

FMJ



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inside

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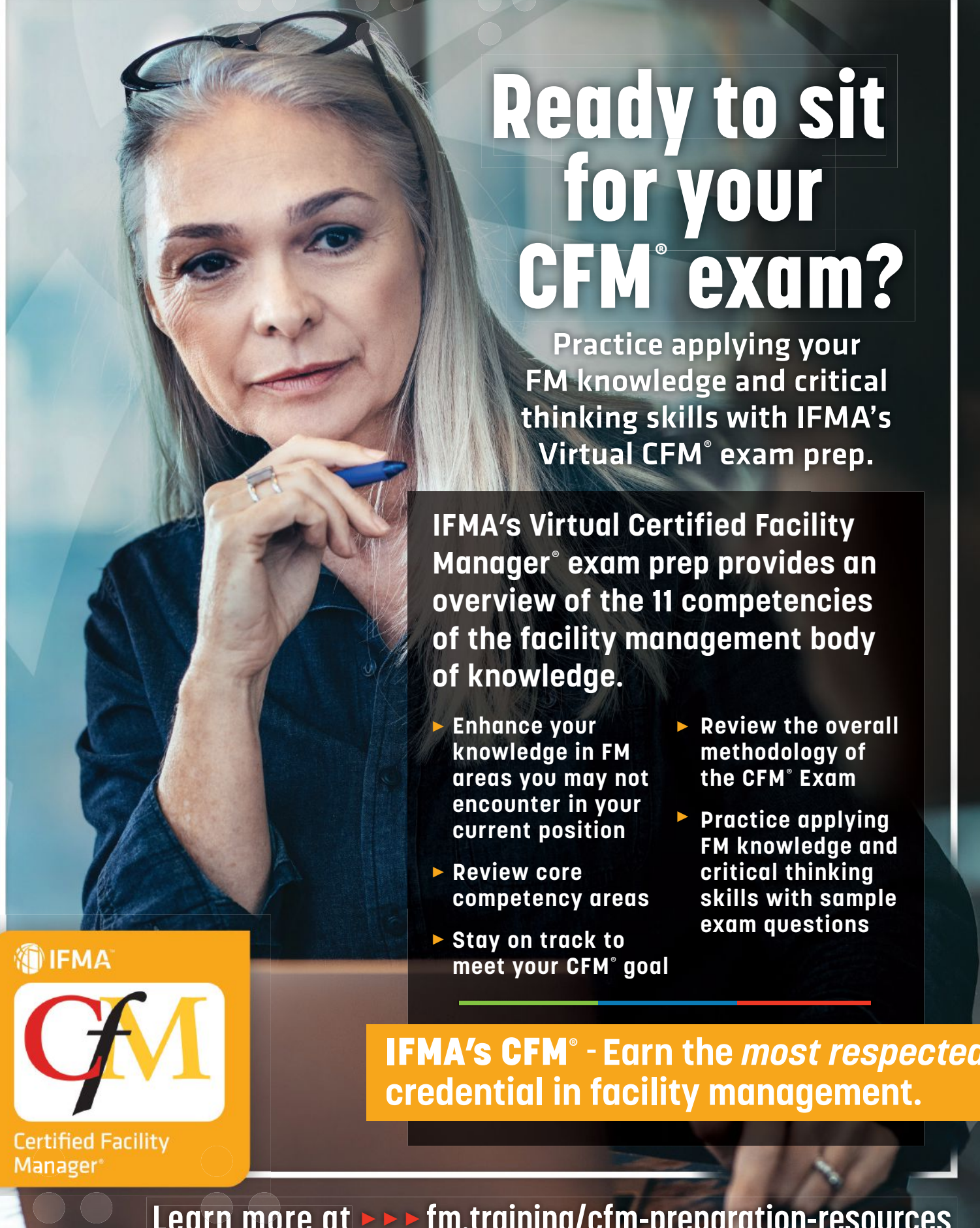
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Features

- 014** **Leading in Crisis**
Creating safer, healthier facilities
Chris Hodges
- 021** **Enter: Humane Brave New World**
Embracing new FM opportunities
Elena Bondareva
- 026** **Facility Management**
What really matters
Doug Pearson
- 031** **Cultivating Next-Gen FM**
A Denver case study
Carolyn McGary
- 036** **Facility Managers**
Leaders, innovators, visionaries
Bill Conley
- 040** **Space Without Boundaries**
From reimagining to managing a new way of working
Kate North, Lorri Rowlandson & Colette Temmink
- 046** **IFMA & Leadership**
Past chairs offer personal insights
- 052** **My Facility**
The Smithsonian Institution
Judie Cooper
- 057** **The FM's Creed**
Learn, KISS, CYA & Applaud
Rayne Guest
- 062** **Technology & Materials**
Managing the post-COVID workplace
- 068** **A Legal Minefield**
Using technology after COVID
Jack Chen
- 073** **Blurred Lines**
Adapting experiences for employees & visitors
John T. Anderson
- 078** **Innovating for Success**
Sustainable energy buildings
Corey Lee Wilson
- 086** **IFMA's Accredited Degree Program**
Breda University of Applied Sciences
Breda, Netherlands
- 091** **JUST FM**
Social justice & facility management
Diane Levine & Nancy J. Sanquist
- 097** **The People Factor**
Using culture to create a meaningful workplace
Robert Hemmerdinger

Sections

- Editor's Column 006
- Chair's Column 007
- President's Column 008
- Industry News 010
- Credential Recipients 066
- Corporate Sustaining Partners 082
- Behind the Brand 084
- Advertiser Index 102



ABOUT IFMA IFMA is the world's largest and most widely recognized international association for facility management professionals, supporting 24,000 members in more than 100 countries. This diverse membership participates in focused component groups equipped to address their unique situations by region (142 chapters), industry (16 councils) and areas of interest (six communities). Together they manage more than 78 billion square feet of property and annually purchase more than US\$526 billion in products and services. Formed in 1980, IFMA certifies professionals in facility management, conducts research, provides educational programs and produces World Workplace, the world's largest series of facility management conferences and expositions. For more information, visit www.ifma.org.

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FMJ Extras

The online version of FMJ features extra resources like videos, podcasts, white papers and more to enhance your reading experience. Click on the FMJ Extra icons that appear in the digital magazine to link to additional sources of information to learn more about topics covered by articles in this issue.

031 Resource

The Accidental Profession
fmj.ifma.org/publication/?i=558473&p=26

041 Resource

Global Work-from-Home Experience
Survey Report (2020)
globalworkplaceanalytics.com/whitepapers

057 Resource

Efficacy Summary and Review of
Regulatory Classification
www.r-water.com/docs/lab-reports/microchem-white-paper.pdf

091 Resource

Recruiting Gen-Z into FM
fmj.ifma.org/publication/?i=615971&p=88

FMJ Extended

Check out the online issue of FMJ for a special section that follows the end of the print magazine and includes additional articles not available in the print edition. Read the extra articles listed below for contributions from councils and communities, and other supplementary content.

106 Ask the Experts

Contributed by IFMA's Facility
Management Consultants Council

109 Member Spotlight

112 Ahead of the Curve

The changing role of data-driven FM
James Lane & Jeff Peterson

116 Supply & Demand

Smart strategies for the HR side
of supply chain
Jeff St. George

120 Park(ing) & Restoration

Preparing the lot for
returning workers
Bob Lester

123 Reentry Essentials

Focus areas to support
reopening facilities
James Junkin

126 Consider This

Adapting to change while reopening
Bob James & Mike Halligan

129 Smart Buildings

Leadership, data & accountability
Bill Moten

132 Challenge Accepted

Building new leaders
in the virtual workspace
Andrew Mawson

136 Vendor Profiles



Editor's Note Bobby Vasquez

In these strange times, history will have its eye on FM.

The FM response to the COVID-19 pandemic has been on level with the frontline heroes in the health care industry. The monumental decisions surrounding reopening facilities are dependent on the FM having the best possible tools and strategies, and thus they should have input when the important decisions are made. After all, the health and safety of the occupants, organization and facility are all on the line. Without your combined efforts, the world is helpless in reentry.

With so much at stake, FMs should not be satisfied with merely getting into the room where it happens. Constantly arming yourself with the best available information builds credibility and places the FM team in the best position to have the decision makers on their side.

Reopening and reentry strategies and protocols are being discussed, decided and disputed across businesses, factories, schools, houses of worship, sports and entertainment venues, and other built environments. With lives and economies at stake, FMs are a vital part of the planning team. If you haven't been consulted, it's time to step to the forefront and make yourself heard. That takes courage and confidence. That takes leadership.

According to Pennsylvania's Villanova University, effective leaders lead with integrity and tact, regardless of the situation. In the face of change, they innovate, exhibiting creativity and flexibility to make improvements. If your job is to ensure the most efficient, high-performing, comfortable, clean, safest possible environment for your organization and its occupants, then it's your job to lead. If you've built trust among your team and stakeholders, then you've already cleared the highest leadership hurdle. Trust opens ears. Leadership opens eyes.

After all that, what comes next?

It's continual follow through. The world will always need FMs. No matter what is happening, be it prosperity or pandemic, peace or strife, FMs have and will be among the frontline leaders. That integrity and follow through ensures you'll be back when the next big decision comes.

In this issue of the FMJ, our FM authors dive into the leadership and relationship aspects of the industry, including accountability, innovation, culture and the role of FM.

FM's organizational impact goes far beyond ensuring a facility's inner workings are functional and occupants are in a comfortable setting. FM sets the tone for organizational culture through action and environment. Today's occupants demand flexibility and knowledge that the organization is committed to corporate social responsibility.

From workspace to recycling stations, security and safety to LEED certifications, FM is where an organization continuously lives its policies.

FMs are born to lead. They are trailblazers. As the pandemic spotlights how facilities function, FM is in a position to shine. With the world turned upside down, FMs cannot throw away their shot.

Cheers – and stay safe!

Bobby

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Interested in writing for FMJ?

Email bobby.vasquez@ifma.org article ideas to be considered for future issues of FMJ.



From the **Chair**

**PETER
ANKERSTJERNE**

MBA, COP, FRICS,
IFMA FELLOW

*Chair,
Board of Directors*

It is common to emphasize the word “facility” in facility management; however, FM has always been and will continue to be a people business – the successful facility manager focuses on what happens inside the building rather than on the building itself.

Perhaps a better term for our profession would be “facilitation management,” as we provide the platform, surroundings and facilitation to allow management to happen... whether at the workplace, at home, on the fly or anywhere work, life, learning or play takes place. Through FM, management can provide a productive, efficient, healthy and fun environment, wherever that may be. Therefore I believe we should focus much more on the second part of our title; on the word “management” as we move forward.

Over time there have been suggestions to change the FM term to property manager, asset manager, workplace manager, community manager, experience manager or even workplace happiness officer. The fundamental focus doesn't change just because the name does. Let's refine FM to include a stronger people focus – and a stronger focus on the outcome of what we do, why we do it – and how it helps make the organizations we serve stay relevant and competitive now and in the future. Let's take the lead in defining our profession and our contribution to the built environment.

There has never been a better time for FM professionals to demonstrate our leadership than during the current COVID-19 crisis. As FMs, we are at the forefront of ensuring a safe return to the workplace. We have a rare opportunity to directly influence the immediate success of our organizations. We have the chance to showcase our role in keeping people healthy, comfortable and productive in the workplace. We have the duty to partner with CRE, IT and HR to renew focus on people's experience and happiness within the built environment. It is our moment to lead a positive development for the enterprises we serve and the people within.

The three C's of great leadership are Confidence, Credibility and Compassion. If you know your stuff, if you stand by your decisions and if you care about your team, you are already exhibiting leadership qualities.

- » **Know your stuff:** You are a professional with a unique set of skills and expertise. You can address issues others can't; but remember: knowledge is power only if it is shared with those who can benefit from it. Teach your team what you know. Enlighten stakeholders about the outcomes you effect. Collaborate with external partners, janitors, engineers, receptionists and other service professionals who are either directly or indirectly managed by you. Openly sharing information, ideas and credit for successes is critical for any well-functioning team.
- » **Stand by your decisions:** Integrity and accountability are the foundation for great leadership. Taking responsibility for your decisions and the actions of your team is what separates great, even good, leaders. Making difficult decisions is in a leader's wheelhouse. Leaders dare to make unpopular decisions. Leaders dare to be wrong – and admit when they are.
- » **Be good to your team:** As a leader, you must genuinely care about the people on your team, both in-house and outsourced. Treat the janitor with the same respect as you would treat the CEO. Place yourself in the role of a sideline coach, giving your entire team – not just the ones scoring goals – the tools and encouragement to play their best. The most important mindset for a leader is interest in the personal growth and well-being of those you manage.

IFMA provides training and guidance for developing your leadership skills further, whether you are an experienced leader or are just starting your leadership journey. Through professional development programs such as the SFP®, FMP® or the CFM®, IFMA provides resources to help you excel as a leader. Coupled with a strong network through IFMA chapters, councils and communities, you have many opportunities to sharpen your personal leadership style and approach to directly and indirectly managing your team. After you have reached a level of excellence, you are positioned to support and mentor others to reach the same level of excellence. This is what we do at IFMA – we develop ourselves and others, and together we become better leaders.



DON GILPIN

*President & COO
IFMA*

I recently spoke with IFMA Chair Peter Ankerstjerne to discuss his vision for the continued growth of the association and advancement of the FM profession. I typically meet with each new chair to see how we can fold their particular legacy theme into the activities of the association during their term. Peter's strategic legacy theme aligns with my personal interest in humanizing the role of FM. As this issue of the FMJ focuses on People and Leadership, I wanted to share some of the ideas Peter and I discussed regarding FM's expanded role in the workplace and what IFMA is doing to ensure you are prepared and equipped to meet new expectations.

To be clear, acknowledging the human factor as we interact with the built environment does not mean that we discount asset management or the fundamentals of operations and maintenance. Rather, we add another layer on top of FM's existing job functions to include a heightened awareness of how the built environment can enhance the experience of people in the spaces we manage.

Over the past two years, IFMA has successfully formed strong partnerships with other trade associations that represent various aspects of the built environment. This year IFMA will focus on building a meaningful relationship with the world's largest organization representing the human resource profession, the Society of Human Resource Managers (SHRM). As we continue to reimagine the workplace amid and

post COVID-19, it is more important than ever to strengthen understanding and collaboration between the two professions.

The FM of the future will need to be equipped with the interpersonal skills necessary to function as the intermediary between the people utilizing and interacting with the space and C-Suite decision makers. Who better to represent the marriage of asset management and the human factor than the FM?

IFMA is poised to be the core component of your continuing education and primary source of industry content and professional connections so that you stay on the cutting edge of changes taking place within the scope of facility management. We believe that in the near future you will be called upon to educate the people using the space you manage, as well as those who make decisions about that space. Your association will make sure you have the information necessary to articulate your position, concerns, needs and objectives among all stakeholders and workplace partners. The new role of FM reflects the current mantra that we're all in this together. Asset management + human factors = a more humanized FM profession.

Sincerely,
Don Gilpin

IFMA's COVID-19 Resource Center Provides the **Answers FMs Need Now**

Find resources to help you and your facility develop strategies to manage the COVID-19 crisis during the various stages of the pandemic. www.ifma.org/coronavirus

IFMA CORONAVIRUS ESSENTIALS



STRATEGIC FRAMEWORK

Learn how to plan, act, review and revise your emergency plans.



FM + COVID-19 WEBINAR SERIES

Follow along with the latest tips and information for pandemic preparation.



PANDEMIC MANUAL

A comprehensive 100+ page guide to prepare for the pandemic and other crisis.



WORLD WORKPLACE 2020 RELOCATES TO FACILITATE SAFE LEARNING & NETWORKING

Previously scheduled for Sept. 30-Oct. 2, 2020, in Chicago, Illinois, USA, IFMA's World Workplace Conference and Expo will now take place Dec. 9-11, 2020, at the Gaylord Texan Resort Hotel and Convention Center, located between Dallas and Fort Worth in Grapevine, Texas, USA.

"For the safety and peace of mind of attendees and staff, World Workplace will be self-contained in one facility, with no overlap from other conferences," said IFMA Director, Conferences and Events Ann Loayza, CMP. "The Gaylord Texan can accommodate every aspect of our flagship event. Attendees will be able to attend sessions, browse the expo, engage in social activities, dine and stay in one location."



Opening keynote speaker Shawn Kanungo (above left) is a disruption strategist who has worked hand-in-hand with hundreds of organizations on their journey to digital transformation. Closing keynote speakers Céline (above center) and Fabien Cousteau (above right) will address the connection between business and the environment, illustrating how Corporate America's contribution to the sustainability of the planet impacts the overall economy.

A full program of educational sessions presents tactics, strategies and up-to-the-minute ideas for addressing top-of-mind priorities, including pandemic response and recovery, occupant health and well-being, achieving net-zero, remote work and reopening, budget cuts, managing through crisis, mitigating risks, developing plans for resilience and forecasting what's next for the built world.



Networking and celebratory events include the welcome reception at the Gaylord Texan's spectacular lakeside Glass Cactus Nightclub, and IFMA's Awards of Excellence, honoring achievements of IFMA chapters, councils and individuals.

"We're responding to our community's desire to network and learn in a 'normal' environment," said IFMA President and COO Don Gilpin. "Facility management professionals who have been on the front

lines of facility shut-downs and reentry want to share their experiences with colleagues and gain even more insight into safety procedures and preparedness moving forward. Questions about how best to address challenges presented by the pandemic and other factors impacting the industry are ongoing. IFMA has a commitment to safely and responsibly facilitate necessary conversations and essential training for the benefit of our industry and everyone who enters the built environment."

Learn more about programming, on-site health and safety protocols, speakers and registration options at worldworkplace.ifma.org.

The Gaylord Texan's multifaceted approach to the health and safety of guests and staff will be combined with IFMA's on-site event protocols, including:

- Mandatory temperature scans
- Required masks (disposable masks provided)
- Social distancing practices
- On-site medical assistance
- Individually packaged meals
- Larger registration area
- Stations cleaned hourly
- Hand-sanitizing stations
- Shield guards at every point-of-sale area
- Touchless scanning for event tickets

IFMA thanks the following members of its Health and Safety Protocol Task Force, who identified and created a comprehensive set of guidelines addressing the majority of present-day health and safety concerns to ensure that World Workplace 2020 is a model of excellence in providing a safe environment for all attendees:

JOE ARCHIE, Director, Campus Operations at Loyola Law School Los Angeles

PAT TURNBULL, MA, LEED AP, IFMA Fellow, President/COO at Workplace IQX LLC

DR. STEVE GOLDMAN, Internationally Recognized Expert/Consultant at Steve Goldman Associates, Author of the IFMA Foundation's 2020 Pandemic Report

LARRY BARKLEY, Sr. Real Estate, Facilities and Information Systems Consultant

DEREK BACIGAL, Director Engineering at Hale Koa Hotel



CFM® receives ANSI National Accreditation Board accreditation

In June, ANSI's National Accreditation Board granted initial accreditation for IFMA's Certified Facility Manager® (CFM®) credential under ISO/IEC 17024:2012: Conformity assessment – General requirements for bodies operating certification of persons, providing assurance that the IFMA Certification Commission operates according to internationally accepted criteria. ISO/IEC 17024:2012 specifies criteria for the operation of a Personnel Certification Body, including requirements for the development and maintenance of the certification.

“ANSI accreditation is globally recognized as a mark of quality, offering CFMs and their employers elevated assurance that IFMA's certification meets the highest industry standards. It takes the CFM to a whole new level in validating professional excellence,” said IFMA President and COO Don Gilpin.

The CFM program joins two other ANSI-accredited IFMA credential programs: Facility Management Professional™ (FMP®) and Sustainability Facility Professional® (SFP®). IFMA is accredited by ANSI (accreditation #1057) under ANSI/ASTM E2659-09 to issue the FMP and SFP certificates to those successfully completing the programs.

