in and using a facility every day. Sick workers should be encouraged to stay home, rest and get better before returning to work. Minimizing risk is a good starting point for implementing an advanced set of cleaning standards. **FMJ**



Robert Kravitz is a former building service contractor and now a frequent writer for the professional cleaning and building’s industries. He may be reached at 773-525-3021.

The Real **STAR** of Guthrie Theater



BY DAN SOLTYS

Everyday non-profit organizations of all stripes win grants for social programs to help the poor, to bring the performing arts to rural schools or wells to Africa. But winning a million-dollar grant for demonstrating a stellar maintenance record does not exactly conjure up the typical grant award. Yet that's exactly what the maintenance team achieved at the Guthrie Theater in Minneapolis, Minn., USA.

The Guthrie Theater, which opened a new facility in 2006 and more than tripled in size, prompted the maintenance team to revamp operations and replace overstuffed paper repair binders with a computerized maintenance management system (CMMS) to generate work orders and schedule preventive maintenance for nearly 350 pieces of equipment. The CMMS also captures repair data and issues historical reports, showing that the theater's equipment is being well maintained overtime. Organized maintenance and a foolproof 25-year projection on capital replacements earned the team a million-dollar matching grant award from the Kresge Foundation to establish a building reserves fund in 2010.



The Guthrie Theater re-imagined and reconstructed

The Guthrie Theater, one of Minneapolis's main attractions, first opened its doors in 1963. It was the dream of British theater director Sir Tyrone Guthrie to create an alternative venue to New York's Broadway: a theater with a resident acting company that would perform the classics in a rotating repertory.

What began as a single, 1441-seat thrust stage playhouse evolved into a 269,000 square foot complex on 2.25 acres and nine levels, complete with three stages. The Guthrie expanded from the main theater in 2006 to now include the 1,100-seat Wurtele Thrust Stage, the 700-seat McGuire Proscenium Stage, and the 200-seat Dowling Studio black box space. The three theaters have their own auditoriums, but are linked by a transverse walkway. Beyond the three stages, the Guthrie added new rehearsal rooms, classrooms, administrative offices, production and support facilities, and an adjoining complex with an award-winning

The main Wurtele Thrust Stage is shaped like a half-cylinder surrounding a ground floor restaurant.

seafood restaurant, an express café, more than a dozen bars and shops, parking garages and a lobby known for its views of the city. The Guthrie Theater relocated to the banks of the Mississippi River in downtown Minneapolis's historic mill district. Architect Jean Nouvel designed the Guthrie Theater structure to reflect the historic flour mills and grain silos. The main lobby is accessible from the street level by two long escalators, reflecting the flour mill conveyor belts. The main Wurtele Thrust Stage is shaped like a

half-cylinder reflecting the grain silos and surrounding a ground floor restaurant.

One of the signature features of the new Guthrie is an award-winning cantilevered lobby made of amber glass, known as the "Endless Bridge." Nouvel wanted to create a place for people to gather at the Mississippi River. The Endless Bridge is one of the longest occupied cantilevers in the world, extending out more than half a block, and serves as an observatory overlooking the Mississippi River Valley. Sloped floors guide visitors toward the river looking out windows on the bridge walls showcasing framed views of the river, St. Anthony Falls, the Stone Arch Bridge and Mill Ruins Park. Images digitally printed on thin sheets of airmail paper cover interior walls and ceilings, continuing the theme seen on the exterior images set on steel panels of well-known actors who performed in past Guthrie productions.

The scene shop, which had been several miles offsite, was built above a municipal parking lot across the street from the theater. It is the same level as the two largest theaters

WHAT TO LOOK FOR IN A CMMS PACKAGE:

- **Ease of use** Look for a CMMS designed for the maintenance professional who has the skills to repair equipment but may not be computer savvy.
- **Require all the basic, with core functionality including asset management, PMs, work orders, spare parts, requests, predictive reporting and analysis.**
- **Look for a CMMS that is scalable to incorporate facilities in other locations, locally and overseas if needed.**
- **Seek professional service options to help with maintenance strategy and re-organizing your maintenance operations, training, importing asset**
- maintenance data as well as configuring CMMS to fit your facility's needs.**
- **Check for an attentive support team and help desk.** Customer retention rates should indicate the level of timeliness and quality of assistance that is being received from a CMMS vendor.
- **When performing a CMMS search, include input from management (operations and finance), but also get feedback from those who will use it daily such as maintenance technicians.**

and a connecting skywalk that allows scenery to be wheeled over easily or transported in a 10'×17' freight elevator.

The scene shop, which had been several miles offsite, was built above a municipal parking lot across the street from the theater is the same level as the two largest theaters and a connecting skywalk that allows scenery to be wheeled over easily or transported in a 10'×17' freight elevator.