“IFMA's Certification Commission has worked diligently toward achieving this accreditation,” said Dean Hitchcock, chairman of the Certification Commission. “We extend our appreciation to the IFMA global board of directors, IFMA Fellows, current and retired CFMs, other volunteer members and professional staff for their efforts and support of this critical strategic initiative.”

“Congratulations on this great achievement. Such accreditations are hugely important as they document the rigorous processes we follow, and the consistent high levels of quality standards offered by IFMA's educational programs.”

– IFMA Chair Peter Ankerstjerne, MBA, COP, FRICS, IFMA Fellow



Aramark announces Executive Diversity Council

Food service, facility management and uniform services provider Aramark recently formed an Executive Diversity Council, naming Senior Vice President, Human Resources for Aramark's U.S. Food and Facilities Ashwani Hanson to the new role of Chief Diversity and Sustainability Officer.

Hanson was recognized as one of the Top 15 Diversity Champions in 2019 by Diversity Global, as well as a diversity leader to watch by Black Enterprise in 2016. As Chief Diversity and Sustainability Officer, she will lead all diversity, equity and inclusion efforts and the strategy and governance of Aramark's 2025 sustainability plan, which is focused on positively impacting people and the planet for generations to come.

Aramark has long been recognized by institutions focused on promoting diversity and inclusion, including one of DiversityInc's Top 50 Companies for Diversity; a Best Place to Work for LGBTQ Equality; a Best Place to Work for Disability Inclusion by the Disability Equality Index; and a Top 50 Employer for Equal Opportunity by Equal Employment Publications.

REPORT: REMOTE RECRUITMENT IS HERE TO STAY

A recent report asserts that employers can expect a permanent shift from face-to-face to video interviews. Even in sectors where remote working is not an option, remote recruitment is emerging.

Amid months of social distancing and work-from-home, employers have adapted, finding that video conversations capture more aspects of a conventional interview, such as reading facial expressions and visual cues, than interviewing by phone. Skills assessments can also transform the recruitment process, helping identify who will fit best. After implementing assessment technology, 76 percent of corporations saw an increase in the quality of hires.

Industry News



RBI releases Space Planning Benchmark Report

In July, IFMA's FM Research and Benchmarking Institute (RBI) released its new Space Planning Benchmark Report to assist FM professionals and built environment consultants in assessing their workspace management practices against a variety of facility and operational demographic profiles.

One of the few space planning benchmark reports completed pre-COVID-19, it includes an appendix on how the pandemic has affected facility managers, providing useful perspectives on FM's pandemic response, facility shutdown practices, project execution impacts and facility reopening plans.

Generously underwritten by HKS, the report's section on Flexible Workspace

Strategies represents one of the first and most comprehensive research-based analyses of the subject. Insights reflect the evolving industry over the last decade, revealing that the agile workplace of the future is only now beginning to be developed in select industries.

"COVID-19 has changed everything. In these challenging times, it is important that the industry have consistent, reliable data," said Kate Davis, director of commercial interiors at HKS.

RBI's Space Planning Benchmark Report is available for purchase at bit.ly/2ZaLDyT. Nonmembers who purchase the report by Oct. 1, 2020 receive a one-year complimentary base IFMA Professional membership.

As RBI prepared to release the Space Planning Benchmark Report in March 2020, the World Health Organization officially declared COVID-19 a pandemic. The research team quickly distributed the COVID-19 Facility Management Impact Survey, collecting data between April 21 and May 7, with more than 1,000 facility professionals participating.

Study: 84 percent of employees concerned about returning to the physical workplace

A Traction Guest survey of risk management, physical security and facility management professionals in companies with at least 1,000 employees found that 84 percent of employees are somewhat or very concerned about returning to their organization's office, warehouse or physical worksite for the remainder of 2020.

For 85 percent of respondents, workplace health and safety is a greater consideration now than before the COVID-19 pandemic; yet despite growing concerns among employees, 15 percent do not know if their company has introduced new technology to help ensure health and safety. Another 39 percent said their company has not introduced any new health and safety technology, leaving many employees at risk.

More than half of respondents agreed that physical security has become a greater concern than cybersecurity since the onset of COVID-19. As a result, security and risk management professionals have been mandated to keep facilities safe and operational and are being propelled into a strategic position within the enterprise. Eighty-seven percent of surveyed companies plan to increase spending on physical security going forward, and the top physical security investments planned for the next six to 12 months include: touchless sign-in, security access control systems, temperature checking devices and cameras.

REPORT: MAJORITY OF AMERICANS WOULD SUPPORT ANOTHER STAY-AT-HOME ORDER IN FALL/WINTER

In June, creative media consultancy GALE conducted a study to gauge U.S. consumer sentiments on reopening economies in the wake of COVID-19. Of the 900 respondents age 18 years and older, 70 percent believe people should return to the workplace by September, including about a quarter who said people should return "right now."

While 72 percent of respondents support another stay-at-home order should a second wave of COVID-19 occur this fall or winter, more than a third of Gen X participants would not support one, almost half of Millennial and Gen Z respondents want to return to their normal life, and 72 percent of Baby Boomers with preexisting conditions were "cautious" about reopening. For 48 percent, separating service hours for seniors/vulnerable people would increase their goodwill toward a business.

Have relevant FM industry news to share?

Submit your news to be considered for inclusion in the Industry News section of the next issue of FMJ. Send us an email at communications@ifma.org

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OFFICE FURNITURE

Leading in a Crisis: Creating Safer, Healthier Facilities

BY CHRIS HODGES

Leadership during a crisis is one of the most valuable contributions the facility management community provides. Organizations need a steady hand to navigate the challenges posed by any emergency threatening the safety, security and health of its stakeholders.

During any crisis, the most prepared organizations are more likely to recover faster, more completely, and with fewer adverse health, safety and economic impacts. If the magnitude of the crisis is significant and prior experience with the crisis is limited, the general knowledge of the recovery process is diminished, and recovery will be far more difficult, even under the best of circumstances.

In early 2020, facilities worldwide were and are challenged by COVID-19. On one hand, the rapid departure from office buildings, public and recreation facilities, restaurants and community gathering places led to large vacancies. FMs were faced with how to prepare buildings for minimal operation. On the other hand, emergency and health care facilities were required to escalate health and safety requirements to brace for maximum occupancy under significant additional health threats and limited resources. As areas move toward a recovery phase, organizations must determine the conditions under which they will be operating their facilities in the near- and long-term.

The challenge of both re-occupation and continuous operation under new environmental conditions poses an even greater threat as information on health, safety, cleaning and operational risks changed (and continues to change) on an almost daily basis. This environment demands a planning process that remains flexible as new health information, operational practices, technology and equipment continue to evolve.

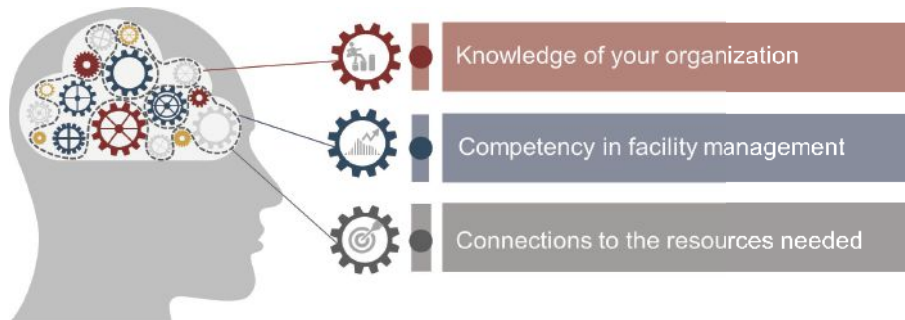
Given that little is known about the specific challenges presented in this crisis, how does an organization best respond to keeping its staff, visitors and the public safe in the built environment when the health and safety risks are unknown? The answer lies in being prepared and having the right process to manage unknown risks.

FMs can start by acknowledging that they may not have a complete understanding of the challenges, circumstances will continue to change, and time is needed to develop the best approach for providing a safe environment¹. In an unprecedented situation such as with COVID-19, pre-determined procedures in response to emergencies may not provide the proper solu-

tion, may be wrong and may not apply to a specific organization or type of facilities.

FMs already possess the knowledge, skills, abilities and competencies needed to develop and implement a plan for dealing with the unknowns related to the built environment in a crisis. When information on the impact of a new crisis is unknown, the FM's most valuable assets are threefold:

1. **Institutional knowledge** allows the FM to align plans and strategies with the mission of the demand organization and make the business case for health, safety and productivity in facilities. It also allows the FM to appropriate the right resources and serve as the advisor to the organization about exposure to risk if the appropriate resources are not provided.
2. **Competency in FM** covers a broad range of knowledge and technical skills (e.g., leadership, business, finance, communication, technology). It aids in facilitating alignment with the demand organization. Employing their knowledge and skills in the formulation of strategies for risk management, emergency preparedness and response, and facility and business resilience have been recognized as part of the FM's role for many years.
3. **Connections to the right resources** through networking with peers, access to publications and research, organizational involvement, benchmarking and sharing of practices provide the FM with channels that expand the knowledge base of potential answers to strategic and tactical challenges.



The FM’s core purpose is in managing the integration of *People, Place and Process*. When immediate answers are unknown, and new information (and often misinformation) continues to evolve, a systematic approach that allows for frequent updates and modification is needed.

Facility management: “the organizational function which integrates people, place and process within the built environment with the purpose of improving the quality of life of people and the productivity of the core business” (ISO 41011)

IFMA responded to the COVID-19 challenge by formulating a Rapid Response Task Force to develop a planning framework to respond to facility re-occupation. Utilizing the *Plan-Do-Check-Act* (PDCA) planning model and integrating the model with FM’s core purpose of maintaining People-Process-Place, the task force mapped a process that extends well beyond facility re-occupancy in a COVID-19 environment.

The well-known practice of continuous improvement through the PDCA cycle provides a robust framework to develop a crisis response plan, an operational or tactical plan, or a long-range facility strategic plan. This is especially important in an evolving crisis. The decades-old history and utility of the PDCA cycle provide a powerful model when linked with the facility manager’s core purpose. Regardless of the challenge, following the PDCA cycle with People-Process-Place in mind offers a repeatable, reliable process for continuous improvement. As with any FM plan, the objective is to provide safe, healthy, productive and more resilient facilities and organizations. Having a plan in place that also considers the economic impact on the demand organization creates an environment that links the out-

come to what is economically feasible (i.e., cost-effective).

The figure below is a schematic representation of the integration of *People, Place and Process* with the PDCA cycle. It represents “what question are we answering?” in the facilities environment. Using this schematic outline, we can formulate a response plan that is flexible and adaptable to changing conditions and can be tested, measured and improved.

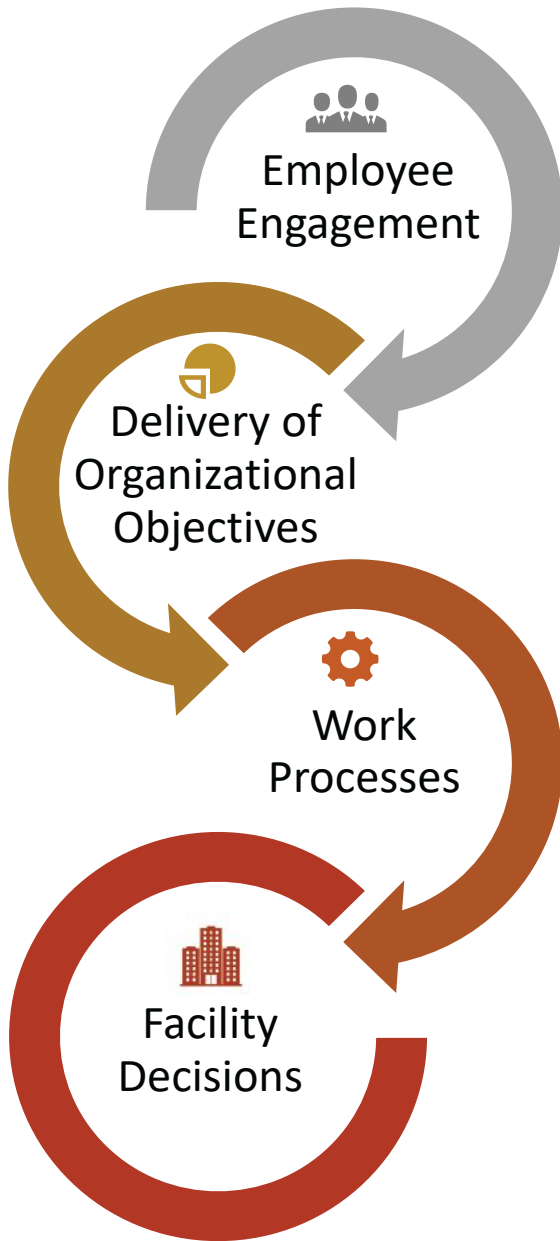
An essential component of leadership is the ability to think critically, consider different perspectives, formulate a plan, measure progress and modify the plan to

adapt to changed conditions. Using the PDCA model provides the ability to reason through the process to assure that the desired results are achieved. In FM’s case, the ability to create safer, healthier facilities that provide as productive an environment as feasible within the resource constraints is the desired outcome.

The most frequently missed steps in the PDCA cycle are the Check and Act phase. This happens because once a plan is implemented, there is a natural bias to move on to the next issue and let the plan play out. It is also often difficult to determine appropriate metrics and measurements during the

PLAN		DO	
People			
Who is affected and what is the desired outcome? <i>Establishes the objectives of the plan by identifying decision-makers, establishing drivers (the need for the plan), assessing risk, determining team composition, and communication protocols.</i>		How will stakeholders be kept informed during implementation? <i>Communicates required actions, behaviors or compliance of stakeholders to create desired outcomes.</i>	
Process			
How does the desired outcome affect the FM function? <i>Establishes the actions needed from the facility perspective to achieve the desired outcome of the plan by managing the FM functions of:</i> <ul style="list-style-type: none"> • Health, safety, and security in the facility • Management of physical space • O&M processes • Management of operational risks • Management of procurement and budget 		What actions are needed? <i>Implements processes and procedures that align with the desired outcome and success criteria.</i>	
Place			
What is affected? <i>Establishes changes to physical space and operations and maintenance practices.</i>		How are facility changes made? <i>Implements changes to physical space and operations and maintenance practices.</i>	

CHECK		ACT			
What are we learning by implementing the plan? <i>Reports plan progress to stakeholders and communicates measured results.</i>		What changes are needed to improve success measures? <i>Communicates changes to practices, policies, procedures that lead to improved outcomes.</i>			
How is the plan measured and monitored? <i>Establishes how the plan is measured and monitored. Determines metrics and links to KPIs for:</i> <ul style="list-style-type: none"> • Creating a safer environment • Creating a healthier environment • Enhancing the productivity of stakeholders • Enhancing the resilience of the facility or the business • Improving the cost-effectiveness of the FM response 				What plan adjustments are needed? <i>Adjusts practices and procedures based on assessment of metrics and KPIs.</i>	
Did the changes meet organizational needs? <i>Determines if the changes met the organization’s need related to capacity, how space is used, or how it is operated and maintained.</i>		What plan adjustments are needed that impact the physical environment? <i>Determines if further changes are needed to enhance the physical environment.</i>			



first stages of developing and implementing a plan. It may take several iterations to settle on the appropriate measures for plan success. The issue of changing information and shifts in understanding of the impacts of a crisis also makes measurement and monitoring difficult.

However, the Check and Act phases provide an opportunity for FMs to demonstrate true leadership and bring value to their organizations. Plan success should contribute to greater resilience in the built environment, reduced organizational risk, and more cost-effective responses to the challenge or crisis. When success measures are tied to the demand organization's needs for safe,

healthy and productive facilities, the FM function will take a strong lead in safeguarding the organization's most valuable asset — People.

There may be many measures in the Check phase. But there are few KPIs. KPIs are more strategic in nature and should focus on and align the most important outcomes to the organization. In practice, they help answer fundamental questions such as:

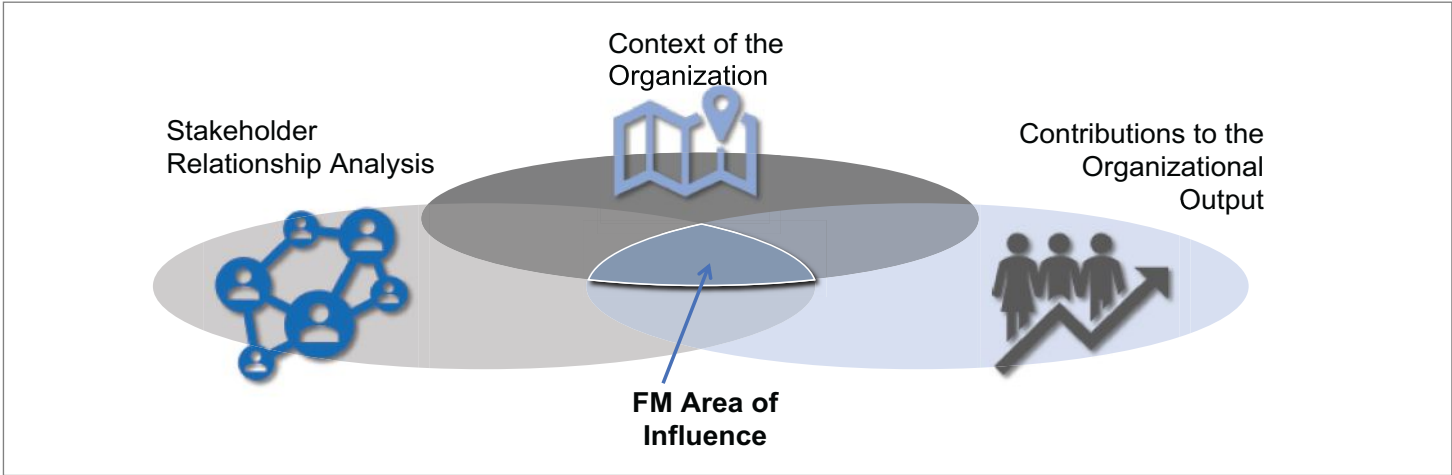
- Has our facility been made *safer*?
- Is the building *healthier*?
- Is it more *productive* to occupants?
- Is the facility been made more *resilient*?
- Has the implementation of the plan *reduced risk*?
- Has the implementation of the plan led to a more *cost-effective* facility, or has the plan helped with cost-avoidance?

These are all important outcomes that align with the core purpose of FM in integrating People-Place-Process. These are not always easy outcomes to measure and require the FM's leadership and critical thinking skills to walk through the PDCA process and create the necessary links between the plan and the expected outcome.

For the last step, the Check phase will allow for adjustments to be made in the Act phase. Lessons learned can be incorporated, the plan updated, new measures put in place, and implementation continued. This is where plan elements are evaluated, and some are made to "stick," while others are abandoned.

Although this process may seem laborious to some, it is at the core of FM leadership to recognize that they are the stewards of the built environment on behalf of their organizations. It is beneficial to keep the charge of FMs top-of-mind: "*improving the life of people and the productivity of the core business.*" This focuses our actions when faced with a crisis that threatens the health and safety of our stakeholders. Max DePree sums it up well with this passage from *Leadership is an Art* —

“Leadership is the concept of owing certain things to the institution... [It] is a way of thinking about stewardship as a contrast to ownership.”



FMs demonstrate leadership every day as they are on the front lines of the built environment, keeping it safe and creating a healthier, more resilient environment, often with limited resources, limited information, and (often) very little time to react. By bringing strategy and planning competencies to bear, FM is able to set plans in place in preparation for a wide range of challenges, some of which they will know little about. With a plan in place before a crisis hits, FM will be able to maintain safer, healthier environments our organizations need to serve their purpose. It is understanding and linking actions to that purpose that brings true value to the organizations they serve.