Maintaining the Guthrie Theater complex

In conjunction with the Guthrie Theater's expansion, a building automation system and equipment was purchased. A CMMS also was invested in to help look after the building and automate maintenance for nearly every piece of equipment past the front of the stage, from theater seats to house lights and drinking fountains, to chillers, boilers, heat pumps, and air handlers.

A preventive maintenance calendar allows an unlimited number of tasks and procedures to be scheduled each month based on repair history. The CMMS issues automatic reminders and assigns these scheduled tasks to technicians, ranging from replenishing the oil in a gear box to replacing a fan belt to changing a light bulb.

Maintenance tasks can be set up by calendar day, meter readings or by the asset manufacturer's maintenance instructions.

When it's time to perform a preventive maintenance task, the CMMS system generate work orders, which becomes the asset's maintenance record to show repair history for asset analysis and reporting, clocked in worker hours or asset repairs that have increased in frequency. Other features might include predictive maintenance, replacement parts inventory and asset life cycle management.

When it's time to perform a preventive maintenance task, the CMMS system generates work orders.

Guthrie's CMMS program gave the facility team a detailed maintenance history, proved that the maintenance staff had kept up proper repairs, and what asset would need to be replaced by when, eliminating any surprises.

Today 343 pieces of equipment are scheduled for maintenance on the preventive maintenance calendar, which reminds his

team to grease a bearing, or change a filter. If the controls of an air handler need to be checked, the CMMS issues a work order and sends an email to the assigned technician who, in turn, notifies the facilities director when the task is complete through the CMMS.

If a vendor replaces an expensive part and invoices the theater, the facilities director can dispute the charge with easy access to the digitized warranty in the CMMS. The CMMS' "miscellaneous page" and makes up work orders are utilized for ad-hoc repairs, such as changing the battery on a fork lift or fixing a broken office chair.

Except for a blizzard in 2010 that forced the theater to close for one evening, Guthrie has never missed a performance.

Likewise, when its 90 degrees outside air conditioners cannot fail; the show must go on. Guthrie's CMMS system is its insurance against failed equipment and unhappy patrons." **FMJ**



Dan Soltys is the facilities director for the Guthrie Theater and is a native of Minneapolis. He joined the Guthrie Theater five years before new construction began. During construction, Soltys oversaw mechanical equipment placement for access to equipment maintenance.



From Smart Buildings to SMART CITIES

Part 1

BY PAUL DOHERTY, AIA

The migration of the human race to urban environments is occurring at an unprecedented rate around the world. New and existing cities are developing smart city planning and implementing projects and programs to accommodate their citizens with a safe, healthy and sustainable environment to live, work and play. Facility managers and their responsibility to the built environment are a critical component of the emergence of smart cities.

A smart city is not a marketing campaign, a slick sales technique nor an amusing political catch phrase. It is a series of solutions to a serious and urgent situation the world faces today. Smart cities are emerging as a civic action due to a “perfect storm” of the convergence of market conditions, technology innovation, social wants and government needs, and the migration to urban environments that has accelerated on a global scale that dwarfs any previous mass movement of people in history.

At a global perspective, cities account for 75 percent of greenhouse emissions, while only occupying 2 percent of the world's surface. It is expected that the amount of people living in urban areas will double through 2050. Of immediate concern is that by 2015, 1.2 billion cars will be on the road making one car for every six people on the planet. These trends are mentioned not to initiate how they can be stopped, but how they can be changed and managed.

There are emerging suggestions on how to change and manage the many issues facing the world's cities today. Collectively, cities need more space in order to accommodate