Chris Hodges, P.E., CFM, FMP, LEED AP, IFMA Fellow is chairman and co-founder of Facility Engineering Associates. He currently serves as Chair of IFMA's Certificate Commission and has contributed to IFMA for over 25 years. He is co-author of the book, "Sustainable Facility Management, the Facility Manager's Guide to Optimizing Building Performance."





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ENTER: HUMANE BRAVE NEW WORLD

BY ELENA BONDAREVA

Unprecedented times tend to result in structural change; change that forever alters the environment in which we operate. World War II resulted in the Universal Declaration of Human rights and 9/11 redefined security. While there is no doubt we're living and working in unprecedented times, most of us struggle to envision what this means to the property industry, let alone for FM as one of its youngest professions.

Aldous Huxley's 1932 novel "Brave New World" examined a dystopian future governed by science and efficiency; a class-segregated society in which emotions and individuality are conditioned out of people starting in utero. Eighty-eight years later, half of it has come to be: both science and technology drive our lives. However, shared humanity is permeating even those applications. Technology underpins the built environment, but it is also increasingly inseparable from sustainability, equity, change management and user experience. And now, Dr. Joseph Allen (Harvard University, School of Public Health) claims that the FM has a greater impact on an individual's health than their physician. What does this mean for the future of the FM profession — and how do FMs prepare both for the power and the responsibility?

Mega trends transforming the FM profession

Structural change follows shifts in what is deemed possible, acceptable or both. Once it was possible for people to ascend building levels effortlessly in lifts, skyscrapers came to define city skylines. Once U.S. ADA, EU AA or the U.K. EA made it no longer acceptable to lock people out of public spaces based on their physical mobility, design and operations followed suit. High-performance buildings transformed the FM profession, and bricks-and-mortar is now the least of it. What seismic shifts are silently redefining the built environment, thus redefining both baseline and the possibilities for the FM profession?

1. Desire for autonomy

The pandemic and other compounding crises, combined with growing distrust of government, are driving a demand for autonomy. Even as the world increasingly experiences just how interdependent it is — and we've formed villages since forever precisely because people can only do a fraction of what it takes to protect, feed, teach, clothe and heal a community — individuals today seek to control how they live their lives.

2. Convergence

The term, used extensively in tech, describes the tendency for technologies that were originally unrelated to become more closely integrated and even unified as they develop and advance. As we accept that our operating environment is a complex system of behaviors, guardrails, incentives and institutions, specialization can feel inadequate. It seems that every professional must understand the entire system — the building, the tech, the science, the change management and more — just to do their job.

3. Buildings re-empowered

If nine months ago, we still had to explain why buildings matter to health, that is now a moot point. Curiously, this public awareness rekindles a deep relationship: until the 1950s, the story of the built environment was inseparable from that of public health. Plumbing, sidewalks, parks, underground trains and more recently, the profound design changes due to the codification of fire safety — all these are testament to the built environment's ability to meet public health demand.

4. Involuntary transparency

Run-away "digital footprints" have marked the end of privacy. While

transparency is no longer a choice, it is not just about managing the associated risk but about harnessing the benefits. There is a growing public demand for accountability for one's impact as well as for authenticity: people accept imperfection in other people and organizations as long as they are doing the best they can.

5. Social responsibility

The "moral compass" may be the most powerful force transforming the FM profession. We know too much to act unaware. There is a groundswell of demand from investors, occupants and employees for astute social awareness and corporate responsibility. How could one install asbestos once it is proven to cause cancer? Today, there is no doubt that the spaces we occupy have a profound impact on our health, well-being and ability to fulfill our potential — and more and more FMs are pushing to do what is right even if it means redefining their scope.

The opportunity

"Healthy buildings represent, without exaggeration, one of the greatest health — and business — opportunities ever."

Healthy Buildings, Joseph G. Allen and John D. Macomber.
Harvard University Press. 2020.

On the front line of the built environment, the FM profession is uniquely positioned to ensure that buildings enhance occupant health, well-being and performance — in turn making the FM work more interesting and the profession more compelling. How does an FM leverage rapidly emerging best practice and science to optimize how a building performs for its occupants, for its owners and from the standpoint of environmental impact?



Know thy building

When planning a lasagna dinner, the shopping list would reflect what is missing from the fridge, pantry and spice cabinet. However, asset and facility managers are often “COVID-proofing” with a generic “shopping list” because they don’t know what their buildings are — and aren’t — doing for infection control. If CO₂ levels in a space regularly exceed 500 percent of norm, sanitizing stations aren’t going to cut it any more than mozzarella gets you a lasagna without an oven-safe dish. There is an opportunity for FMs to know their buildings the way a doctor would know a patient: what are an asset’s “vitals” at low versus maximum utilization? Do you discover an anomaly immediately, diagnose it quickly and determine the best course of action? How do you bring the building back under acceptable tolerances?

IOT-enabled FM

Buildings have mostly become forever inseparable from technology, and the FM profession must lead the charge. Soon, BIM will not only guide design but inform operations, with sensor systems providing real-time monitoring that triggers controls to activate pre-planned protocols. FMs need to grasp the opportunity to command the power of data.

Occupant advocacy

The “head office” is commonly disconnected from occupants of the building. It is the FMs who receive real-time feedback and can best understand the occupant experience. Furthermore, nobody is better positioned to control for unintended consequences: it is FMs who raised alarm when prolific hand sanitizer and chlorine disinfectant led to flare-ups in asthma and allergies, or who hold the key for keeping carbon emissions at bay even with increased ventilation. Whether it is about change management or healthy building certifications like WELL or Fitwel, FMs can assert the role of occupant advocates, empowered to act as liaison between strategy and on-the-ground action.

Change management

Aiming to (re)inhabit spaces even as the COVID-19 pandemic rages on, we are heading into the most complex change experiment of our lifetimes — and that’s not the first or the last of it. Re-emerging will mean creating new and better habits and occupying spaces more consciously, demanding and enjoying their positive impact on health, well-being and cognitive ability. In a world changing faster than anybody can keep up, who is better positioned than the FM to implement the change initiatives required for retention, productivity, Corporate Social Responsibility and more? As buildings become measurably more vital to any organization’s performance and resilience, FMs have an opportunity to become expert change agents at the interface of organizational strategy, building systems and behavior change.

Leveraging science:

Stripped of its “ivory tower” jargon, the scientific method is exactly how a good FM thinks: observing an issue, developing a hunch and testing it until a solution works. As such, the scientific method can supercharge our buildings’ ability to learn, focusing on gaps and shortening the feedback loops until a solution works. Especially when uncertain times leave no room for error, FMs have an opportunity to leverage science to help their buildings learn well and quickly while honoring the asset owner’s risk appetite.

Impact

“Busy” never quite meant “productive,” but there just is no patience for it now, driving the demand for measurable impact. People want to know what any measure of effort achieves: did we merely patch a problem, or did we break the cycle of inefficiency? The business case for doing something is increasingly assessed against the risk of doing nothing; becoming fluent in both risk and impact assessment puts FMs at the decision-making table. There is an opportunity for an FM to help buildings and organizations measure, drive and report on environmental, social or other impact.

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The challenges ahead

Embracing complexity. The FM community prides itself on its pragmatism and practical experience. It has been a phenomenal career track for so many, precisely because it has not demanded university education. While it is still not required for mastering communications, technology or change management, will enough FMs embrace these knowledge domains? If so, not only will the FM profession become ever more invaluable, but those disciplines will benefit from its practical approach.

Embracing change. Scientific breakthroughs change the world overnight, and technology evolves exponentially. This means that a person who has just learned something may be more of an expert than a person with decades of experience. This makes many FMs defensive, and yet accepting this idea is a gateway the FM profession must walk through. The industry must differentiate between content and application expertise. It must also consciously foster a learning culture, especially if it wishes to play a bigger role in change management.

Delegation and collaboration. The increasing complexity of the FM role does not mean that FMs have to do it all. In addition to versatility and practicality, accepting personal limitations is probably the greatest skill of an FM. Perhaps rather than becoming an expert in everything, the FM becomes an “expert client” able to identify, inspire and manage a much greater range of sub-contractors than before.

What FM can do as an industry

Own the impact

A basic management principle dictates that authority must be aligned with responsibility. The property industry didn't influence carbon policy until it claimed responsibility for more than 40 percent of total carbon emissions. Similarly, can we quantify the FM contribution to business continuity, organizational productivity, environmental impact or public health? What percentage of the coronavirus transmission was due to the management of indoor and outdoor spaces? If the FM industry owns its impact, it can claim more power in the form of influence over corporate and government policy, regulations, budgets and more.

Embrace health impact

How many designers are required to take a public health course? How many doctors a building maintenance course? If FMs are to operate buildings to their potential, they must be required to — and rewarded for — understanding the social dimensions of the spaces they manage to include public health, occupational hygiene, equitable access, etc.

Proactively stratify


When looking at health care as a service, the end user can differentiate the role of an orderly from that of a nurse, nurse practitioner, physician's assistant, primary care doctor or cardiac surgeon. There must be such strategic fragmentation for the “facility manager,” with both the vernacular and career pathways clear to job seekers as well as the public.

As individuals

Decide what kind of FM you want to be. You can probably do exactly what you love but the clearer you are, the better your chances.

Become your own natural experiment. Observe your own reactions to stress, new technology and challenging situations to cultivate empathy and ground your skills.

Claim a seat at the table. If your asset is going through upgrades, don't wait for an invitation from the design team. Your contribution is invaluable already, and only more so if you are skilling up in ways introduced above.

Align accountability with authority. Demand more say whenever more is required of you, even if it means building those impact and risk arguments discussed above. 



Elena Bondareva, MA, BS, WELL AP has a solid track record of transformative innovation through her varied international career. Bondareva has held public, private, teaching and board roles in Australia, New Zealand, Russia, South Africa, India, and the U.S.; delivered CPD training to thousands of professionals; contributed to globally significant events such as COP17 and G20; published in peer-reviewed and public journals; and presented at countless conferences. She helped establish four Green Building Councils and the Living Future Institute of Australia and serves on the Advisory Board for the Global Health & Wellness Summit (Greenbuild), the COVID-19 Taskforce of the International WELL Building Institute (IWBI), and the Board of Pollinate Group, an award-winning social enterprise.



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Facility Management:

What Really Matters

BY DOUG PEARSON

Facility management is a complex and dynamic profession. FMs are expected to have a wide knowledge base, understanding everything from HVAC, electrical, building envelopes, building automation, security, sustainability, procurement and real estate, to energy management, cleaning techniques and much more. FM journals are filled with the most recent technology developments, better water filters, cordless vacuums and ice storage. Conferences have vendors from every trade and technology.

However, is this really what makes facility managers successful?


FM is a people-intensive business. Ninety percent of all funding, effort, management, leadership and process involves a human being performing in some manner. All too often, managers focus on the technical aspect of facility management, ignoring what really matters: people. The ability to manage behaviors, emotions and attitudes can be the difference between success and failure.

FMs can greatly improve their performance by spending some time focused on basic human needs, emotional intelligence, change management, conflict management, motivation, recognition, positive mental attitude and customer service. These soft skills can have a dramatic impact on job performance and department success.

Every day, life decisions are made and actions taken based on what individuals think, feel and believe is most important. Having a basic understanding of the underlying factors that influence and motivate these decisions can help FMs appreciate why employees behave the way they do.

While people are not always consciously aware of why decisions are made, the truth is that each person has unique filters of perception that naturally rank certain decisions and actions higher than others. There are more than 7 billion versions of reality unfolding each day on the planet, and each person shares a set of human needs that guide decisions and actions.

Abraham Maslow's theory of human behavior provides a foundation for this concept of human needs. Maslow was a humanist psychologist who is often referred to as the father of the humanist movement. Humanism emerged in response to the two prominent schools of thought at the time: psychoanalysis and behaviorism.



There are more than 7 billion versions of

Humanist thinkers felt that psychoanalysis tended to be too pessimistic, focusing solely on negative aspects of human nature. Behaviorism, on the other hand, was too mechanistic, allowing little room to consider things such as free will.

Maslow first introduced his theory in a 1943 paper titled, “A Theory of Human Motivation,” published in the *Journal Psychological Review*. In it, he outlined the basic five-stage model of human behaviors: Self-actualization, esteem, love/belonging, safety and physiological.

“He wears his emotions on his sleeve,” and “She is comfortable in her own skin” are two common behavioral idioms describing the difference between a person with poor emotional intelligence and a person with high emotional intelligence. Ninety percent of all workplace terminations are due to low emotional intelligence.

Emotional intelligence has emerged as a key differentiator between high- and average- or low- performing employees. Emotional intelligence is measured through a variety of exams known as emotional quotient (EQ). This is different from the standard measure of intelligence, the intelligence quotient (IQ). Emotional intelligence skills result in improved leadership, better recruiting, better customer service skills, employees who engage in professional development, take direction better and can result in an improved bottom line for a company. Many mental health professionals assert emotional intelligence is a valuable asset in the workplace. Employees with high levels of emotional intelligence are better able to cooperate, manage work-related stress, solve conflicts in the workplace and learn from previous mistakes (*Bodhih, 2017*).

Leaders with low emotional intelligence display attitudes and behaviors such as criticizing other people when they make mistakes, refusing to accept personal responsibility for errors, always playing the role of the victim, refusing to accept critical feedback, using passive, aggressive or passive-aggressive styles of communication, refusing to integrate with the team or not being open to others’ opinions (*Goodtherapy, 2016*).

“What is change management?” This is a question often asked in the break room or in passing at FM organizations. While people know change management’s definition, conveying to others what it really means is not easy. In thinking about how to define change management, it is important to provide context related to two oth-

er concepts: the change itself and project management. Change management and project management are two critical disciplines that are applied to a variety of organizational changes to improve the likelihood of success and return on investment (Prosci.com). FMs must understand the fundamental goal of change is to improve an organization by changing how work is done. When introducing a change to the organization, one or more areas will be impacted, including processes, systems, job roles, organizational structure and/or finances. While numerous approaches and tools that can be used to improve the organization exist, all of them ultimately prescribe adjustments to one or more of these five parts. Change typically results as a reaction to specific problems or opportunities the organization is facing due to internal or external environmental changes. In the words of former General Electric CEO Jack Welch, “change before you have to.” The business environment for both private and public sectors is changing rapidly. To remain competitive or even remain viable, organizations much change.

In every aspect of life, there is conflict. FM presents an almost constant environment of conflict such as customers reporting facility issues, employee conflict, vendor conflict and the personal conflicts that employees allow to bleed into the work environment. How these conflicts are handled will directly impact an FM’s success. There are five types of conflict management: accommodating, collaborating, competitive, avoiding and compromising. The workplace setting is overflowing with conflicts due to the dynamics and interdependency of the employee-to-employee, customer-to-employee and employee-to-outside-vendor relationships. Recognizing and addressing the factors that give rise to the potential for conflict can have a positive impact on productivity and the workplace environment (Rau-Foster, 2019). A good FM will be prepared to manage conflict and recognize good and bad conflict. Understanding different conflict styles will help resolve workplace issues.

A positively motivated workforce is the key to organizational effectiveness and efficiency. This is why the topic of employee motivation garners considerable attention from management scholars and consultants. Motivation inspires employees, individually and collectively, in the workplace. Whether an employee is successful



reality unfolding each day on the planet,

and each person shares a set of human needs that guide decisions and actions.

or failing, dedicated or apathetic, behaving or not, their output is the result of motivational forces. Of course, employee output includes complaint, grievances and, in extreme cases, lawsuits. Thus, understanding the forces that drive employees can help employers mitigate legal exposure (*Folks, 2016*).

In a general sense, employee motivation can be understood by analogy to the laws of motion. An employee at rest will stay at rest unless acted upon by a prevailing motivational force. Work is produced when a motivational force acts on an employee. An employee at work will remain at work unless acted upon by a countervailing motivational force. For every motivational force, there is an equal and opposite motivational force. Yet, motivation is more complex. Motivational forces may be physical, metaphysical, emotional, intellectual, rational or irrational (*Donelson, 2016*). Motivation is unique to each employee and varies over time with changes in the employee's personal life, work environment and personal beliefs.

The primary purpose of an employee reward and recognition program is to motivate employees to be successful. The challenge is identifying the circumstances that will effectively stimulate employees to produce long-term, measurable results. The accomplishment of the desired results depends on the ability to precisely define the importance of the intended goal. The accomplishments recognized in an awards program should align with the mission, vision and values of the organization.

An awards program must align with the strategic goals and objectives of the organization. First, use overall business objectives as the foundation of any awards program. These objectives will provide the infrastructure for all the other components of the program. The bottom line is well-defined objectives will ensure the program is on track.

The power of positive attitude can turn an average FM to an outstanding one. The great thing about attitude is that the individual completely controls it. A person with positive thinking mentality anticipates happiness, health and success, and believes that he or she can overcome any obstacle.


Positive thinking is not a concept that everyone believes and follows. Some consider it unproductive and laugh at people who encourage positive thinking. However, there is a growing number of

people who accept positive thinking as a fact and believe in its effectiveness. Attitude is the only thing an individual can completely control — a person is only as happy as they decide to be when they wake up in the morning.

The most important communication skill for leaders is the ability to listen. Professional listening skills include listening for the message, listening for any emotions behind the message and considering relevant questions about the message (*Schwartz, 2017*).

Listening for the message means hearing the facts accurately, without prejudice or being distracted by other thoughts. It's also important to listen for any unusually strong stresses in the sentences or other signs of emotion. In training, leaders can practice using role-play; if they hear these signs of emotion, they can respond by saying, "You seem to feel strongly about this. Please tell me more."

On average, people retain just 25 percent of what they hear. The good news is that people can learn to be better listeners and significantly increase retention. There are principles and practices that can help people be intentional, purposeful and conscientious when listening, making a huge difference with the spirit of =team members.

To earn and maintain quality relationships, employees need to know leaders genuinely care about them. By listening with an empathetic ear, putting themselves in their shoes and maintaining an open mind, leaders develop a culture of enthusiastic and energetic teamwork. Conscious listening, which is listening to understand and learn, is a gift to others (*Keyser, 2014*). 



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CULTIVATING NEXT-GEN FM

A DENVER CASE STUDY

BY CAROLYN MCGARY

A featured article in FMJ's January/February 2019¹ edition highlighted a significant question: how does one turn the accidental profession of facility management into an intentional one? Resources were provided – links and conversation starters offering opportunities to spark discourse and elevate the game in local chapters. But now the question has evolved. Have you utilized those resources? Are you still in the “talking about it” phase? Have you taken the steps needed to initiate something of your own and are you ready to implement something new? Do you need more help to bring your vision to life?

Mahatma Gandhi once said, “The future depends on what you do today.” Perhaps the most important thing we can learn from this is to not be frozen by our own inaction. We will not change the future of our profession by thinking we are unable to impact it. Every one of us is significant enough to leave a mark. We have the ability, the obligation, the creativity and the ingenuity to act for future generations of FM. We must actively seek a solution to our staffing needs as one vibrant, indefatigable, international organization, combining our resources chapter by chapter, as a unified organization.

The Denver Chapter of IFMA stands as a case study representing one path toward cultivating a sustainable future for FM in their community. In 2006, the only accredited FM academic program in the state was closed by the participating university due to low enrollment. While the loss meant fewer students would actively seek this career path locally, many within the chapter dreamed of both resurrection and grand improvement. Countless attempts would be made to establish connections with new colleges and universities, without success.

As the IFMA Foundation’s Global Work-

force Initiative (GWI)² gained traction in California and with the formation of the Chaffey College Student Chapter, the Denver Chapter became reinvigorated. Fueled by the GWI partner playbook, multiple conference sessions, the successes in California and 10 years of uncertainty, Denver got to work; this time their results were tangible.