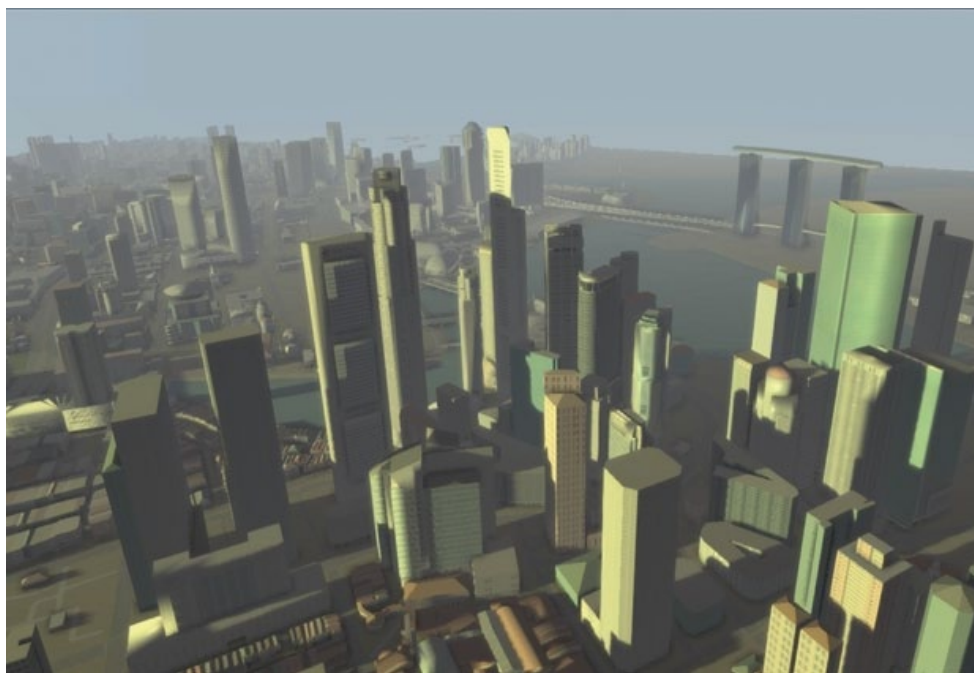
response to the increasing demands of its inhabitants, making a smart city one that listens, communicates and attends to its citizen's needs.

Defining a smart city

A smart city has many emerging definitions. The flexibility of this definition provides cities the opportunity to define programs, policies and procedures according to its own local set of priorities and needs. The art of becoming a smart city means that a storytelling process must be employed by a city in order to tie back and validate the programs, policies and procedures being implemented. To assist in this storytelling

- Health care
- Green buildings
- Transportation
- Citizen services

The interesting thing about smart city initiatives is the closely integrated way that seemingly disparate elements work together. As cities begin their transformative process into smart cities, it helps to consider the manner in which cities will need to address the social, economic, engineering and environmental challenges. This manner will center on knowledge.



When a city makes the commitment to follow the path of becoming a smart city, it is positioning itself at a competitive advantage.

the influx of people. The new and emerging cities are planning for this with urban planning strategies such as high-density solutions, while existing cities are exploring dense micro-grids that reposition existing buildings, transportation systems and neighborhoods to accommodate more people, create a self-sustaining economic center and provide sustainable energy.

Cities also are addressing climate change, which is forcing the issue of sustainable development into the spotlight while enabling thoughtful foresight of a city's future needs. When a city makes the commitment to follow the path of becoming a smart city, it is positioning itself at a competitive advantage. The true measure of what will attract and retain people and business to a smart city will be in a city's

process, smart city frameworks are being designed and marketed by academics, companies, urban associations and the media. Through this cacophony of frameworks, a foundation has emerged that help define areas of smart city interest, action and measures. Most frameworks use the word SMART as an acronym to mean specific, measurable, achievable, relevant and time-based goals. These same frameworks provide the definition of 10 smart city elements:

- Energy
- Water
- Waste
- Infrastructure
- Public safety
- Education

As we identify the challenges of living in highly connected, Information Age world, it is comforting to relate to our cities as organisms. If the city is a body, then we have seen its evolution from the agrarian society to the Information Age through the development of systems. Each city has its own cardiovascular system (traffic, mass transit), skeletal system (infrastructure), respiratory and digestive systems (energy, waste) and even a primitive nervous system (telecommunications).

In order for a city to provide access to its intelligence behind the knowledge and become a smart city, the development of the intelligence system that connects the central nervous system to a brain is required. Smart city initiatives like Gigabit Network programs and citywide, free wireless



element toward being a truly smart city. A smarter, efficient city that would encompass aspects of intelligent transportation, security, energy management, CO₂ emissions and sustainability is contingent on the implementation of a big data strategic plan to enable decision makers and authorities to perform their jobs. In response, some cities have taken an open data approach to assist in making its data available to the general public, which has spawned an emerging market for the development and sale of “apps” to enable this open data to come alive and provide value to a user.

No longer is a city held hostage to unaffordable IT integration issues, with the emergence of the cloud.

broadband initiatives are the beginning salvos in meeting these challenges and moving cities forward as a healthy organism.

If evolving into a smart city means connecting seemingly disparate elements into working as a healthy organism, then we should be focusing our collective efforts, our path forward, on two areas of immediate action.

Data

Due to the implementation of vast information technology (IT) solutions over the past few decades by cities, the world has created a cornucopia of data. This data comes in all shapes and sizes and enables an enormous amount of tasks to be conducted more effectively and efficiently. The issue is not if the city has the proper data to become a smart city, the issue is how.