Just as there are many ways that one can fall into FM, there are many pathways for delivering education and credentialing to help individuals better prepare themselves for entry into the profession. Significant results can be obtained by chapters, councils and communities taking the initiative to address the problem from as many angles as can be reached. It is important to initiate conversations with as many organizations and individuals as possible. We must be open, listening and ready to grow.

The Denver Chapter of IFMA uses an assortment of methods to increase awareness of FM as a career path in Colorado, the first being “prime the pipeline,” utilizing outreach programs and coordinating with high school programs such as Skills USA and the FM Pipeline Team’s implementation of the Facilithon³. SkillsUSA⁴ is a career-technical student organiza-

tion focused at the high school and college levels, allowing students to compete at regional, state and national events.

IFMA Denver volunteers at SkillsUSA events to judge competitions and to present a Facilithon event that introduces students to FM as a career path. As COVID-19 halted most in-person events, the FM Pipeline Team took their competition virtual, introducing in June 2020 the first fully online competition for SkillsUSA, with 11 student competitors and 24 volunteer judges from the U.S., Canada and Egypt⁵. This allowed everyone involved to experience the judging process, in addition to the awards ceremony⁶ presentation, inspiring them to participate in future events.

Students are now asking what options they have available to learn more about entering this career. In partnership with Metro State University of Denver, IFMA Denver will soon initiate their first Introduction to FM course for a bachelor’s degree of construction project management with an emphasis in FM. The launch of this program is a testament to perseverance. It was a labor of love and a belief in the future of the profession.

A tangible and notable 2020 accomplishment is the creation of a Denver pilot of

A DENVER CASE STUDY

“The future depends on what you do today.”

~ MAHATMA GANDHI

the Talent Development Pipeline Program (TDP), in coordination with the IFMA Foundation. This template can be used to replicate Denver's pilot in other states and will help expedite successes based on Denver's efforts.

PARTNER WITH THE IFMA FOUNDATION

Working with the IFMA Foundation was key for the program. They made the recommendation to connect with economic development. The IFMA Foundation established the contract with the City and County of Denver to establish the pilot. Their mission of making FM a career of choice can help your chapter with the connections and discounts for course materials. Use your resources, and do not go it alone!

MEET WITH LOCAL WORKFORCE DEVELOPMENT

Denver Chapter members met their local councilperson who provided introductions to the Denver Economic Development and Opportunity Office (DEDO). Meetings were held with a

workforce project manager and a youth liaison within DEDO to discuss the FM profession and the extensive opportunities available in our field. Data collection was completed to qualify funding and an instructional pilot. Most workforce development groups will have access to workforce data useable to identify the job market for certain job types. This helped to secure funding to sponsor 10 students through a live instruction of the Essentials of FM.

HAVE AN INSTRUCTOR


The IFMA Foundation does not provide an instructor from within, so you will need to find a credentialed instructor. Consider your local group of IFMA Qualified Instructors to teach the Essentials of FM coursework. These courses are scheduled to be 15 weeks long (a typical school/college semester), with one semester break and one class for workforce readiness trainings.

FILL THE CLASS

Fill classes by reaching out to the various resources above. In the Denver case study, eight of the 10 available spots were filled with minority men and women aged 18-25, half of which were military veterans. The workforce development team was highly influential in this process. The Denver Chapter of IFMA made several presentations targeted at youth groups to help garner additional interest using the IFMA Foundation's FM Ambassador Kit.



UTILIZE THE CHAPTER(S)

The Essentials of FM, by itself, is approximately 32 hours of education. When presented over 15 weeks, this gives an instructor plenty of room for additional content. The Denver Chapter was consistently engaged and vested in the success of this project and offered speaking and tour opportunities through its membership. Ultimately, the group was able to include nine



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speakers, a luncheon, and a tour in the curriculum. Two guest speakers provided additional educational content on building automation and how to read architectural drawings. COVID-19 restrictions required a quick pivot to virtual learning, and while it limited the total number of speakers and tours planned, the program remained successful.

HOST A CAREER CONNECTIONS DAY

While COVID-19 derailed Denver's plans for this step, nevertheless they advocate for it strongly. Career Connections Day is a mentorship day that involves working with FMs in several companies who are willing to take on 1-2 students for the day to show them their daily activity as a facility manager. The program includes lunch, dinner and an evening panel with additional professionals speaking about their paths in FM. The dinner is intended to provide students and chapter members an opportunity to network and make connections. This was created by the IFMA Foundation, modeled off the Day with a Facility Professional program.

PROVIDE REAL WORK EXPERIENCE

Workforce development offices like DEDO are dedicated to helping people enter the workforce and have the funding to support work experiences like paid internships. DEDO provided funding for 120 hours of work experience for each graduate of the course. This meant that all local partner companies needed to do was provide mentorship and experience for students in the FM field, and DEDO handled the rest. This was a key element in ensuring a measurable outcome for participating students.

The steps outlined above were fundamental to success in the Denver TDP⁷, which ended the semester with a graduating rate of 75 percent. Supported by the Denver Chapter, each graduate received a full IFMA student membership to continue their mentorship and chapter networking, and their resumes were shared on the chapter website to help them find permanent work in the field of FM.

Denver continues to move forward with projects to help further the FM industry locally. Discussions are underway at a local community college, with both the dean and the business school's advisory board, to establish an associate of business degree with an emphasis in FM. Progress with DEDO has opened the door to other opportunities, such as classes for adult learners. There is money and opportunity for skilled apprenticeships for students to try out FM, augmenting academic courses with on-the-job skills. With this in mind, the Denver Chapter and IFMA Foundation started creating a registered FM apprenticeship program in Colorado.


We are seeking help to improve upon what has been started. So many of us want a very bright future for the built environment; now let us work together to make it a reality. This is a call to action:

Talk to the IFMA Foundation | Diane Levine and the board of trustees are rock stars with a wealth of knowledge of what is active and possible in the world of FM as a career of choice. They are also the creators and keepers of the GWI.

Talk to your Peers | There is a wealth of knowledge with a depth and breadth within IFMA membership. Go to IFMA Engage⁸ or



contact me. So many of us are deeply passionate about the future of FM. We love listening to what others are doing and making connections to add benefit. We are all in the same ocean; let us lift the boats together.

Shape our Future | Time-travel narratives always warn against radically changing the present by doing something small, but barely anyone in the present thinks that they can radically change the future by doing something small. Each of us is significant enough to make an impact on our collective future. We have the ability, the obligation, the creativity and the ingenuity to act for future generations of FMs. Commit to taking the first small step today and maintain momentum, individual by individual, chapter by chapter and as a unified international organization. 

References

1. Article - McGary, Carolyn. "The Accidental Profession — How to Secure the Future of FM." FMJ January/February 2019. Pages 27-29.
2. IFMA Foundation's Global Workforce Initiative — foundation.ifma.org/global-workforce-initiative/
3. FM Pipeline & The Facilitathon — www.fmpipeline.org
4. SkillsUSA — www.skillsusa.org
5. Facilitathon Online Press Release — www.fmpipeline.org/?mdocs-file=795
6. Facilitathon Online Awards Gala Presentation — photos.app.goo.gl/VecnGDtQB4qeiS9j7
7. IFMA Foundation's Denver TDP Press Release — foundation.ifma.org/ifma-foundation-and-denver-economic-development-and-opportunity-dedo-introduce-new-facility-management-talent-development-pipeline-program-tdp/
8. IFMA Engage Website — engage.ifma.org/home



Carolyn McGary is deeply passionate about the future of FM as a career of choice. She has 15 years of facility and project management experience in both the public and private sectors, and an equal number of years as an IFMA volunteer leader. She is a CFM, SFP, IFMA Qualified Instructor for FMP, and the 2016 IFMA

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FACILITY MANAGERS:

**LEADERS,
INNOVATORS,
VISIONARIES**

BY BILL CONLEY

It has been said that if a person really enjoys their job, they do not view it as work. What makes the workplace even more appealing is being firmly ensconced in a comfort zone. What worked last year worked last week, worked today, and should work tomorrow. With that mindset, FMs can feel they are totally in control and all is well. Complacency sets in and continuous improvement takes a back seat to the status quo. Nothing ventured truly leads to nothing gained. Where is the fun in that?

If everything seems to be going well, then something was overlooked. FMs can only sit on their hands for so long before the world catches up with them. Only after a person has stepped outside their comfort zone can they begin to grow.

Leadership and innovation go hand in hand. If a person is not a leader, it will be difficult to introduce new ways of doing things. If a leader is not an innovator, they may be perceived as complacent and relegated to doing the same old thing.

One definition of leadership is the ability to influence a group toward the achievement of goals. Innovation is the setting of goals beyond standard procedures. It is the over-arching catalyst of change and continuous improvement. It is not a cookie-cutter process, but a matter of adapting an approach that best fits a specific situation or team.

A leader works with teams to identify needed change, creating a vision to guide improvements through inspiration, and executing new processes with committed members of a group. Strong leadership empowers employees while enhancing their motivation, morale and job perfor-

mance through a variety of mechanisms. This entails being a role model for followers, inspiring them and raising their interest in a project. It means challenging team members to take greater ownership in their work, while understanding the strengths and weaknesses of the facility staff. This allows an experienced FM to align personnel with tasks that enhance their performance. It is also important to understand the qualities a leader can bring to a work organization. FMs must adapt to different situations, share a collective consciousness, self-manage and stay aware of the big picture while inspiring the team.

FM is in a constant state of flux, with ever-changing demands from stakeholder needs and ever-increasing pressure to become more sustainable in operations. This involves researching new ways to be more streamlined and satisfy the imperative to fulfill the precepts of the triple bottom line, which is people, planet and profits. There is also an expanding appropriation of other innovations which FMs must embrace to help organizations improve their bottom line by upgrading general operational efficiencies.

INNOVATION

FMs are waging a multifront war against attrition, but opportunities for improvement abound. Managing facilities the way it has always been done will not keep pace with the workplace's ever-changing developments. In a world where FMs are tasked with doing more with less, trying new things is sometimes the only way to improve operations.

In its modern meaning, innovation is a new idea, creative thoughts, new imaginations in form of device or method. It is the application of better solutions that meet new requirements, unarticulated needs or existing facility needs. Such innovation takes place through the provision of more-effective FM products, processes, services or technologies. An innovation is something original and more effective. It is related to, but not the same as invention. Innovation is more apt to involve the practical implementation of an inventive way of operating to make a meaningful impact in a facility. Not all innovations require an invention; they often manifest themselves via a new process when the problem being solved revolves around stakeholder satisfaction or is of a technical nature.

Innovative leaders are focused on moving past the status quo and ushering in new projects, acquisitions or initiatives. As a result, these leaders must be comfortable with failure and the volatile effects of change. If the status quo is routine, then that is a mold that must be broken. In an innovative and creative environment, the status quo could be viewed as a benchmark, of sorts. It reflects the best that is being done at the time (best being a relative term), but it does set a baseline for improvements. An innovator is a creator of new ideas. Their role is to go beyond the curve and act as a pioneer. They prepare or open a way for others. They need to own a



An
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THEIR ROLE IS
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A PIONEER.

sense of wonder, willing to dream and have access to those dreams.

Perception is based on patterns. The usual mode of thinking is based on judgement, which serves to reinforce existing patterns. FMs need some method for getting out of familiar routines. Sometimes they will need a jolt for stimulating system change, some provocation to start them rethinking. Disruptive innovation is sometimes necessary. Heretics, troublemakers and change agents can be the key to success when all else fails. The words “no, don’t, can’t” make creative choices uncomfortable or force rebellious action. FMs must ignore the negatives and absolutes. Conformity is so ingrained in society that it sometimes masks a person’s true identity. FMs must be willing to undermine the conventional wisdom on which everyday competencies depend.

Innovative spirit is the spirit of optimism. It takes positive thinking on the part of the leader as well as facility staff members to be successful. It also takes perseverance and a determination not to let anything or anybody discourage them. As leaders, FMs should not only allow, but encourage those they work with to develop their skills and try out new things. They need to be positive about the future, and in turn, promote creativity and new ideas within their teams.

To innovate is not to reform. It is a way of creating improvements and introducing a new way of performing operations in any organization. Even if it has been implemented somewhere else in the business world, FMs can take on the role of early adopter and still successfully introduce new ideas. An adoption life cycle is a sociological model that describes the acceptance and utilization of a new product or innovation, according to the psychological and demographic characteristics of defined adopter groups. This integration viewed over time is typically illustrated as a classic normal distribution or bell curve. The model indicates the users of a new product are innovators, followed by early adopters. Next come the early majority and late majority, and the last group to eventually adopt a product are the laggards or phobics. This latter group will implement the latest and greatest only as a last resort and will probably never try to understand it.

COMES A VISION

When creating a Facility Strategic Plan, having a vision is part of the package. Strategy is based on assumptions. No one can predict the future, but FMs should have a good idea of where the challenges will arise and how they will deal with them. More intriguing is the development of wild ideas, based on what-if and best-case scenarios, in which successful FMs can envision optimum conclusions, aim at dreams and work to fulfill them.

A facilities visionary is one who thinks about the future or improved operations in a creative and imaginative way; someone who is ahead of their time and has a powerful plan for change in the future. Good visionary leaders will prepare for what they want the organization to look like and create strategies for how they can accomplish that goal.

Visions are part of long-term planning. In the pursuit to improve performance and spur change, visionary leaders can be intensely focused. They have set their goals and are willing to do all in their power to accomplish them. Visionary leaders have the self-control and self-discipline to effect positive change and inspire those who report to them. It is hard to follow someone who does not lead


by example, and good visionary leaders understand this. One of the most important characteristics an FM can display is enthusiasm for their vision. Their passion and zeal should reach others and inspire them to feel the same.

Successful FMs are leaders, in that they understand how necessary it is to encourage a sense of accomplishment and to let workers know their contributions are meaningful and useful to the company. They will align their work to the ultimate vision and goal, be leading innovators who show consistent improvements in the market share of their company, contributing to the bottom line and alleviating stakeholder concern.

PERSPECTIVES

FMs should be visionaries as well as leaders and innovators. They all tie together. The FM profession was based on a vision. Forty years ago, IFMA's founders foresaw the need for FM and created the discipline that forms the basis of the profession as it is known today. It was innovative spirit and leadership that led to opening this field of endeavor. What started as a focus on space management alongside operations and maintenance has evolved to concentrations in 11 core competencies. FMs now deal with challenges like increasing energy efficiency, cost control, resource management, security, cybersecurity, emergency preparedness, sustainability/streamlined operations, biomimicry and the aging of facilities, to name a few.

A vision is long term. Today's FM must consider the FMs of tomorrow. It may be difficult enough to teach an old dog new tricks, but it is a completely different proposition to get the next generation up to speed. Industry newcomers may be well-versed in technology and the proclivities of their peers, yet there are lessons that must be learned about the holistic scope of FM.

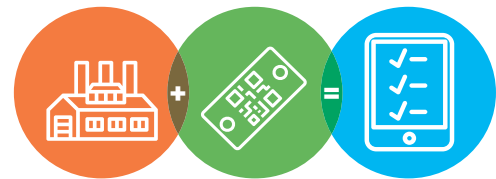
Existing and experienced FMs must lead the new generation and be innovative in finding unique ways to impart knowledge and strategy to those new in the industry. They need to hold on to a vision of FM's future and pass that down. They should always ask themselves what steps are needed to be more successful. If those can be defined and accepted as guidelines, the road may be that much easier to travel. There is a lot invested in this profession — even though things change, they somehow stay the same. That is a concept that should serve FMs well into the (un)foreseeable future. 



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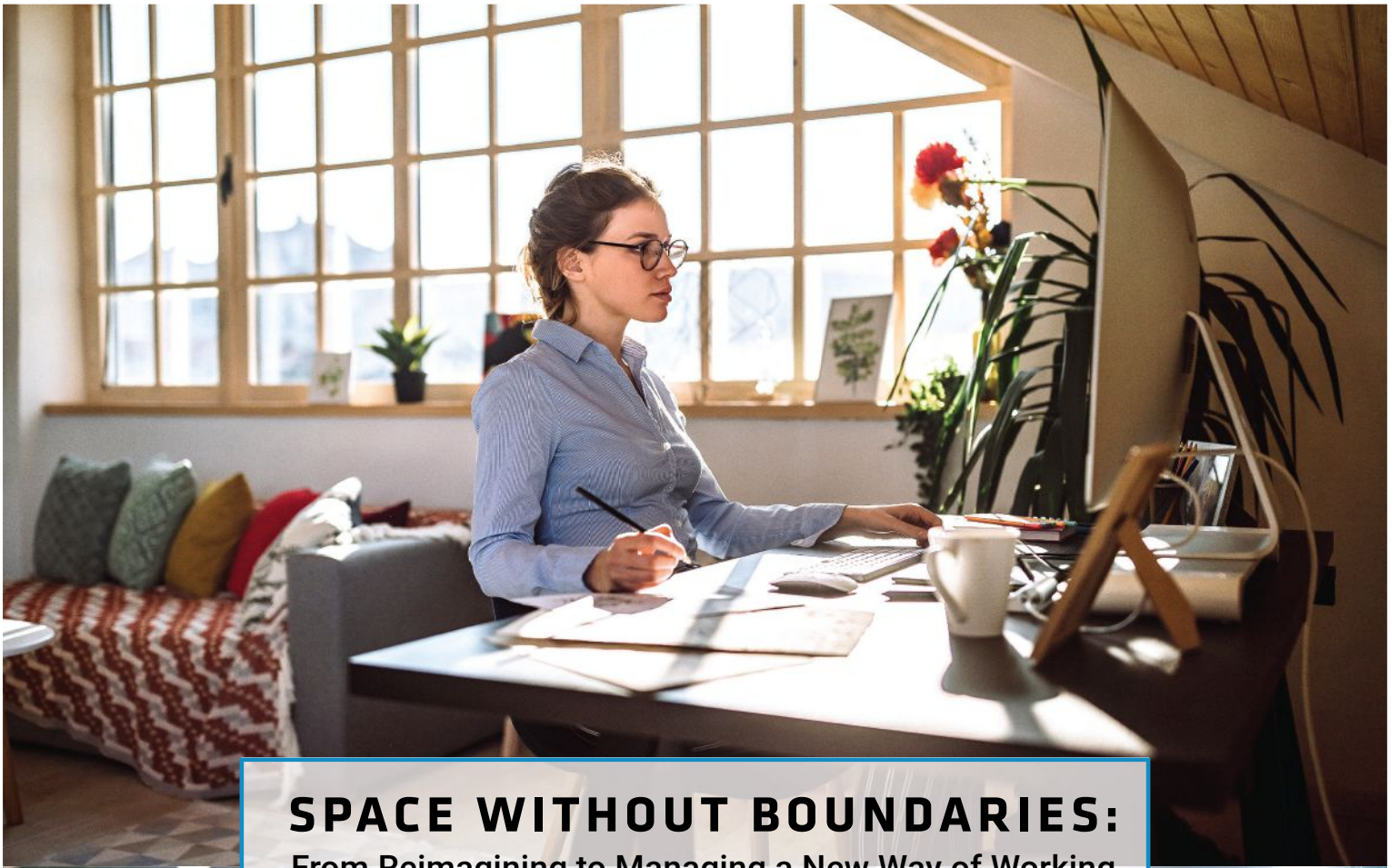


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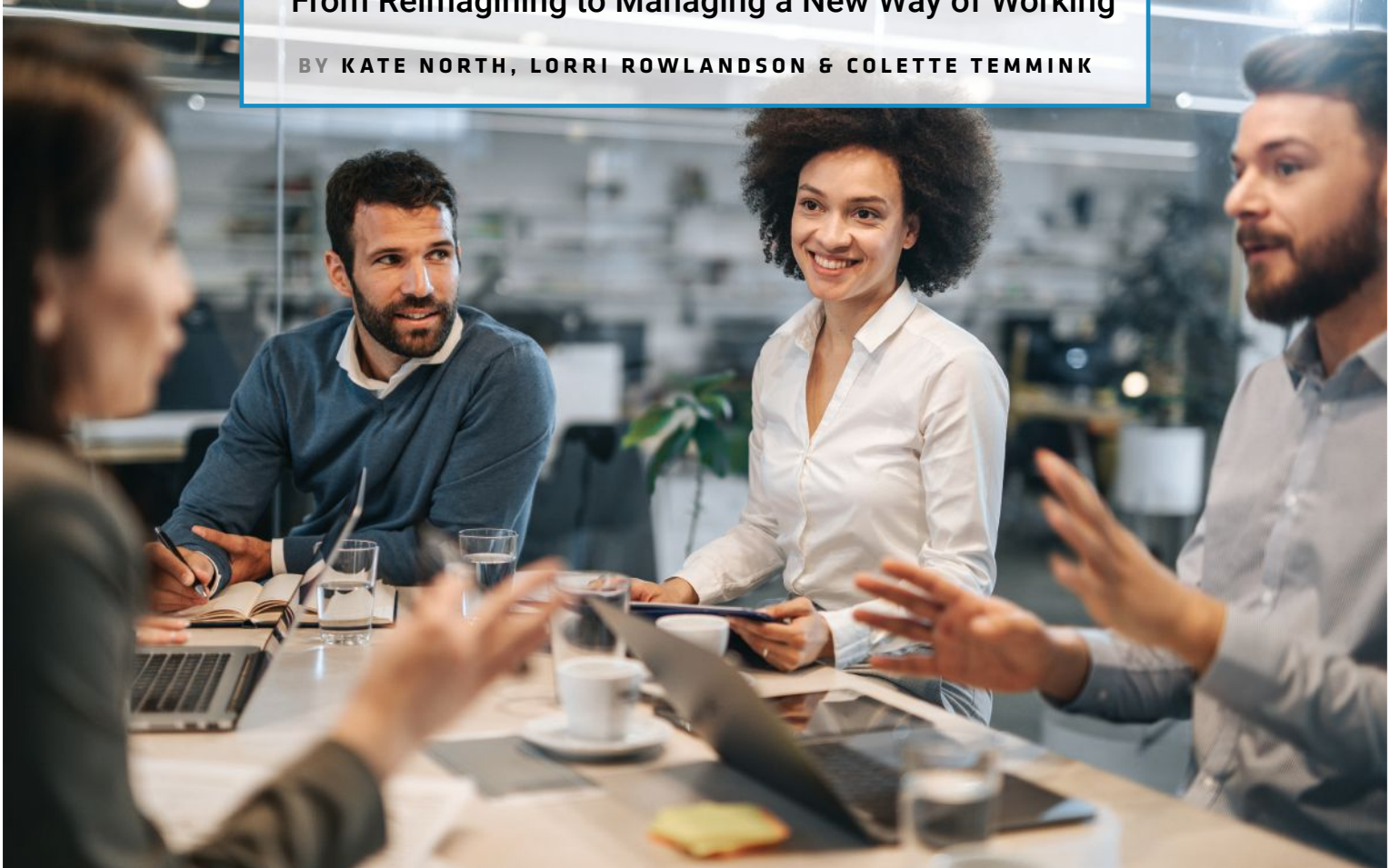
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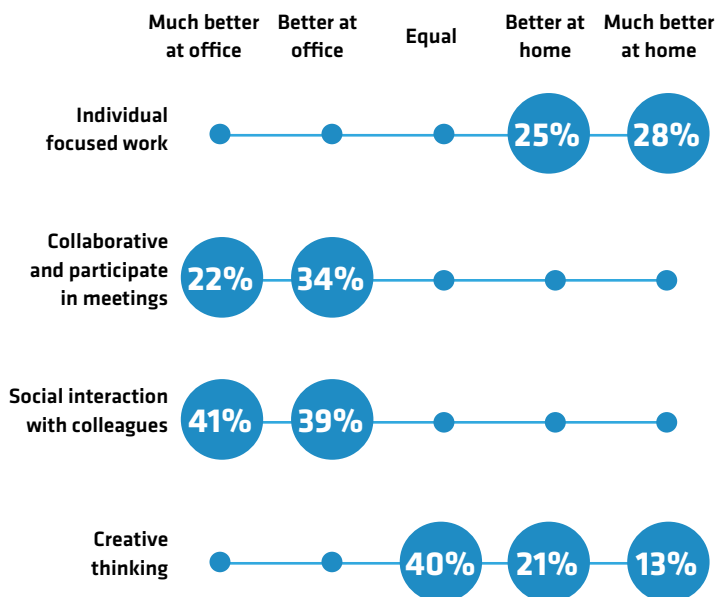
BY KATE NORTH, LORRI ROWLANDSON & COLETTE TEMMINK



Within the past decade, companies such as Yahoo, IBM and HP made headline news when they required employees who were working from home (WFH) to return to the office. The consensus among many CEOs at the time was driven by the urgent need to innovate and bring new solutions to the market. For many leaders, this meant bringing people together physically to build relationships and spark new ideas that would foster innovation. In hindsight, the focus on face-to-face collaboration was needed to re-engage employees, but what some leaders missed was the fact that employees also need to concentrate.

The recent “Work from Home Experience Survey,” sponsored by IFMA’s Workplace Evolutionaries (WE) and conducted by Global Workplace Analytics and Iometrics, found that 68 percent of respondents are successful working from home and 77 percent are fully productive working from home. Colliers’ “Working from Home Experience Survey” found that individual/focused work is better facilitated at home and collaborative activities are better facilitated in the office.

Colliers’ “Working from Home Experience Survey” highlights these preferences.



Bottom line, the purpose of the workplace is to bring people together to connect, collaborate, co-create and experience the culture and values of the organization.

Society has also recognized the importance of work-life balance, which flourishes when people are given choice and flexibility to manage the complexities in their lives, work schedules and tasks. Through the global WFH experiment, which many workers participated in and quickly adopted, a new style of leadership based on trust and inclusivity is also emerging. Leaders who can authentically connect, clearly communicate objectives and measure employees by results, not line-of-sight, will build teams that thrive in a culture of distributed work. As a professional body, we have the unique opportunity and responsibility to help co-create and shape this new way of working, which will be positive for the organization, teams, individuals and the environment. As we approach the threshold of creating this new way of working for the organizations we serve, the FM’s role has never been so important.

Crisis-management expert Judy Smith noted, “There’s always an opportunity with crisis. Just as it forces an individual to look inside himself, it forces a company to re-examine its policies and practices.” COVID-19 is just such a crisis that allows companies to re-examine their workplace policies and practices. For the first time, leaders who once vehemently objected to work being done outside of the company’s offices experienced working from home first-hand. We’ve been living in an experiment that has proven we can be productive while working remotely. It is helping organizations get over the mental stigmatism of remote work, and they are rapidly accelerating remote work strategies. According to a recent Gartner survey, 74 percent of financial leaders and CFOs plan to have at least 5 percent of their on-site workforce move to remote positions following the COVID-19 crisis. This brings a new need and opportunity for a digital workplace that is without physical boundaries and an opportunity for FM leaders to manage multiple environments.

Data from Colliers also states 83 percent of workers want to work from home at least one day a week permanently, and 48 percent said one to two days a week. However, this data also shows

what people miss the most is the ability to connect and collaborate with colleagues in the office. Based on these insights, new hybrid scenarios are rapidly developing that allow for greater fluidity and choice for employees. These emerging models support focused work-from-home and high-touch collaboration and innovative work in the office. None of this work can be accomplished without robust HR and IT strategies to support the physical and digital work and require strong collaboration and integration with these important allies.

To help frame these ideas, the chart below showcases the following concepts.

- Work includes people accomplishing the work (who)
- The place the work is being accomplished (where/workplace environments)
- The process to enable the work and execution (how)

Workplace Environments/Lead Support Org.	Enablers	FM Responsibility	Required Skills
Office (FM)	Mobile App for Communication, Work Orders and Space Reservation (IT, FM)	Manage Work Environment Space and Services	Space Management
Mobile (IT)	Remote Technology (e.g., Google Docs, Zoom) (IT)	Ergonomics Across Work Environments (health and safety)	Building Maintenance
Home (HR)	IOT/Building Automation; i.e., remote monitoring (IT, FM)	Analytics and Reporting, Governance (enforcing policies)	Hospitality
Co-location (FM)	Concierge Services (FM)	Concierge services, Workplace programs & Special Events (i.e., yoga, learning events)	Information Technology
Hotel (FM)	HR Support Programs/Culture/Change Mgt. (HR)	Reprogramming space based on occupant needs (e.g., hackable furniture)	Data Science/Reporting
Remote from Anywhere (IT)	Employee/Corporate Communications (ALL)		Essential Skills (e.g., Interpersonal, Creativity, Communication, Collaboration, Resilience, Decision Making, High EQ, Problem Solving)
	Analytics (BI) (ALL)		
	Policies and Procedures (ALL)		
	Wellness/Well-being Programs – wherever they work (HR)		
	Ergonomics (HR)		

Figure 1: Workplace Without Boundaries

Workplace environments/Lead support organizations

The new workplace will be digitally forward and combine both virtual and physical presence. Work will be done from many locations such as the office, one’s home, co-location facilities, hotels or just about anywhere imaginable. Work is what you do, not where you are. Employees are no longer limited to the individuals and teams they sit by. Employees will be able to develop, innovate and connect across the organization through video conferencing, virtual and augmented reality, collaboration tools and other digital tools. Companies are no longer limited by the physical walls enabling innovation and can now increase innovation across all employees. While COVID-19 forces businesses into a virtual environment, they do not need to replicate the office environment of the past once a COVID-19 vaccine is developed. Now is an opportune time to re-imagine a place you want to be. If employees can work from

anywhere, why would they choose to be at the office? The answer is “the experience.” Creating this new workplace experience will require new thinking and management. A wide variety of space will accommodate those touching down for the day, teams brainstorming or options for those who do not want to work remotely. The purpose of place will be focused on collaboration, interaction, camaraderie, teaming and mentorship. It is no longer about where you work but how you work and where is this best accommodated.

Corporate real estate and FM teams have been chartered with the management of a corporation’s physical footprint. The new charter will be to manage employee services from anywhere. They will continue to focus on maintaining offices, plants, data, centers, etc.; however, the office environment will see the most change. This change will be centered around one of the most important

and valuable assets of an organization: human talent. HR and IT departments will play a larger role in supporting employees in various work environments. When CRE reports to the HR department or chief experience officer, the focus tends to lead to supporting employees versus cost when they report to a CFO. It is still unclear if the increase in work environments will tip the scale to HR or IT leading in the future or whether it will be a collaborative effort among HR, IT and CRE. Also, will there be a balance between the importance or priority of people and maintaining buildings?

Enablers & automating the management of corporate office space

Regardless of the work setting, certain enablers are required to support people in any work environment.

TECHNOLOGY ENABLERS:

Initially, the employee journey back into the physical space will be filled with angst, and FMs have an opportunity to lead their organizations into the future with improved safety. The primary concerns for the employee to return to work have much to do with the facilities. For example: overall cleanliness, touching common surfaces, air filtration and quality, ensuring the density is well managed and not overcapacity, and use of community and public areas like restrooms and cafeterias. Many FMs spent the past few months with other members of their COVID-19 Task Force focused on keeping people safe. Some of the basics include HVAC testing and strategies, integrating touchless technologies where appropriate and ensuring the six-foot distancing is reinforced throughout the space with the maximum occupancy understood and managed. Also, increased cleaning and supplies are available, navigation signage, and strong and consistent communication are applied.

Other technology strategies to support safety include using an automated kiosk or thermal camera to monitor temperatures for automated site monitoring. This new technology can immediately notify the cleaning vendor to disinfect the impacted area or remotely trigger a robot with UV lighting. Remote building system management can enable limiting access to the building or even certain areas that are impacted; then notify building occupants with instructions on what to do next via a mobile device. Sensors can help with building systems and equipment management. For example, sensors can be placed on the HVAC systems to monitor vibrations for predictive analytics to predict when the system may stop working or when certain maintenance is required. This also includes dispatching robotics for floor cleaning, window washing and disinfecting.

Further enhancing a distributed work model will require acceleration in digital transformation in certain areas such as remotely monitoring building equipment and the employees' use of space. If an employee books a hoteling desk via a mobile device before entering the office, their experience could be based on their preferences and usage. Integrating this tech-

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nology could provide data on when they will arrive (spacing entry for lobby and elevator use), provide food options based upon preference, and conduct cleaning and supplies all based on usage.

Mobile apps are available to support a fluid experience by providing access from anywhere at any time, and remote technology (e.g., Google Docs, Zoom) will support collaboration and access to information. This level of ease and transparency keeps work visible and allows teams to stay connected to their work. Many work and management processes will also become more automated and agile. Data analytics on individual and team performance are already here. Still, there will be a further aggregation of this data that will redirect the work to whoever is best suited and available.

Automating the physical environment enabled by remote management of buildings will also be essential. Creating digital twins was cost-prohibitive in the past, given the average age of buildings. If a building is more than 30 years old, the building systems are difficult to remotely automate. Now that sensors are becoming affordable, FMs can leapfrog antiquated infrastructure and remotely monitor buildings via sensors. This includes real-time occupancy, indoor air quality, temperature and building equipment. The business case for remote monitoring now includes reducing “truck rolls” of technicians, which reduces labor costs, avoids carbon emissions and avoids unnecessarily exposing the technician to the public.


The future will be focused on real-time occupancy tracking, remote building system management, and marketplace employee and facilities services. All of these can support quick, real-time safety responses. This technology would also get us one step closer to self-managed buildings, in which a building can monitor its systems remotely and adjust setpoints or dispatch a work order for repair. This will require an enhanced skill for FMs.

Conclusion

To manifest this new way of working, the mindset of the FM must remain curious, open to new possibilities and the desire to learn. When developing a new way of working the best approach to take is based on data and is a more inclusive one that integrates HR, IT, sustainability, finance, risk and communications. Throughout the crisis, we have observed that many organizations were forced to break the silos between departments and create a COVID-19 Task Force to solve the immediate issues. Through this more intensified collaboration, many FMs and CREs experienced stronger alignment and partnership with HR and IT than ever before. As we begin to settle into the next phase of COVID-19, is there an opportunity to expand this union and invite others with diverse expertise and mindsets to participate?

The FM will require additional skills and knowledge supporting this new way of work. It will require a desire to collaborate with HR and IT; understand workplace management and workplace strategy, change management, space management, experience management (concierge services) in addition to building maintenance, and technology (smart building, IoT, etc.); and essential skills like emotional intelligence, communication and a strong financial acumen.

The list is long, and very few of us have all the skills required.

Ongoing training through IFMA’s SFP®, FMP® credentials and WE’s newly released Workplace Management Program certificate course will certainly support the FM of the future. However, the successful FM of the future will have the awareness to know when they need support, strong networks and the ability to partner with other experts, both internally and externally. Together, anything is possible. 

REFERENCES

[we.ifma.org/wfh-results/](https://we.ifma.org/wp-content/uploads/2020/05/WFH-Exp-May-Survey-WEinar-DECK-5-14-2020-Locked.pdf) (Global Workplace Analytics and Iometrics) or <https://we.ifma.org/wp-content/uploads/2020/05/WFH-Exp-May-Survey-WEinar-DECK-5-14-2020-Locked.pdf>

U.S. Report | Workplace Advisory “Exploring the post-COVID-19 Workplace”

Source: Colliers “Working from Home Experience” Global Survey

www.brainyquote.com/quotes/judy_smith_823185

www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2

we.ifma.org/workplace-management-program-overview/



Kate North is vice president of workplace innovation at Colliers International and has helped organizations create innovative workplaces and adopt new ways of working for more than 25 years. Her global expertise includes workplace strategy, change management, training, research, sustainability, design and leadership. She has authored more than 40 workplace case studies and hosts numerous learning industry events within IFMA and CoreNet. North is an active member of the Chicago Chapter of IFMA is an IFMA board member and founder of IFMA’s Workplace Evolutionaries (WE).



Lorri Rowlandson is global senior vice president, strategy and innovation at BGIS and is an IFMA board member. She advises C-Suite real estate executives, consulting on a wide variety of topics to define and drive best outcomes for clients. Rowlandson is a hands-on thought leader, steering strategic transformation initiatives for key clients on a variety of topics, including employee experience, total cost reduction, smart buildings, organizational design, workplace and portfolio strategy, multiyear roadmapping, future proofing for disruption, practical innovation and measuring productivity.



Colette Temmink serves as president of property services at Eden and is an IFMA board member. She is responsible for enabling companies to seamlessly run and scale their real estate portfolios. She also oversees the strategy, delivery and quality of property services being delivered to enhance workplace performance. Temmink earned her master’s degree in Business Administration, International Finance from the American University, Washington, D.C., and a bachelor’s of science degree in Business Administration — International Business from the American International College, Springfield, Massachusetts, USA.

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IFMA & LEADERSHIP

As part of IFMA's 40th anniversary celebration, four of the association's past chairs offer their personal insights on development and leadership within the FM industry.



1980s | CHRISTINE (NELDON) TOBIN, CFM, IFMA FELLOW | 1991 IFMA CHAIR



Imagine your professional world with no organization dedicated to supporting facility management. No information, guidelines or standards to help you ensure efficiency, success or excellence. No accredited degree program to set you on your FM journey. No continuing education or credentialing to help you grow in your

field. No network of mentors or peers to call on for helpful advice. No specialized consultants or products geared specifically toward managing facilities. No representation. No definition. No vision for a future filled with opportunity for advancement.

Welcome to FM pre-1980! In the late 1970s, Herman Miller formed the Facility Management Institute and sent Dave Armstrong of Michigan State University to major cities to talk about a newly minted term called “facility management.” A group of professionals interested in creating and defining a profession met to form the National Facility Management Association. Chapters formed across the U.S.; and once the Toronto Chapter was chartered, NFMA became IFMA.

My first experience with FM was in the fall of 1981 at a meeting in an Atlanta, Georgia, USA, hotel. By spring of 1982, we had a chapter and I was treasurer. My limited experience was in technology, and there was a whole lot I didn’t know. When I went to chapter luncheon meetings, other attendees thought I was some FM’s wife.

Today, I’m a CFM, an IFMA Fellow, an international speaker and an award-winning author. I have retired from two successful careers as an FM executive. How did I get here? More importantly, how can

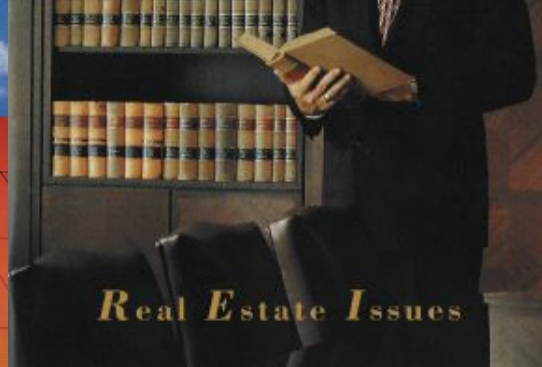
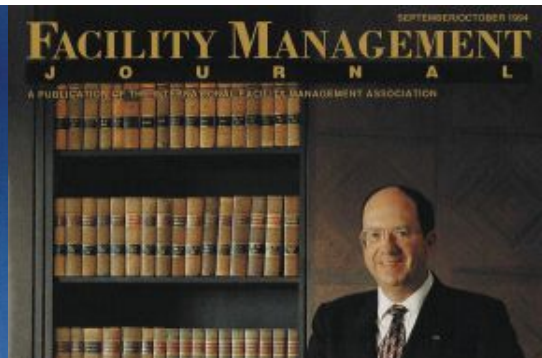
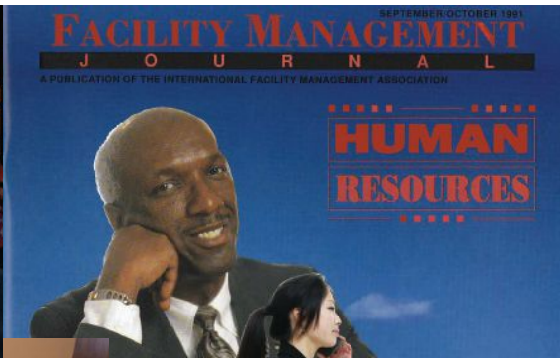
you get from where you are to a similar “here?” FM has come a long way but there are basic skills that still apply.