No longer is a city held hostage to unaffordable IT integration issues, with the emergence of the cloud, the integration of a city's department of sanitation data can communicate with the transportation department or the police or city hall in an inexpensive and powerful way. The media and marketing people are calling this emancipation of data being freed from their silos big data. This means that an enormous amount of data has the ability to enter a city's body and freely circulate. The job of today's cities' IT department is not to just secure people from getting into a city's system, but how to control and manage the glut of data that will be trying to get out.

No matter which of the 10 smart city elements a city decides to focus on, the data will be the key driver to all policies, programs, projects and measures. Thus, the focus on big data and a city's behavior toward its data's management is a critical

Digital DNA

If big data is a key for cities evolving into smart cities, then a question arises as to the hierarchy of data prioritization. In other words, where does a city start?

Two points of entry can assist a city in answering this question. One point of entry is how some cities see the market driving the need for access to certain types of data. Incident reporting, energy usage and analysis, and transportation information are all areas that citizens see immediate value. Other cities position the new data-centric tools like social media to assist with better

communicating with their citizens. This reactive approach is highly effective when implemented correctly, with many examples from all over the world as best practices and, in certain cases, lessons learned.

The second point of entry is in the proactive approach of identifying and managing your city's digital DNA. The building blocks to effectively and efficiently use city data ultimately resides in a city's ability to repurpose its existing data and documents associated with the built environment, which is the authenticated digital DNA of all cities.

Built environment data already is captured by city's in various formats and processes—building departments, engineering departments, land departments, planning departments, tax departments, postal services—they all collect and manage vast amounts of data that when viewed as a whole, creating the virtual representation of the physical city. The accuracy, authentication and integration of this city data is the key to a proactive approach to entering a path to becoming a smart city. Without proper digital DNA structure and management, the connectivity from a city's nervous system to the brain will be problematic, inhibiting performance and the evolution of a city to a smart city.

A path to leveraging a city's digital DNA comes from the use of building information modeling (BIM) and the data captured by smart buildings. BIM and smart buildings provide the digital DNA that when put into the context of a neighborhood, district and city, provides a city relevant, authenticated data. Think of a city as a network, with each building acting as a server. Each building has data, like BIM for design and construction and smart building data in the form of facility management and building automation. When this individual building data is connected to the city network, potentially through an open data policy, interesting things begin to happen. The captured AEC and FM data that a city already possesses becomes the digital DNA of smart cities.

Savvy FM professionals are strategically positioning themselves to not only contribute to smart city programs through the creation of digital DNA, but also are benefiting from this DNA. Issues that a FM professional and a city should consider when

developing a digital DNA plan include:

- Legal and insurance, including intellectual property rights and who owns the data and the model;
- Planning and design;
- Construction, commissioning and handover; and
- Facility operations in the form of space planning, asset management, maintenance, document management, environment health and safety, and security.

Smart city solutions

With a city's data and digital DNA identified, the actionable solutions of evolving into a smart city emerge. Using the same plan, processes and policies in the IT industry, a city can implement smart city pilot programs and projects adopting techniques such as rapid application development, creating and implementation policies like Internet Protocol and develop trust relationships between people to get things accomplished such as social media solutions.

The creation of interdependence, of having your interests shared by others in the community, is a powerful force that drives ideas into action and provides a mechanism for collective intelligence for a smart city. The best smart city solutions enable this type of environment and position a smart city to share this knowledge to raise the consciousness of a topic on a global scale. In other words, being a truly smart city is achieved through sharing of knowledge that can benefit not only the city's citizens, but all citizens of the world. Cities that adopt this as part of their smart city plan will need to select smart city solutions that feed into a knowledge and data sharing platform. One of the leading public accessible platforms is the World Bank's, which is empowering cities and citizens to plan their smart city as a modern central nervous system that connects people, places and things.

Some of the better smart city solutions are acting as "front ends" to leverage internal data, like digital DNA, and external data, such as the urban knowledge platform,



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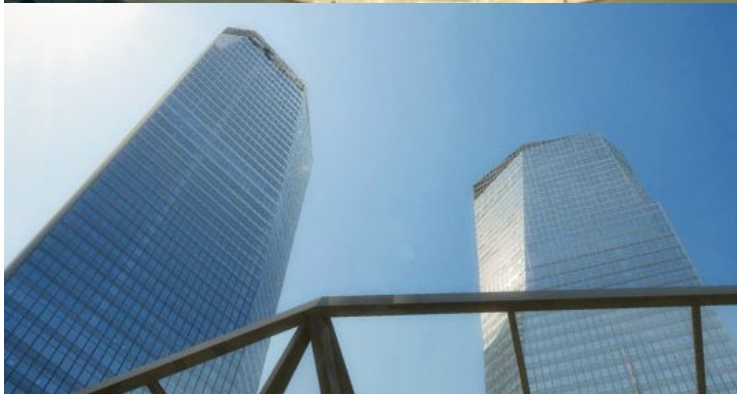
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Cities are a mirror to the values of a civilization. At the core, smart city solutions, both large and small, have an opportunity to assist in creating an environment for people to prosper.

while viewing this data in 3-D for an easy, intuitive view of complex information. Using a 3-D immersive interface that blurs the lines between virtual and reality, complex, expert systems like energy management systems and bureaucratic processes are simplified for the average citizen to make intelligent decisions on sustainability Do I take mass transit today or my car to work?, cost and quality of life.