Knowledge — You must know what you are talking about before you can be an effective leader. Today, there are accredited degree programs and a variety of facility-related certificate programs. There are conferences and meetings on FM, as well as IFMA education programs. There is a plethora of information online. Vendors, consultants, coworkers and FM peers can teach you. Take advantage of the education open to you. Imagine your FM world without it.

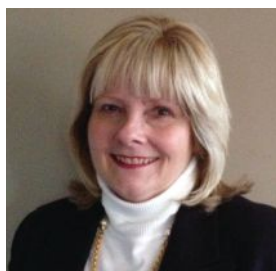
Volunteer — Many associations, committees and charities are anxious to find leaders. Volunteers learn interpersonal, presentation, organizational, financial and technical skills surrounded by supportive people. Becoming known in your community for good works brings positive recognition. Your employer and contacts will take you more seriously. Be open to starting at the bottom and working your way up.

Networking — Attend FM conferences and meetings. Talk to people. Use the member directory or online messaging to reach out. Learn from their experiences. Connect with HR, finance and IT professionals at your job. They can support your objectives, projects and career growth. Find a hero. Find a mentor. Find an ally. Imagine your FM world without them.

Personal Integrity — It is very important to always deliver on what you say you will do. Never exaggerate your skills or present yourself falsely. Don’t lie. Assume that someone is always watching what you do. Stand behind your work and the work of your team. Admit your mistakes and take responsibility for them. Establish a reputation for honesty and transparency.



1990s | DIANE MACKNIGHT, CFM, FRICS, IFMA FELLOW | 1993 IFMA CHAIR



The 1990s seem like ancient times compared to today. It was a period of extensive economic growth, allowing many of us the opportunity to serve in expanded roles and gain valuable professional knowledge.

I am indeed thankful for the knowledge, practices and principles I was exposed to throughout that portion of

my career; and for me, several themes emerged from that decade. FM professionals and leaders have several opportunities:

Studying our organizations: Developing a comprehensive understanding of the organization is both an opportunity and often a requirement if we are to be successful in our roles. Moreover, it helps us foster alignment in the delivery of our FM services. Understanding formal and information-based decision-making structures is a critical success factor.

Creating an environment that supports career development and advancement: Truly, “to whom much is given, much is expected” should be words to live by for FM leaders. Providing comprehensive one-on-one coaching, skills training, leadership/supervisory skill development and designing career paths for FM staff produces extraordinary results both for staff and the organization.

Continuous learning: The extraordinary pace of technology during 1990s underscores the need for lifelong focus on learning in a variety of areas. Clearly technical expertise is required, as underscored by the continuing evolution of FM competencies. Learning how best to apply and deploy technology is key to long-term success.

Managing with data: Most smartphones have as much as or more computing/storage than desktop machines we were issued in the 1990s. The ability to collect, analyze and make decisions based on data offers FM professionals a true seat at the decision-making table if they exercise the discipline in their organizations to collect, validate, understand and use the information to optimize services and manage costs.

Identifying and tracking trends: Monitoring and understanding the evolution of the workplace and workplace practices is key to creating and continuously improving FM services through service changes, training, staff development and cost efficiency. We have seen the blinding speed at which organizations have adapted to remote working. The effect on the way facilities are viewed, designed and managed has been profound. We must be alert to the full range of potential impacts.

Fostering a culture of fairness and respect: For some FMs, the 1990s were marked by a distinct focus on real estate transactions and project management with FM operations often sidelined. Principled FM leaders create an environment where all services, skills and disciplines are valued. The pandemic has underscored the importance of our maintenance, technical and custodial staff in a dramatic way.

FM has offered me the opportunity to learn a little about a lot of things, but the greatest honor was to have worked with hundreds of people from different backgrounds and experience to deliver services, develop the profession and learn together.



2000s | SHEILA M. SHERIDAN, RCFM, IFMA FELLOW | 2002-2004 CHAIR



Be open to change and opportunities that present themselves. Reflecting on decades of experiences, I realized that successful individuals are willing to accept the opportunity to change and adapt as they travel through life. As an individual is exposed to various situations, he/she can absorb what has happened and glean

from it what is valuable. A leader grows continuously as different opportunities present themselves. True leaders are open to change, making it work for everyone.

Be respectful of culture and diversity. At the start of my work career, I experienced a variety of situations that improved my interpersonal skills. As an inner-city teacher, I discovered how critical it was to respect the culture and diversity of all individuals. Each student exhibited a unique individual personality, learning style and willingness to be educated. This challenge provided me with a solid basis for relating to all people who crossed my path. A true leader enables others to learn and succeed in conjunction with advancing their own career.

Be willing to ask. Since my serendipitous introduction to FM in 1980, I realized the need to learn from others. Asking because you do not have enough information or knowledge gains people's re-

spect. They will honestly share what they know if you are open to learning. Be willing to request help, then appreciate the person providing it. Show that you are open to listening to others and will consider implementing what they have to share.

Be a collaborator. A leader must encourage dialogue on how to develop a solution to an issue. If people share in finding the right answer, then they are more willing to make that answer a success for the team. Creatively looking at situations together can invite new ideas and opportunities to improve. It is acceptable not to know all the answers yourself, if you know how to lead a team to a positive result.

Be steadfast in your beliefs and be patient. When I realized how important sustainability was to the FM profession and to our planet, I decided to act. I spoke to numerous people concerning this topic and read all available materials. It was apparent to me that people were not ready to change what they were doing. It would be a long road ahead for sustainability to become the norm. I doggedly pursued the topic and accepted that it would take patience and perseverance to incorporate sustainability into the very core of FM practices and education. A leader needs to be willing to educate others concerning what needs to be achieved; then offer opportunities to learn. Edmund Burke's quote was my touchstone during this endeavor: "Nobody made a greater mistake, than he who did nothing because he could do only a little."



2010s | KATHY ROPER, RCFM, IFMA FELLOW | 2011-2012 IFMA CHAIR



After being in FM for more than 20 years, I had the awesome opportunity to teach at a highly respected university in my hometown for a new FM graduate program. It would not have been possible had I not previously followed advice to continue my formal education in communications and business and learn quite a few

leadership skills throughout my career. Working with young career professionals or students new to FM gave me insights into some of the possibilities for improvements and efficiencies in FM.


Going forward, I see a tremendous need for younger, innovative leaders who embrace new technologies, develop their employees and learn from everyone around them. These are traits of good leaders and will enable those with less experience to leap-frog their peers and even more experienced FMs. If you hear about new technologies anywhere, be curious. How could these be applied to the facility realm? What's new that your organization might not have tried yet? How can we do more with less?

This last question is a perennial quest within FM and must constantly be considered. Technologies such as building information modeling (BIM), augmented reality and the Internet of Things (IoT) bring new efficiencies to operating facilities and managing them for the best use of occupants. Understanding how they might fit into your organization, or not, is critical to leading your FM group to success. Being able to anticipate new business challenges

and respond rapidly are successful leadership skills.

Developing your team is one important way that leaders demonstrate trust and expectations of success from employees. Listening to new ideas, encouraging new processes and being willing to experiment a bit will expand a new leader's ability to meet users' needs. While improving customer satisfaction, it also provides enhanced employee commitment and loyalty. Research has shown achievement, acknowledgement, autonomy and responsibility are stronger motivators of employee commitment than pay. Everyone wants to do well and creating and embracing an environment for responsible contributions results in success for the employee as well as the organization.

Relatedly, the ability to see opportunities in various innovations is a new leadership skill that can quickly improve results. A classic example from benchmarking literature is the woman who suggested that the lipstick manufacturer consider touring a Winchester rifle production line. Why? Think of lipstick cases and bullet casings! Different industries but similar products. How could something unrelated possibly work to improve FM services? There may be new innovations, especially within the hospitality and service industries. Look around and be innovative.

Finally, good leadership requires continuous learning. With things changing faster and faster, old ways of working and processes that require too much manual time are ripe for improvements. Always look for new information, opportunities for advancement and remember that people (our employees) are the real reason the facility must operate efficiently. 

Christine (Neldon) Tobin, CFM, IFMA Fellow was regional project manager for Travelers Corporate Real Estate in Alpharetta, Georgia, USA, before her retirement. Her responsibilities included planning project work, facilitating space negotiations, overseeing outsourced allied partners and department relationships, annual budgeting, emergency and operational support. Tobin was a founding member of IFMA's Atlanta Chapter, 1991 IFMA chair, served on the IFMA board for eight years and is an author/speaker on FM throughout the U.S. and internationally. Awards include 1993 Distinguished Member, 1995 IFMA Fellow and 2001 Distinguished Author. In 2016-17, she served as Trustee for the IFMA Foundation.

Kathy O. Roper, RCFM, LEED AP, IFMA Fellow is a retired associate professor and chair, FM, at Georgia Tech in Atlanta, Georgia, USA. Roper continues to research and write about FM issues, focusing on innovations, trends and integration of technology and business acumen into FM. Roper was co-founder and co-editor of the "International Journal of Facility Management," launched in 2009. She is co-author of "The Facility Management Handbook," third and fourth editions, and recently completed IFMA's "Climate Change Fundamentals for FM Professionals" report. She served on local, national and international boards and scientific committees for expertise in FM.

Sheila Sheridan, IFMA Fellow, RCFM was a teacher with a M.Ed. and left the profession to raise her family. She returned to work in an administrative position and within a year, she found herself in the facilities field. Sheridan retired from Harvard University as director of facilities and services at HKS and has more than 35 years' experience in the facilities profession. She is past faculty for IFMA and USGBC and has been a guest lecturer and visiting faculty at international universities. As IFMA chair, she advocated an awareness of sustainability. In her retirement, she is active in environmental issues and town government. She continues to participate in various IFMA activities and is a member of the Environmental Stewardship, Utilities and Sustainability Strategic Advisory Group (ESUS).

Diane MacKnight, CFM, FRICS, IFMA Fellow is a recognized expert in real estate and FM with more than 30 years of experience. Practice areas are organizational assessment, facilities outsourcing, strategic and tactical facility planning, administrative/office services, leadership coaching and process improvement. Her consulting experience includes assignments across North America, Europe, Australia, Brazil, and Asia. She offers a unique perspective gained from serving as a practicing facility manager for Freddie Mac, vice president of facilities for Gannett/USA Today and as an outsource service provider (SVP of Corporate Services for Trammell Crow Co.). She formed MacKnight Associates in 2003. She is a founding member of the Capital Chapter of IFMA, a past IFMA chair (1993), a Certified Facility Manager, an IFMA Fellow and a Fellow in the Royal Institute of Chartered Surveyors. MacKnight has served as an instructor for multiple courses with the George Mason University Facility Management Certificate Program.



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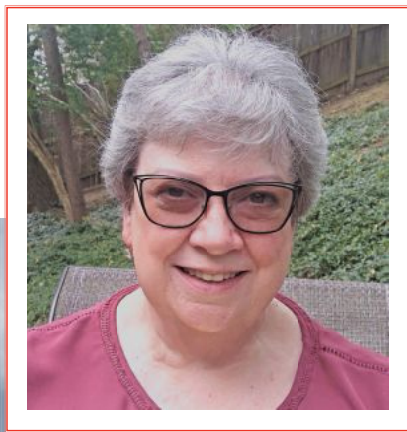
MY FACILITY



JUDIE COOPER

The Smithsonian Institution
Washington, D.C.

Encompassing 19 museums, 21 libraries, nine research centers, a zoo and much more, the Smithsonian Institution in and around Washington, D.C., USA, is the world's largest museum, education and research complex. The Smithsonian welcomes 30 million visitors annually into its halls, where they are immersed in cultural arts, sciences, history and nature. The upkeep of the Smithsonian, protection of its holdings, and comfort of its employees and guests falls on Judie Cooper and her FM team.



Photos Courtesy of the Smithsonian Institution





FMJ: *Tell us about yourself and how you got into FM.*

COOPER: I got into FM the same way many others did, by accident! I was hired to work at the Smithsonian Institution in the Office of Facilities Planning and Engineering Services in 1978, where I assisted with budget work and correspondence. I later moved to what is now the Office of Facilities Management and Reliability (OFMR). In that position, I learned about all administrative and management aspects of facilities – how to fund them, financially manage them, hire, train, manage and lead staff, understand each functional area of facility operations and maintenance; clean and maintain facilities; and articulate facilities' needs.

From there, I became the Director of Crafts Services with a staff of 129 skilled crafts and tradesmen serving all Smithsonian facilities – we did everything from preventive maintenance to building exhibitions.

In my current role, I focus on strategic initiatives, learning and development, measuring and improving organizational performance, and supporting organizational improvements. We are facing some very serious challenges in this industry over the next decade. For every three skilled tradespersons who are looking to retire in the next couple of years, there is one skilled tradesperson ready to step into the role. Only 6 cents of every U.S. education dollar is invested in technical education;

this will have a very significant impact on our profession and productivity in the future. My greatest pleasure is working with staff and creating opportunities to help them identify a path to grow professionally.

For this reason, our leadership is supporting an initiative we call the Facility Management Academy, which will provide classes for our staff members to help them upskill and reskill in order to be ready to address the challenges of managing, operating and maintaining facilities. We invest in our staff and provide training courses that will help them develop the skillsets to address facility challenges at all levels.

FMJ: *What is the Smithsonian Institution?*

COOPER: We are the world's largest museum, education and research complex with 19 world-class museums, galleries, gardens and a zoo. The Smithsonian's mission was clearly stated in the will of James Smithson, an Englishman who left his sizeable estate to found "at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge." In OFMR, our mission is to operate and maintain our cultural facilities and provide services that support the Smithsonian; in other words, we set the stage for the Smithsonian experience.

MY FACILITY



JUDIE COOPER

The Smithsonian Institution
Washington, D.C.

FMJ: *What is day-to-day life like at the Smithsonian?*

COOPER: No two days are ever the same and that is one of the things I like about FM! There are 6,700 employees at the Smithsonian and another 7,000 volunteers. The FM staff is about 870 people with expertise in just about every area of FM.

FMJ: *Why is the Smithsonian unique and what kind of unique challenges do you face managing the facility?*

COOPER: The Smithsonian is unlike any other organization. There are many wonderful museums dedicated to history, the arts, culture, technology, science, humanities, and even specific events or subjects. At the Smithsonian, we seek to be a leader in that arena, and we provide an unparalleled learning experience for our visitors and researchers. We have multiple facilities of varying ages that welcome many people every day (except Dec. 25, the only day of the year we are not open). This level of interest and foot-traffic presents many challenges for iconic facilities.

We are visited annually by more than 29 million people. We house collections of unique artifacts in a facility that may be 90 years old, built to accommodate thousands of visitors, yet is visited by millions. Just as any facility that is heavily utilized, our facilities have their challenges. On a hot summer day, the persistent opening and closing of doors lets valuable cool air escape and hot air sneak in. Imagine trying to maintain the proper environmental conditions to preserve irreplaceable artifacts in such conditions. People track dirt and snow throughout these highly visited facilities. Restrooms designed to accommodate hundreds must accommodate thousands. Imagine trying to keep these heavily utilized facilities clean and neat every day. Just to keep things working properly and provide the right environment for the best experience at our facilities takes a whole team of very talented people whose work is far less visible than our exhibitions and research, but nonetheless critical to support the Smithsonian mission.

FMJ: *How much space do you manage?*

COOPER: We manage 13.9 million square feet of space housing almost 155 million objects and specimens on over 28,500 acres of property. Our portfolio also includes almost 2 million square feet of leased space. We are larger than some small towns. In our world, managing an art gallery is a bit different than managing a science museum, which is different than managing the National Zoo with its live collections. Managing space in which important research is conducted is very different than managing public spaces. There are many challenges related to specialty cultural FM.

FMJ: *What is the biggest FM challenge you have faced and how did you find a solution?*

COOPER: One of the most significant FM challenges is how to best articulate the FM needs of an organization. As facility management becomes more professional, it is imperative that FMs know how to frame their story so that it clearly articulates the FM needs as well as the FM demands. We can share how our funding enhances the visitor experience, protects collections, ensures public safety, ensures more efficient use of funds by performing predictive and preventive maintenance instead of reactive maintenance, and how we can prevent project cost escalation by spending modest amounts now as opposed to potentially significantly larger amounts in the future.

One concern that I have is that FMs sometimes suffer from a collective inferiority complex. There are still some who believe that facility staff should just keep their heads down, make sure the lights work and try to stay out of everyone's way. They believe that any day that no attention is drawn to facilities is a good day, and that is just not right. We should





position ourselves to advocate for the facility requirements of our enterprises. We need to be articulate, clear, engaged, involved and immersed in our larger enterprise so we are viewed as partners and are consulted as the experts we are. People should know that we are critical in helping advance our enterprise.

It does concern me that we sometimes may not make the best facility decision in deference to what we believe may be the needs of the larger enterprise. On occasion, you may need to make a decision that is important from a facilities perspective (such as safety or equipment operation) but may appear contrary to the needs of the larger enterprise, such as continuing to operate an area uninterrupted as repairs are made. These can be hard calls to make if we are not working in partnership with the larger business and are not seen by them as a partner in advancing the business.

FMJ: *What are some FM challenges you face at the Smithsonian that are common across the FM industry?*

COOPER: No facilities department has enough resources – people, time or money. We would all like to have more of each, but we know that is not likely; so, we should focus on how we can utilize what we have to make the most productive and positive impact on our enterprise.

Deferred maintenance and facility condition assessments are definite concerns. Keeping maintenance current is important in controlling costs. Knowing asset

conditions supports identifying and ranking facility requirements to prioritize projects. Understanding and managing funds in terms of maintenance and capital is critical so that both types of requirements are clearly understood, planned and communicated.

We would benefit from improving communication among facilities staff. Within facilities, we can recall times a project has been designed with little regard to the people who maintain it, when there has been inadequate communication between the designers and the end users, or times that commissioning has not gone well.

FMJ: *What do you like best about what you do?*

COOPER: Every day is unique and challenging. Every job has some aspects that may seem uninteresting or robotic, but in facilities there are always challenges and opportunities to share and explore new and different ways of seeing and responding to situations. I love working with people to identify opportunities to learn and help position people for the future.

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THE FACILITY MANAGER'S CREED:

**LEARN,
KISS,
CYA &
APPLAUD**

BY RAYNE GUEST

A creed is a set of beliefs or aims that guide someone's actions. Every day, FMs rely on a unique facility creed to rise above the many challenges they face. These challenges include coordinating teams and seamlessly maintaining countless operational components such as HVAC, air quality, pools and spas, kitchens, plumbing, loss prevention, landscaping, lighting, public spaces, fire safety, mechanical equipment and health inspections, just to name a few.

Before February of this year, these Jacks and Jills of all trades would have agreed "dirt is 90 percent of the problem, cleanliness is key." However, within the ever evolving and unpredictable new reality defined by COVID-19, cleanliness, with the emphasis on disinfection, is the new 90 percent. Tasked with implementing heightened cleaning and disinfecting protocols in addition to the hundreds of other moving parts of a facility, how can these heroes successfully fulfill a mission of safely re-opening the world's workspaces, schools and event arenas? Where should an FM even begin?

LEARN: GAIN KNOWLEDGE

FMs are combating a lack of information on two fronts, COVID-19 and disinfectants. Fortunately, new information on COVID-19 is discovered daily. Unfortunately, information about disinfectants that is readily available to buyers is being misrepresented by the people selling it.

Choosing the right — or wrong — products can make or break even the best plan for overhauling protocols. A special onus has been placed on FMs to learn as much as possible about the products used to keep facilities safe for workers and visitors. Now is the time to hold vendors and sales reps accountable for their claims, through the review of additional information and proven successes. It is not just livelihoods on the line, it is lives. In the athletic setting, athletes lose careers over staph infections, lose games over flu and lose practice over COVID. In the health care setting, every minute and every infection can quickly become a matter of life or death.

KISS: KEEP IT SIMPLE AND STRAIGHTFORWARD

Disinfection does not need to be overly complicated. It just needs to be done correctly the first time, and FMs need products that work effectively without compromising safety.

Insurance does not prevent accidents

UV robots, fogging machines, surface coatings and other back-up methods of disinfection may sound high-tech and sexy, but they are not meant for use as primary disinfection. They are intended to serve as a back-up, and like insurance, if there is a rock-solid primary plan, back-up insurance is good to have, but not essential.

Break-up with unreliable chemical supply chains

Breaks in the chemical supply chain have been particularly problematic, at a time when access to supplies could not be more important. Grocery store shelves have been rendered empty, businesses are being price gouged and nurses have been forced to practice amateur chemistry to get by until common products become available.

All these issues have brought to the forefront the fact that chemical supply chains are not necessary. In fact, they are a hindrance. Devices regulated by the U.S. Environmental Protection Agency (EPA) capable of producing powerful cleaning and disinfecting solutions on site are available. The adoption trend has been slow, because they are regulated in the same category as UV robots, as "devices." Because they are devices, they will not be found on any EPA list. To ensure use of a product risk assessors can stand behind, it will be imperative to ask the companies being considered for their EPA Establishment Number, the complete Good Laboratory Practices (GLP) report for the level of disinfection they are claiming (more on the different levels below) and additional testing of a small non-enveloped virus to ensure COVID is knocked out cold.

Disinfectants should kill germs not people

Disinfectants should be effective against a wide array of pathogens and the Centers for Disease Control and Prevention recommends the use of products that have the shortest contact time possible. Unfortunately, many cleaning and disinfecting products force a dangerous compromise to health and safety, even those claiming to be "green." Many products cause allergies, asthma, alter the red blood cells in mammals and attack internal organs, even in their at-use concentrations. Many doctors call the cleaning and disinfecting products used in our homes, schools, offices and other public places, "modern-day asbestos." Whatever disinfectant is chosen, the goal to protect the people in a facility remains the same. A general rule of thumb, so long as the product's GLP report proves effectiveness, the fewer chemical ingredients, the better. As an example, some disinfectants are 99.98 percent water, hypoallergenic and offer quick disinfection without compromising health.



CYA: COVER YOUR ASSETS

There is a dangerous trend in the market. Chemical companies are trying to appease and retain frustrated customers. As a result, many chemical companies are having their reps fraudulently advise customers that their products kill on contact. However, every disinfectant has a contact time, which is the time a disinfectant needs to sit wet on a surface to kill the germs it claims to kill. It is the goal of every manufacturer to have the product with the shortest contact time possible. It should be noted that if the product is used improperly, liability and repercussions from the misuse fall on the users, not the manufacturers or their representatives. It is imperative that FMs ask the sales reps they are working with for a copy of the disinfectant's GLP report. This study should be prepared by an EPA-accredited laboratory and classifies the product's level of disinfection.

	LEVEL OF EFFICACY	TEST ORGANISMS	EVALUATION OF SUCCESS
Most Effective ↑ Least Effective	Health care Grade	<i>Staphylococcus aureus</i> (ATCC 6538) and <i>Pseudomonas aeruginosa</i> (ATCC 15442)	59/60 carriers are negative for each batch tested for all methods except AOAC Hard Surface Carrier Test, which is 58/60 carriers are negative against <i>Staphylococcus aureus</i> for each batch, and 57/60 carriers are negative against <i>Pseudomonas aeruginosa</i> .
	Broad Spectrum	<i>Staphylococcus aureus</i> (ATCC 6538) and <i>Salmonella enterica</i> (ATCC 10708)	59/60 carriers are negative for each batch tested for all methods except AOAC Hard Surface Carrier Test, which is 58/60 carriers are negative for each batch.
	Limited Spectrum	<i>Staphylococcus aureus</i> (ATCC 6538) or <i>Salmonella enterica</i> (ATCC 10708)	59/60 carriers are negative for each batch tested for all methods except AOAC Hard Surface Carrier Test, which is 58/60 carriers are negative for each batch.

To protect colleagues, workers and visitors, the goal is to choose the highest level of disinfection, i.e., health care grade — products tested against tough gram-negative and tough gram-positive bacteria. The effectiveness and contact time (again, the amount of time the product must remain wet on a surface to be effective) will be listed in the GLP report. Knowing and adhering to this number is critical. As shown in the chart on the following page, the EPA allows for a product to be health care grade with a mere 95 percent kill rate during the contact time, which is generally 10 minutes.

Spray and wipe is not a method for proper disinfection

If there is one takeaway from this piece, let it be this: every disinfectant has a contact time and even the most highly effective disinfectant will not give the results needed if it is used improperly. Most disinfecting products have a 10-minute contact time; and to make things especially vexing, disinfectants typically dry well before the 10 minutes are up, so they need to be reapplied several times to truly achieve the necessary contact time.

A closer look at the product spec sheets of the disinfectants used in Notre Dame Athletics, the Four Seasons Hotel and Fitness

*It is not just
livelihoods
on the line,
it is lives.*

Center Los Colinas, and Texas Health Resources Dallas revealed the following:

FACILITY & PRODUCT	CONTACT TIME	REAPPLICATION
Notre Dame <i>Alpha - HP</i>	10 Minutes	Most products with a 10 minute contact time must be reapplied 2-3 times to stay wet for required wet time, requiring 2-3 times the amount of product and 2-3 times the labor, and resulting in a huge expense while crippling limited resources.
Four Seasons <i>Oasis Pro20</i>	10 Minutes	
Texas Health Resources <i>Virex 256</i>	10 Minutes	
CHRISTUS Health <i>TK60 One-Step</i>	1 Minute	No reapplication needed.

Ten minutes is an impractical amount of time to keep a surface wet and would hamper operational efficiency tremendously, yet not using products properly leaves susceptibility to being infected by the germs left behind and to superbugs forming.

Ten minute contact time? You have better things to do

Even the CDC recognizes a 10-minute contact time as infeasible; especially in buildings welcoming countless tenants and visitors every day. Unfortunately, with current concerns over COVID at the forefront, a growing number of product users are adhering to the contact time listed on the EPA's N-List.

While the N-List can help facilitate find-

ing a disinfectant effective against COVID, it is not ideal for determining how long to wait before wiping. The problem with using the N-List to decide on a kill time is that the list only shows the contact time for COVID. To the benefit of all humanity, COVID is an enveloped virus, and as shown in the chart below is the easiest type of virus to kill.

If focusing disinfection practices on only one, easily killed pathogen, COVID infections will be the least concern. FM teams have fought dangerous and harder-to-kill pathogens, such as MRSA and C-Diff, for ages and the longest contact time on a product should always be adhered to.


A case study of Franklin Park — Sonterra (<http://www.r-water.com/docs/case-stud->

[ies/r-water-fp-sonterra-case-study.pdf](#)), a senior housing community in San Antonio, Texas, USA, with more than 250 people and 90 staff members, demonstrated a significant drop in the number of flu cases and other respiratory ailments by using a disinfectant with a one-minute contact time versus their previous product with a 10-minute contact time. They even recorded only four cases of flu in four years and a 65 percent decrease in staff call-offs and sick days.

APPLAUD THE FM TEAM

FMs have a daunting job. Now more than ever, it is tremendously important to remember everyone is in this together. From the FM to the part-time custodial worker, each player has a critical role in making facilities safe for everyone and it is important to celebrate the victories. Previously, keeping track of workplace injuries like slips and falls was a popular metric for evaluating and praising success. Now, reduced infection rates, whether COVID, cold or flu, is another valuable metric. Updating cleaning protocols has created a way to improve metrics and provides an opportunity to celebrate success and motivate teams to achieve new heights. A simple shift in perspective turns this from a time of great challenge to a time of growth, with greener, cleaner, safer and more effective options.

COVID-19 has changed the FM landscape, but it has not changed its creed to learn, KISS, CYA and applaud.

Before the world reacted to the current pandemic, FM had projects on target and goals in mind. Through education on the safest, best, fastest acting products, FMs can return to normal. 

EASE OF KILL	Difficult	Small non-enveloped	<i>Poliovirus</i> <i>Hepatitis A</i> <i>Feline Calicivirus</i>
	↑	Large non-enveloped	<i>Rotavirus</i>
		Easy	Enveloped

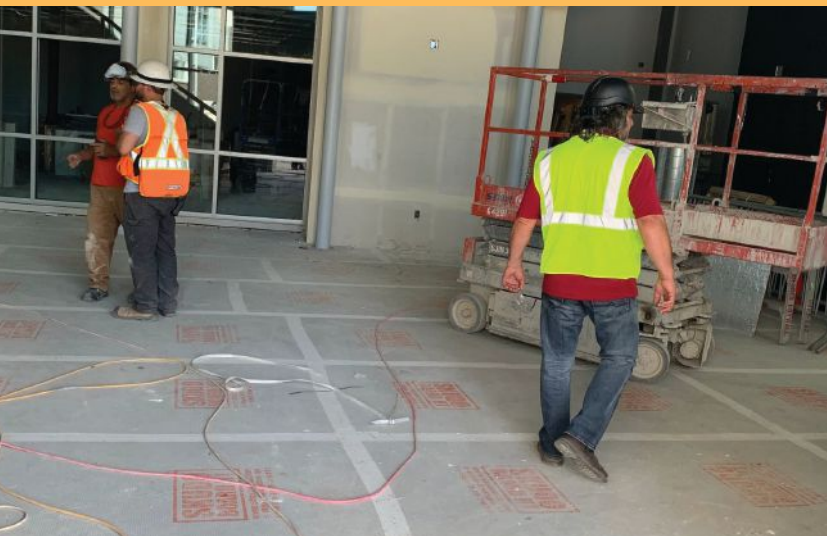


Rayne Guest is the founder and CEO of R-Water, a company that manufactures an EPA-regulated device that attaches directly to a facility's water supply to produce a hypoallergenic disinfectant. While living in Los Angeles, she was inspired to launch her career in the green industry developing customized recycling programs for hotels and other commercial properties. Guest graduated from UCLA's Executive Program in 2006. She was born and raised in the mountains of Idaho and lives in Dallas.



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TECHNOLOGY

& MATERIALS: MANAGING THE POST-COVID

W O R K P L A C E

As the world envisions a safe return to the workplace post-COVID-19, technology and materials will play a key role in the success of this process.

As an immediate response to the pandemic, communication technology has emerged as the top-most technology driver. Remote working is critical, and collaboration tools are a must-have for a productive environment. With mass quarantines and complete lockdowns, the epidemic has ignited and amplified the debate over the future of work.

Yet, the virus will not defeat the concept of working in standard office buildings. As companies plan how to return their workforce to the office, numerous calculations are being made to provide an environment that will keep workers safe, healthy and productive while relieving fears.

The A-B-C-D concept is a good place to start thinking about the technologies and materials that will be the key to managing the post-COVID-19 workplace.

A for Automated

Employees could eliminate the need to press communal buttons by using their smartphone to send a command to the elevator. Conference rooms could be fitted out with voice-activated technologies to control lighting, audio and visual equipment. Passing through doors or flushing the toilet would require a simple wave. Contactless pathways at the office entrance, whereby employees rarely need to

touch the building with their hands, and office doors open automatically using motion sensors and facial recognition.

Simple intelligent assistance technology could become a new interface and remove the need for physically pushing a button or touching a surface in an office. There are apps helping to make the next iteration of the office a contactless one; such as using near-field communication instead of key-cards to give employees access to a building or lift system via their smartphone, or to buy food and drink from cash-free workplace canteens.

Successful implementation depends on what level of existing technology is already in place.

B for Breathable

It may not be possible to return to the workplace until HVAC systems are properly adjusted. The relationship between HVAC and viral spread is still being studied, but use of operable windows, or other ways of natural ventilation where available, will be a part of the future breathable office.

Air-filtration systems will need a radical technology upgrade, including installation of passive features like HEPA filters, activated carbon filters and active devices like UV and electrostatic precipitation. Methods used in clean rooms for technical and

health care facilities can filter virus particles but may not be practical or affordable for most workplaces.

- Antimicrobial filters, bipolar ionization and UV lights for return air openings.
- Increased airflow and longer system operation times.
- Continuous operation of ventilation systems in communal spaces.
- Increased sanitation of ductwork with aerosol sprays or UV light.

C for Clean

Technology investments can make a building perform better for people while also improving public health. Touchless surfaces make a significant difference in both perceived and real cleanliness. Smart lighting reduces contact with shared surfaces, and it can also be customized to each user's preferences.

One of the guiding principles is choosing materials that can withstand heavy cleaning using caustic products. Porous surfaces like natural oiled wood will be avoided, with a preference for stone or laminates. Fabrics and carpets that can withstand heavy and frequent shampooing should

be used. These more durable materials are not necessarily costlier than the more familiar alternatives. Few organizations will have the budget for an expensive refit. Work practices may continue to evolve, so it is important to keep close coordination with maintenance personnel.

Restrooms are critical to the user experience of spaces, and pantries offer refreshments and socialization. Most building occupants will use one or both spaces every day. They include plumbing fixtures and, in the case of pantries, food handling.

Toilet facilities that were merely adequate pre-COVID-19 may now actually seem problematic to users. Adding spray disinfectant units and lids with UVC or far-UVC lamps to toilets and, at a minimum, adding toilet lids that do not already have them to minimize contaminant dispersion could be the short-term solutions. Installing new hands-free toilets with built-in sanitization mechanisms, UVC lamps or far-UVC systems to aid in stall sanitization could be long-term solutions.

Occupancy sensors can support multiple components of the clean workplace. For example, they can enable maintenance staff to see which spaces are being used — and need to be cleaned — and which spaces have not been occupied since the previous cleaning.

Society's heightened awareness of contagious diseases could usher in a new type of office — one that has elements in common with a hospital. If nothing else, the idea of coming to work while sick could become socially unacceptable. On the other end of the spectrum is a focus on health and hygiene so pronounced that it gives new meaning to the idea of working in a sterile environment.

D for Data

All workplace strategies should be informed by social data. In addition to providing valuable social data that will make the return to the office more successful — such as who should be at work at the same time and how they will be seated — this engagement also lays critical groundwork for any contact-tracing efforts that may become necessary if an employee becomes ill.

Social data can be paired with information from building systems to map employee interactions. Building security systems already offer records of the comings and goings of employees and visitors. Room booking apps and occupancy sensors can provide data on who has shared space. Colleagues who may have been exposed can then be alerted and either seek treatment or take mitigation actions. Maintenance staff can prioritize areas that may be contaminated. BIM will be able to integrate the facility and the person who works there. Mobile IOT will be able to track every individual and would be useful for detection and other purposes.

This is the first time the current generation has experienced a pandemic. Whatever happens in the months ahead, and even if a COVID-19 vaccine becomes available, it seems likely that the experience of living through a pandemic will have a long-lasting impact on the way people work and how workplaces function. The opportunity for the workplace is to move forward, not backward. And



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technology and materials will play the key role in the post-COVID workplace.

The role of facility management is emerging from just being a service provider, to promoting a culture anchored by safe work practices, quality, talent development, technology and analytics.

“As the need to manage and maintain buildings and workplaces better has never been a more pressing concern, facility management, which has long been a behind-the-scenes operation, has now catapulted to center stage. We believe facility management will determine workplaces and see growth in the immediate future,” said Pankaj Kain, group director of Informa Markets.

The role of FM services providers will become more strategic and long term in nature. The organized FM market size in India is around US\$15 billion, according to Knight Frank India; and the total area of management under organized FM is 3 billion sq. ft.

Dinabandhu Patra is the founder, Across & Beyond, an innovative firm in the Indian building industry.

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A Legal Minefield: Using technology after COVID

BY JACK CHEN

Reopening in a post-lockdown, pre-vaccine world poses a legal minefield for owners and FMs, but they can use technology to carry the weight of several of the heaviest responsibilities, such as contact and facility tracing and notifications.

CCOVID-19 preventive measures are being enforced nationally, provincially, locally and sometimes down to the block or even to specific buildings.¹ Indoor spaces pose a higher likelihood of people getting infected,² while some FMs are classified as essential workers who must keep security and operations going during these challenging times. While some regions have started reopening from wider lockdowns, owners and FMs are tasked with responsibly reopening their facilities and ensuring their tenants and visitors are and feel safe to return. In addition to providing hand-sanitizing gel, facemasks and temperature readings, public health authorities have started imposing contact and facility tracing. All of these factors combined create a treacherous legal minefield for owners and FMs to navigate.

The Minefield Creating Legal and Financial Risk

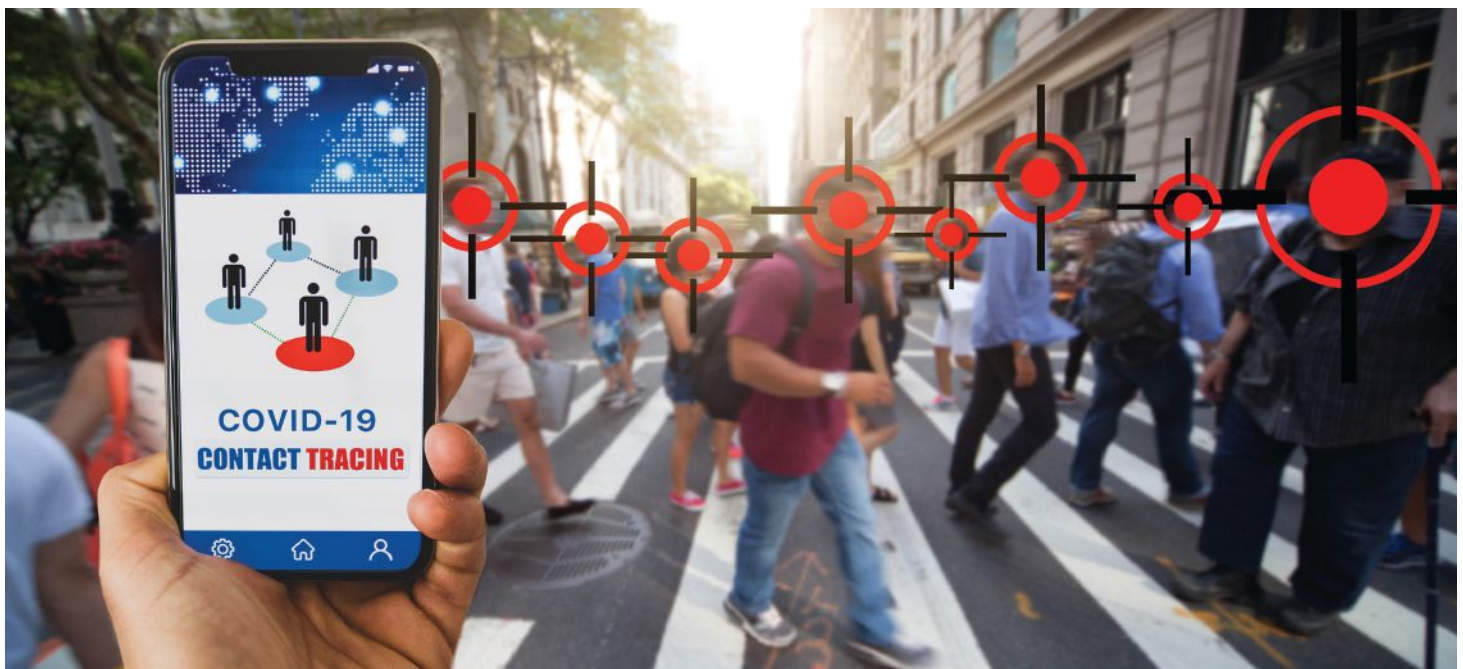
Owners and FMs must operate and maintain health and safety standards, and in this COVID-19 world, special scrutiny will be applied to those facilities that host large groups of gatherings. But what does healthy and safe mean now and what types of legal regimes could apply? The answer will depend on the jurisdiction, but some general legal areas include building code, public health and safety, employment, real estate, disability, human rights, and any COVID-19-specific laws and regulations. In the U.S., a class-action lawsuit is filed against McDonald's for allegedly failing, in part, to have notified employees of their potential exposure to COVID-19-positive individuals, or in other words, for failing to have a contact tracing plan.³ Property and casualty insurers have taken notice of the need for contact tracing.⁴

As companies and facilities prepare for a phased re-entry of buildings, a number of national and local laws and regulations have developed and will continue to develop, requiring owners and FMs⁵ to implement protocols and safety procedures to mitigate potential liability. In New York state, health authorities require owners and FMs to track and trace their tenants and visitors.