Cities are a mirror to the values of a civilization. At the core, smart city solutions, both large and small, have an opportunity to assist in creating an environment for people to prosper in a welcoming, inclusive and open manner. Basic service improvements, reliability and trust building are the cornerstones to a successful smart city strategy. Many smart city solutions are technology based, so a focus on processes and workflows are critical to the success of these initiatives. A selection should not be based on technology for technology's sake.

Choosing the proper smart city solution that solves a specific task in an overall workflow can be as beneficial as a more comprehensive implementation. Smart city solutions also should leverage the power of open data and strive to benefit as many stakeholders as possible.



Paul Doherty, AIA, is the president and CEO of the digit group, inc., a market leading Cloud software incubator with products Digital Asset Assurance (DAA), XDSee and IWMS Select. He is an author, educator, analyst and advisor to

Fortune 500 organizations, global government agencies, prominent institutions and architectural, engineering and contracting firms in the world.

A frequent guest writer, he has authored or edited more than nine books. A former member of the board of director of the International Facility Management Association, Doherty is the co-founder of the IFMA Building Information Modeling Lifecycle Operations group and the co-founder of the IFMA Shanghai Chapter.

Want to learn more about smart cities? Attend the Cities Symposium April 1st at IFMA's Facility Fusion conference. For more information go to www.ifmafacilityfusion.org.

New PRODUCTS & SERVICES



New line of Toshiba downlights

Toshiba International has released integral, higher performing LED downlights with higher lumen outputs. The Toshiba TLS-DCA6 and TLS-DCA8 LED downlights are a direct replacement for metal halide or other high intensity discharge (HID) downlights. While there are many LED downlights on the market, most are at lower lumen outputs (i.e., 3000 lumens or less), ideal for showrooms, banquet halls and retail stores.

The Toshiba TLS-DCA6 and TLS-DCA8 LED downlights offer a range of lumen outputs, including 2800, 5500 and 8500 lumens options, which make LED downlights a viable lighting solution in environments with higher ceilings, such as auditoriums, shopping malls, atriums and concourses.

Toshiba's LED downlights last up to three times longer than typical HID downlights. This creates a tremendous savings in replacement costs, particularly when considering both product and labor costs. Additionally, LED technology outperforms HID lighting when comparing lumen depreciation and color consistency over the life of the product. Some other features include:

- Range of lumen outputs: 2800, 5500 and 8500;
- Consistent light quality at higher ceiling levels;
- Multiple color temperatures: 2700K, 3000K and 4,000K;
- Multiple apertures: 6 inch and 8 inch;
- Minimal ultraviolet or infrared wavelengths to resist fading of artwork and damage to perishable merchandise; and
- Mercury and lead free.



Wipe away the germs

Cascades Tissue Group recently introduced its Cascades Antibacterial paper towel, an away-from-home product designed to minimize hand contamination by killing 99.99 percent of harmful bacteria almost instantly. It is said that 80 percent of all infections are transmitted by hand, so the lack of proper hygiene—namely inadequate hand washing and drying practices—continues to be a problem. The Cascades Antibacterial paper towel doesn't require additional steps and can compensate for imperfect hygiene habits.

When placed in contact with wet hands, the towel releases benzalkonium chloride. This active ingredient has been used in products like gel sanitizers, baby wipes and antiseptic skin solutions since 1935.

Cascades performed several third-party laboratory tests to ensure the safety and efficacy of the paper towel. Microbiologists reported that the towel, when used after washing hands with soap and water, provides a more hygienic result versus alcohol-based gels and other hand sanitizers. While these other products kill bacteria and are useful when there is no water and soap available, they don't remove organic matter (grease, dirt, etc.) often found on hands.

First cleared by Health Canada, the Cascades Antibacterial paper towel now also complies with the regulation and policies of the U.S. Food and Drug Administration. The product contains 100 percent recycled fiber, and is made using five times less water than the North American paper industry average.



LG Electronics launches energy-saving, high-performance air cleaner

LG Electronics USA has introduced a new air cleaner that combines a variety of technological advances with a high dust-holding capacity to provide superior performance and energy efficiency while minimizing maintenance needs and reducing life cycle costs.

The Dynamic V8 VL Series Air Cleaner was designed to offer up to 100 times the dust-holding capacity of typical MERV-13 filters. With this capacity, the air cleaner was designed with the flattest loading curve in the industry to prevent degradation of airflow as the filter gets dirty. This also means the maintenance cycle of the V8 is typically measured in years, not months. Additional benefits include:

- Offers the Dynamic AirQ Report, which can simplify ASHRAE 62.2 calculations;
- Eco-friendly features can help earn Leadership in Energy and Environmental Design (LEED) points;
- Thoroughly tested and validated for single-pass particulate removal and loading utilizing ASHRAE 52.2-2007 test protocol, as well as using a "real-world" fine loading dust;
- Fewer filter changes and maintenance cycles, reducing both out-of-pocket and labor expenses;
- Flexible profile and mounting options, including ultra-low profile for use in restricted height; and
- An easy-to-install, optional custom 2x4 drop-in return air duct and grille accessory that can be installed without removing the ceiling grid.

New PRODUCTS & SERVICES

New tower security spotlight

Larson Electronics has announced the addition of a high power spotlight designed for use in applications where long range and the ability to track moving objects are required. The WAL-TSL-1XM Tower Security Spotlight produces an intense beam of light capable of reaching 2,000 feet in length and can be swiveled and aimed to track persons or objects as they move.

The WAL-TSL-1XM tower security spotlight from Larson Electronics originally was designed to provide security and corrections professionals with a powerful and easy-to-operate illuminator that could be used to track persons and objects as they moved along the ground. This security spotlight produces 110,000 lumens of intense white light via a metal halide lamp and is capable of producing a beam in excess of 2,000 feet long.

This powerful system includes a three foot tall adjustable aluminum pole with permanent mount base and a pole mounted and boxed ballast system. The metal halide lamp assembly is a 1,000 watt unit with a spun aluminum reflector and a ceramic socket assembly housed within a powder coated steel frame. The steel lamp mounting frame allows operators to easily and smoothly swing the light assembly through a full range of vertical and horizontal movement via a single handle attached to the rear of the lamp assembly. The ballast is contained within a powder coated enclosure which is solidly mounted to the aluminum mounting pole separate from the lamp assembly to reduce the weight of the light head and improve light mobility.

Also included is 25 feet of heavy duty power cord with as standard straight blade plug for easy connection to common power outlets. This metal halide spotlight can be ordered in different configurations to allow operation with 120, 220, 277 and 240 VAC current.



Control your thermostat wirelessly

The RP32-IP and the UP32-IP from Network Thermostat are programmable communicating thermostats that feature a 10/100Mbps Ethernet port, Weatherbug, automatic changeover 3-Heat / 2-Cool with advanced programmability and innovative alert features. An integrated Web server delivers device-appropriate Web pages for no-fee remote point and click control. The UP32-IP includes the 3-wire Net/X Advanced Remote Sensor Bus for attaching up to 11 sensors.

There are six alert conditions for the RP32-IP and 16 alert conditions for the UP32-IP. Both thermostats support up to four email and text message destinations for sending reminders and alert conditions. Optional free enterprise class PC software allows drag-n-drop scheduling across thermostats, and an open API provides flexibility to interface with any system.



Opening doors left and right

Yale Locks & Hardware recently introduced its 5800 Series Cast Iron Door Closer. The economically priced 5800 Series combines ease of installation and use with rugged performance and clean design.

The cast iron "large bore" construction of the 5800 Series makes it an excellent solution for high-frequency applications. This closer is adjustable from size 1 through size 6; consequently, it is ideal for a wide range of commercial applications such as office buildings, retail, assisted living facilities, military/government installations, hospitality and medical offices. It can be easily retrofitted to some existing applications, as it matches a mounting hole pattern that is prevalent in the field.

Yale's 5800 Series provides dependable functionality, with features that include adjustments for backcheck, closing speed, latch speed, rack and pinion operation; and a variety of arm options. These features, coupled with the size adjustability make this the perfect closer for many of the most difficult applications.

The 5801 door closer is offered with standard non-hold open arms that are "tri-pack" to accommodate three different arm applications; regular, parallel and top jamb. The 5811 hold-open arm closers are "tri-packed" as well. The 5821 heavy duty parallel arm closer incorporates a stop in the arm's soffit plate creating a "dead stop" feature to control the door. The 5821T uses the same "dead stop," but also incorporates a "ball and detent" hold-open feature for additional control. The 5800 Series door offers a full plastic cover and spring power adjustment.

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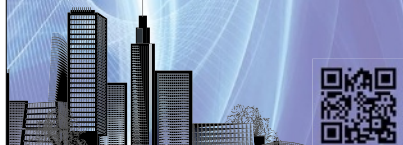
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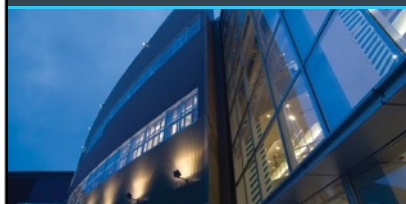
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Interior Design

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FMJ EXTENDED

This exclusive online FMJ section focuses on expanded FM coverage from a global perspective.

Additional contributions

- "IFMA Service Center of Excellence: The Story Behind the Move—Testimonials" by AECOM/Strategy Plus, Watchdog Real Estate Project Managers, Jones Lang LaSalle Americas, Inc. and Perkins+Will
- "Workplace Strategy Presentation" by IFMA

IFMA Service Center of Excellence:

The Story Behind the Move—Testimonials



"I see there being two opportunities in the strategic workplace effort, creating an engine and helping engagement: the workplace engine delivers efficient and effective support to [IFMA] members. The engaged workplace fosters collaborative environments, which allows for knowledge sharing and the building of a highly productive team."

—Marc Liciardello, CFM, MBA, CM

AECOM/Strategy Plus

"Let's start here: why even have a headquarters?"—Strategy Plus

With approximately 60 staff members at IFMA's original headquarters in Houston, Texas, USA, it served as a nexus for knowledge and service for more than 22,000 members around the globe. With the creation of an IFMA Service Center of Excellence, AECOM/Strategy Plus's approach often led us far beyond the walls of IFMA's current facility. Understanding the scope of IFMA stakeholders and how IFMA provides services for them was our initial priority. This allowed us to create a process for engagement and a strategy for supporting IFMA staff both in the near term and over time.

AECOM/Strategy Plus used a variety of tools and methods to understand the history and aspiration of IFMA and how a Service Center of Excellence could propel the organization into the future. Early investigative activity with IFMA staff and leadership included surveys, observational studies, interviews and workshops to understand how the current workspace functioned and how it could better support

organizational goals. Members of the IFMA board of directors were engaged to examine the strategic roadmap and ensure the resulting space use strategy both aligned with and supported achieving it.

A survey was conducted of all IFMA members to leverage the knowledge base of these experts working in facility management around the world. What emerged from these interactions was an opportunity not only to rethink the design of the IFMA headquarters space but also to rethink how IFMA might deliver service around the globe.

Focused on the immediate need at hand, we translated our findings into flexible floor plan prototypes that would serve as a basis of design. Strategic decisions were driven by a want for greater efficiency overall, as well as the desire for a flexible workplace to support teamwork. This led to the allocation and adjacency of core work areas, collaboration zones and flexible meeting areas. In IFMA's Service Center of Excellence, a highly mobile staff is able to sit where they need based on the teams and projects on which they are working.

In developing the prototype, AECOM/Strategy Plus identified a method for IFMA to support its projected footprint expansion around the world. AECOM/Strategy Plus created “building blocks” for a global lit of parts comprised of scalable modules that can be used as IFMA Service Centers of Excellence needs are identified. What began as a project to conceive of a new workplace interior for IFMA evolved into creating a kit of parts for a network of future service centers of excellence.

Watchdog Real Estate Project Managers

Watchdog Real Estate Project Managers was procured as the project manager and was tasked with the responsibility of all project parameters including but not limited to: development of the project schedule, financial accounting, review of design and budget, development and issuing of RFPs, administration of client selected vendors, construction administration, furniture administration, site selection and building analysis, lease negotiation, project administration and relocation /move management.

The project’s success is attributable to a collaborative team that had very open channels of communication. In addition to project tools like SharePoint that facilitated collaboration, the team held weekly project meetings and trade specific meetings as required to transfer the knowledge of the project to the appropriate team member. It was encouraging to work with so many vendors who really embraced the spirit of the IFMA Service Center of Excellence and the collaborative workplace strategies that were outlined in the strategic brief that outlined a collaborative and mobile workplace.

From our perspective, the best practices resulting from this project are:

- The benefit of a well-established comprehensive budget at the beginning of the project;
- The importance of achieving the milestone dates published in the project schedule;
- The value and benefit of key people representing the client who have the capacity to make decisions participating in the project meetings;
- The necessity of having clear direction and objectives at the onset of the project;

- The value of a cohesive team who are like minded and focused on the goal at hand; and
- The realization that value is not necessarily the lowest cost but paying the right price for the right product or service.

IFMA’s requirements for a successful project and space were all about its employees. The locations had to retain the existing employees and help attract new ones.

Jones Lang LaSalle Americas Inc.

IFMA charged Jones Lang LaSalle with the task of finding and negotiating a lease for a new space with occupancy by December 2012. The IFMA Steering Committee of key executives and outside advisors consisting of Watchdog Real Estate Project Managers, Perkins+Will and AECOM/Strategy Plus communication advisors were in constant collaboration with Jones Lang LaSalle in one-on-one communications and weekly team conference calls. This team collaboration and the detailed involvement of the IFMA executives were crucial to the schedule and the ultimate success of the project.

IFMA’s requirements for a successful project and space were all about its employees. The locations had to retain the existing employees and help attract new ones. Commuting times were crucial, and possible commuting patterns from employee residences to alternative locations were studied in detail. The chosen building and the space itself had to be a sustainable

workplace of the future. The building had to project the right image for IFMA and the architecture had to support the space concept and technology plan IFMA had developed. In addition, the neighborhood had to be safe and inviting for all employee needs.

Team collaboration, deep analyses and detailed project management, as measured by key milestones, are always desirable. For the IFMA project, these best practices were followed strictly. Any issue that could affect employee hiring, retention or productivity was researched and analyzed. Financial evaluations included architectural and project management estimates of capital costs and schedules providing IFMA with a holistic evaluation of all of its costs for the entire life of the lease, including expansion and exit strategies. All subjective issues were analyzed using a scorecard approach that gave objective evaluations to subjective issues and ensured that IFMA’s chosen location was the best solution while reducing IFMA’s operating expenses more than 40 percent versus the status quo.

Clearly, IFMA did not just “talk the talk,” but also “walked the walk” in its Houston project.

Perkins+Will

Design is not a fixed formula, and creativity has no prescription. It is mundane to say that every project presents unique challenges and players but designing the new IFMA Service Center of Excellence elevated this cliché into a truly collaborate exchange with a multidisciplinary team of high-level contributors and editors.

On this project, we were approached to provide interior design and architecture, furniture design and consultant management services to interpret and realize the visioning that had begun months before under the leadership of project manager Watchdog, in support of the strategic brief development authored by AECOM/Strategy Plus. This early foundation work provided the directing document for guiding our efforts, and evolved into framework of accountability that we regularly revisited in our interaction with the client and IFMA Steering Committee.

Per the brief, Perkins+Will was challenged to, “deliver a(n) ... effective and satisfying

work environment, support a distributed service model and implement strategies for long-term flexibility and operational sustainability.”

The binding agent of good design is great communication, and that was never truer than on a project that hosted six stakeholder agents, nine design consultant teams, and no less than five service contractors and three furniture installers. It is with great respect and a honed ability to listen that we approached this team and this project. We came to appreciate early in the project that many of the paths of discovery and design were not linear, but more loop driven to allow full participation and buy in by all key contributors.

When asked to reflect on how this varied team worked together, Julie’ Gauthier, interior design discipline leader for Perkins+Will Houston, acknowledged, “A well-informed client that is committed to a workplace that enhances the user experience, encourages new behaviors and embraces new technologies is always the best client. This was certainly the case with the IFMA staff and members engaged on this project. We would be thrilled if all of our clients were this savvy.”

Perkins+Will built on this inherent forward-faced attitude in programming,

design-specific visioning and workplace planning efforts with the local IFMA stakeholders to create a work setting that was resolved around the experience of collaboration, and not prescribed by bricks and sticks. Bringing the processes of a globally-positioned organization under scrutiny allows you to lose some binds of the more pedestrian constraints of time and physicality. We found we could do much with an integrated space/furniture/culture/communication/ technology approach that maximized the return of investment on bandwidth, and not necessarily real estate.

We spent energy and focus on how to maximize the practice of collaboration as we know it today, and acknowledge that those same defining practices will morph over time and with technology. We had to provide for future solutions and the ease of transfer without fully knowing what the future exactly looks like. The result is a much smarter, streamlined, transparent space for IFMA’s new Houston location.

At Perkins+Will, we believe in the strength of ideas and the power of relationships. Through the course of the project to create the Houston IFMA Service Center of Excellence, we returned often to both of these foundational perspectives to extract both focus and inspiration.

Our takeaways from this experience are many, but following are a few favorites that we are most appreciative of and hope are formative to our practice in the future:

- Modeling the new work paradigm embraced by IFMA, collaboration between any number of constituents in varying locales can be effectively and efficiently accomplished through habitual communication.
- The absolute relevance of this project as an example of emerging workplace organization that embraces technology and instills independence and trust in the staff.
- To have participated in the full cycle of a strategic plan (born from a business operative) that was progressive in its approach and could be implemented/realized into a physical space that will allow the organization the flexibility to change as the work styles and tasks require. Further, to watch as that design product moves back out of its dimensional manifestation and gives language and structure again to the very change management processes that will fully activate and unleash potential for this organization.

To have participated in this process invigorates our practice and will inform future work.