To the extent possible, Responsible Parties should make best efforts to maintain a log of every person, including their own employees and visitors, who may have close contact with other individuals at the building; excluding deliveries that are performed with appropriate PPE or through contactless means. Logs should contain contact information, such that all contacts may be identified, traced and notified in the event an employee or visitor is diagnosed with COVID-19. Responsible Parties must cooperate with state and local health department contact tracing efforts.⁶

In New York state, the owner and FM also must notify all entities occupying space in the building immediately with information on where someone who has shown symptoms has been near their section of the building and the respective cleaning and disinfection procedures taken.⁷ Presumably the owner and FM will need to keep a record of such notices having been delivered and received, as a simple email may not suffice for liability purposes.

To make matters more challenging, owners and FMs must meet all of these legal obligations while respecting the privacy rights of tenants and visitors. For example, consumer data privacy regimes, such as the California Consumer Privacy Act (CCPA) and the European Union General Data Protection Regulation (GDPR), could apply to facilities outside of those jurisdictions if their citizens visit those facilities.



What Is Contact Tracing

A historically effective epidemiological tool to fight pandemics such as COVID-19 is contact tracing, or the process of identifying people who may have come into contact with a COVID-19-positive person. The purpose is to notify those contacts, so they can take appropriate action and notify their contacts.

The table below lays out the four general ways to conduct contact tracing along with each method's benefits and challenges.

<p>MANUAL/CONTACT RELATIONSHIP MANAGEMENT/ DATABASE</p>	<ul style="list-style-type: none"> Based on people's notes and memories of where they have been for the previous 14 days and with whom they may have come into contact. A person working with the public health authority records those contacts (manually, or a CRM database) and tries to reach out to all the individuals. Most respectful of privacy. 	<ul style="list-style-type: none"> People's memories and notes are not perfect. They may choose not to cooperate. They may lack the contact details of people potentially exposed. Anecdotal reports of fraudsters pretending to be contact tracers calling people to obtain their private information.
<p>CAMERA SURVEILLANCE</p>	<ul style="list-style-type: none"> Install cameras throughout the entire facility. Using facial recognition and computer vision, digitally capture every person's movements to create a digital record of every person's actions and people's interactions with each other. No friction to engage, capture everyone as soon as they get near/on premises. 	<ul style="list-style-type: none"> How is consent obtained? Will it stand up in litigation? Capturing biometrics could create more liability problems for the owner and FM. A database of tenant and visitor biometrics becomes a more desirable target for hackers. Biases for people with non-Caucasian facial features. How would compliance with personal data removal work? May be illegal in some jurisdictions.
<p>LOCATION TRACKING VIA BEACONS OR GPS</p>	<ul style="list-style-type: none"> Track people by matching their time-stamped location data using GPS or beacons, not actual proximity to each other. Allows authorities to track geographic areas where infections may be spreading. 	<ul style="list-style-type: none"> Users must download an app. Accuracy issues due to lack of vertical awareness (which floor of a building). High data usage and drains battery life on devices. May be illegal in some jurisdictions.
<p>ACTUAL PROXIMITY BASED ON SMARTPHONES/ MOBILE APPS</p>	<ul style="list-style-type: none"> Automatically record interactions when people are physically near each other with Bluetooth Low Energy. Light battery usage, no human error. Faster to gather information and to swing into action. Speed is critical and can be very effective. 	<ul style="list-style-type: none"> Users must download an app and keep Bluetooth on. Most smartphone solutions are for public health authorities and not for private sector use such as facilities.

Does Contact Tracing Really Work?

A jurisdiction such as Taiwan that has powerful pandemic fighting tools due in part to its robust contact tracing program⁸ has done a better job fighting COVID-19. **COMPARE:**

AS OF 7/7/20 ⁹	POPULATION	CONFIRMED COVID-19 CASES	CONFIRMED COVID-19 DEATHS
Taiwan	23.78M	449	7
Australia	24.99M	8,886	106
United Kingdom	66.65M	287,880	44,476



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A number of nations have built or are building smartphone apps as a tool for its citizens and residents to opt-in to a national contact tracing program. This would theoretically produce higher quality results with less human labor. These national contact tracing apps thus far, however, are not meeting expectations for various reasons,¹⁰ including a lack of sufficient percentage of population downloading and using the mobile app.

Moreover, in many jurisdictions, including some parts of the U.S., owners and FMs may be required to have their own contact and facility tracing solutions regardless of any state or national contact tracing app. If a nation's public contact tracing effort falters, the more the private sector will be expected to pick up the slack.

Facility Tracing

In New York (and possibly other jurisdictions), in addition to providing contact tracing, a facility may be required to apply special cleaning procedures to any areas where someone tested positive has spent time on site. That means FMs need not just a way to trace contacts but map the path and duration that person took inside the facility.

The need for facility tracing is still being hashed out in the public health domain as scientists work to understand how COVID-19 is transmitted. But there has already been an alarming case in China where one asymptomatic carrier rode an elevator alone, then 70 people got COVID-19.¹¹ No facility owner or FM would want a headline like that. A contact tracing only solution and a temperature check at the entrance would not have prevented that.

While FMs will keep the entire facility clean, facility tracing just offers that extra bit of insight and assurance that they provide a

deeper clean to those sensitive areas such as bathrooms and elevators, where an infected person has been. Without this insight, the environment the user is moving through could be helping spread the virus to more people at the facility even without coming into contact with them.

Notifications (and Records Retention)

In some jurisdictions, FMs also may have the responsibility to notify tenants of certain COVID-19-related events, such as someone on site having tested positive. Owners and FMs in litigious areas may want to consider keeping a record of delivery and potentially receipt by the tenant of such notices.

Some Suggestions

Owners and FMs should get proactive and start planning their own contact and facility tracing and tenant notification programs.

Choosing an app-based solution means real user consent (they downloaded and registered to use the app) and could potentially provide contact tracing, facility tracing and messaging/notification capabilities in one. In addition, the FM can “outsource” consumer data privacy compliance needs to the app-based solution provider, who would be better equipped to handle such matters.

While there may already be a sea of products available, most offer only a piece of the puzzle. Owners and FMs should look for vendors who can provide all three services as that would help them navigate this minefield of legal issues. **FMJ**

1. www.theguardian.com/world/2020/jul/06/residents-melbourne-covid-19-tower-lockdown-food-supplies-inadequate
2. <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/deciding-to-go-out.html>
3. Workers Hit McDonald's With Class Action Over COVID-19 Safety, Claims Journal, www.claimsjournal.com/news/national/2020/05/20/297178.htm#
4. Swiss Re, “COVID-19: What we know, what we're still learning . . . and what it all means for insurers” www.swissre.com/reinsurance/life-and-health/l-h-risk-trends/covid-19-what-we-know-what-were-still-learning.html
5. New York State Department of Health Interim Guidance For Commercial Building Management During the COVID-19 Public Health Emergency www.lawleyinsurance.com/wp-content/uploads/2020/06/commercial_building_management_master_guidance.pdf
6. New York State Department of Health Interim Guidance For Commercial Building Management During the COVID-19 Public Health Emergency www.lawleyinsurance.com/wp-content/uploads/2020/06/commercial_building_management_master_guidance.pdf
7. [New York State Department of Health Interim Guidance For Commercial Building Management During the COVID-19 Public Health Emergency www.lawleyinsurance.com/wp-content/uploads/2020/06/commercial_building_management_master_guidance.pdf
8. Robert Steinbrook, MD., “Contact Tracing, Testing, and Control of COVID-19—Learning From Taiwan.” Journal of the American Medical Association, May 1, 2020 jamanetwork.com/journals/jamainternalmedicine/fullarticle/2765640
9. COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU)
10. coronavirus.jhu.edu/map.html
11. From Australia to Norway, Contact Tracing Is Struggling to Meet Expectations, www.coindesk.com/from-australia-to-norway-contact-tracing-is-struggling-to-meet-expectations
12. bgr.com/2020/07/06/coronavirus-spread-through-the-air-surfaces-asymptomatic-transmission-elevator/amp/



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BLURRED LINES: ADAPTING EXPERIENCES FOR EMPLOYEES & VISITORS

BY JOHN T. ANDERSON





Converging trends in technology and culture are blending the boundary between employee and visitor and significantly changing how the workplace looks, feels and is experienced. The workplace of the future can already be found today at forward-thinking companies that provide workers and visitors with seamless, secure, self-service access to the spaces and facilities they need to do their best work. This access will become increasingly flexible and on-demand – a shift that has been accelerated by the COVID-19 pandemic, as organizations strive to control who uses what and when, in order to protect their people.

The shift toward this agile working was well underway before the pandemic struck. However, this year, a vast portion of the global workforce is required to participate in an experiment in remote working on an unprecedented scale. Regardless of how many organizations maintain their work-from-home policies beyond COVID-19, agile working will continue to rise as workers demand new levels of autonomy.

CREATING A BRAND EXPERIENCE

Today, many skilled workers expect their employer to grant them the freedom to choose when and where they work; whether from home, a café, a coworking space, the office or a combination. The workplace, in that sense, is competing with alternative spaces. Just as brands like Nike and Apple open flagship brand-experience stores that immerse shoppers in their values and culture, the workplace is fast becoming a symbol and propagator of culture, delivering competitive advantage by helping organizations attract and retain talent.

It's important to visitors as well. According to a survey by Proxy-click¹, 2 out of 5 people say their perception of a company has been negatively impacted by their experience in the lobby or reception. To avoid damaging brand reputation, organizations must create a visitor experience for customers, suppliers, partners and other members of the ecosystem, that creates the right impression.

As the war for talent rages, an employee experience that rivals that of a consumer retail experience will become the norm, not only in terms of the physical space, but the seamless use of technology, including mobile.

Many employees no longer expect assigned seating, while they do expect to easily locate their colleagues, check in and book facilities like conference rooms, AV equipment and parking spaces; and book services like lunch, a new room layout or a yoga class. The pandemic is pushing the digitization of these bookings, because walking up to a receptionist to make a booking, or using a touchscreen, are not as safe than people booking what they need via their own mobile phone.

This “book everything, from anywhere” trend raises new challenges for FM professionals who are trying to reduce — or at least optimize — real estate costs, while providing an excellent employee experience that will serve as a competitive advantage, enabling them to attract and retain talent.

A 2015 report by CBRE² found 40 percent of office space is typically unused, equating to US\$150 billion in empty space. Therefore, it comes as no surprise that 83 percent of corporate real estate executives rank space utilization as the key metric for making workplace decisions, according to Gensler³. As for meeting rooms, space utilization is as low as 30 percent; and when a room is in use, only 40 percent of seats are occupied⁴.



Given that each workstation costs US\$15,000-\$20,000⁵, combined with the need to improve sustainability, the pressure is on to adopt a data-driven, flexible approach to ensuring people can access what they need, when they need it.

Cost and sustainability are only part of the story, however. According to a 2019 CBRE survey⁶, talent attraction and development was the top driver of corporate real estate strategy in 2019, ahead of cost reduction.

To succeed in today's fast-changing, competitive landscape, organizations are increasingly relying on geographically distributed workspaces. "Work anywhere" tools and processes widen the net in terms of recruiting top talent from anywhere in the world.

Yet the importance of blending virtual work with face-to-face contact cannot be underestimated. A field study⁷ on a multinational organization with 43 teams, showed that visiting one another's workplace to work side-by-side on day-to-day tasks is more effective at improving collaboration and productivity than off-site meetings.

Meanwhile there are mixed feelings about returning to work post COVID-19, as some remote working employees are anxious about safety in the workplace, while others are keen to escape the loneliness and isolation of being separated from their peers.

ACCOMMODATING THE GIG ECONOMY

Another factor blurring the boundary between employee and visitor is the rise of the gig economy. An increasing percentage of the workforce is made up of independent workers, such as freelancers and consultants. In an autonomous culture of flexible, non-traditional workers, those on payroll are often indistinguishable from those who are self-employed or contracted from another organization. Research by Gallup⁸ showed that over a third of U.S. workers participate in the gig economy already, and a report by Manpower Group⁹ revealed that 87 percent of workers globally would consider freelancing or non-traditional work.

OPTIMIZING THE WORKPLACE FOR ALL

Sharing the workspace with potentially dozens or more visitors raises various challenges for facility professionals, from security and data privacy, to automation and space optimization.

To address these challenges, forward-thinking FMs are adopting best practices such as:

- Create a consumer-level, flagship workplace experience that embodies the organization's values.
- Make people feel at home right away: Provide wayfinding services with maps and directions to meeting rooms, restrooms, kitchens and other facilities; and enable them to quickly locate the right person or team. With resource scheduling software and mobile apps, companies can let visitors set up the right office environment in advance, which will be ready for them when they arrive — e.g., desk or room selection, resources and the people they need to collaborate with. Likewise, there is no need for paper logbooks that compromise privacy and security, nor for a receptionist to check visitors in, when they can self-serve.
- Organizations can also limit the capacity of meeting rooms, ensure social distancing between desks and gather data that enables contact tracing with scheduling tools if someone falls ill. At the point of booking, health and safety measures can be further enforced by having people provide a reason why they need to be in the office and introducing a layer of approval before they can go ahead with the booking. Likewise, to aid compliance and protect colleagues, people can be asked to confirm that they have not had any symptoms of COVID-19, such as fever, and have not been in contact with anyone who is ill.
- Use data to make workplace decisions that optimize space, well-being, health and safety, productivity and collaboration. Data analysis is particularly critical to enable facility managers to prepare for and address the high degree of fluctuation in space utilization in workplaces today. With employees traveling between offices, freelancers visiting workplaces and a flexible workforce that chooses when to work from the office, the need to predict usage and adapt accordingly is becoming more important than ever. Data-driven insights will help facility managers reduce real estate and other costs and create an outstanding experience, while being able to respond quickly to changing business needs; e.g., the need to suddenly accommodate 100 new hires for a fast-expanding team or the need to plan a phased, safe return to work that prioritizes who is given access to the workplace and when.

An on-demand workplace, in which employees and contractors can easily connect with coworkers, spaces and other resources, inevitably requires an element of activity-based working. Activity-based working allows people to select a particular workspace that suits the type of work at hand; e.g., focus booths for private calls or work that requires deep concentration, a café for informal meetings, breakout rooms for an impromptu brainstorming sessions and whiteboard spaces for collaboration.

A report by Kinnarps¹⁰ found that nearly 70 percent of employees say working in an activity-based work environment — where people can choose from various types of space, depending on their needs — gives them more energy, helps them achieve better results and is more stimulating.


British utilities company National Grid¹¹ found this to be the case when they achieved an 8 percent increase in overall productivity and a reduction in operating costs of £8-10 million per year as a result of implementing activity-based working.

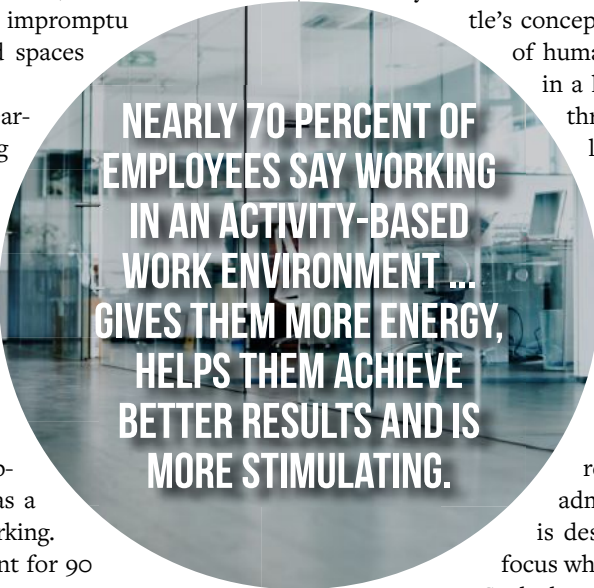
Given that staff costs typically account for 90 percent of business operating costs, while energy costs equate to just 1 percent and rental costs 9 percent, according to the World Green Building Council¹², a seemingly small gain in productivity can vastly outweigh potential real estate savings.

A study by Atlassian¹³ estimates less than 60 percent of the av-

erage workday is spent productively, with the remainder of time devoted to distractions, socializing and aimless office tasks; so, improving the way people, spaces and things interact in the workplace can have a substantial impact.

Architect David Dewane, for example, designed a workspace layout called the Eudaimonia Machine¹⁴, based on Aristotle's concept of eudaimonia, meaning "the epitome of human capability." It consists of five rooms in a linear layout, forcing the visitor to walk through each one. The first space, The Gallery, inspires visitors with impressive examples of work that has been achieved by people in the organization. Secondly, The Salon provides a collaborative hub where people can debate ideas over coffee. Thirdly, The Library is a resource for research and information-gathering for new projects. Fourthly, The Office Space is a place for doing shallow work that does not require deep focus, such as low intensity administrative tasks. Finally, The Chamber is designed to enable intense, uninterrupted focus when tackling cognitively demanding work.

Such thoughtful design is likely to gain traction as organizations prepare their workplaces for dozens of visitors or more, who require not only flexible, on-demand access to resources, but also the ability to leverage those resources to help them achieve new levels of productivity and innovation. 




NEARLY 70 PERCENT OF EMPLOYEES SAY WORKING IN AN ACTIVITY-BASED WORK ENVIRONMENT ... GIVES THEM MORE ENERGY, HELPS THEM ACHIEVE BETTER RESULTS AND IS MORE STIMULATING.

1. The Integrated Visitor Experience, Proxyclick
2. Space Utilisation: The Next Frontier, CBRE, 2015
3. Gensler Corporate Real Estate Challenges 2013 Survey Summary
4. www.density.io/blog/space-utilization-benchmarks-150-billion-office-waste/
5. Desk ownership in the workplace: the effect of non-territorial working on employee workplace satisfaction, perceived productivity and health, Jungsoo Kim et al, 2016
6. Optimising Human Capital: Evolving Strategies for Skills, Space and Service, CBRE, 2019
7. Understanding conflict in geographically distributed teams: The moderating effects of share identity, shared context, and spontaneous communication, Pamela J. Hinds & Mark Mortensen, 2005
8. The Gig Economy & Alternative Work Arrangements, Gallup, 2018
9. Gig Responsibly: The Rise of NextGen Work, Manpower Group
10. Don't be Afraid of Activity Based Working, Kinnarps, 2017
11. woodhouseworkspace.com/activity-based-working-reduced-operational-costs-by-10m-year/
12. Health, Wellbeing and Productivity in Offices, World Green Building Council
13. www.atlassian.com/time-wasting-at-work-infographic
14. www.wsj.com/articles/one-architects-radical-vision-to-replace-the-open-office-11578578407

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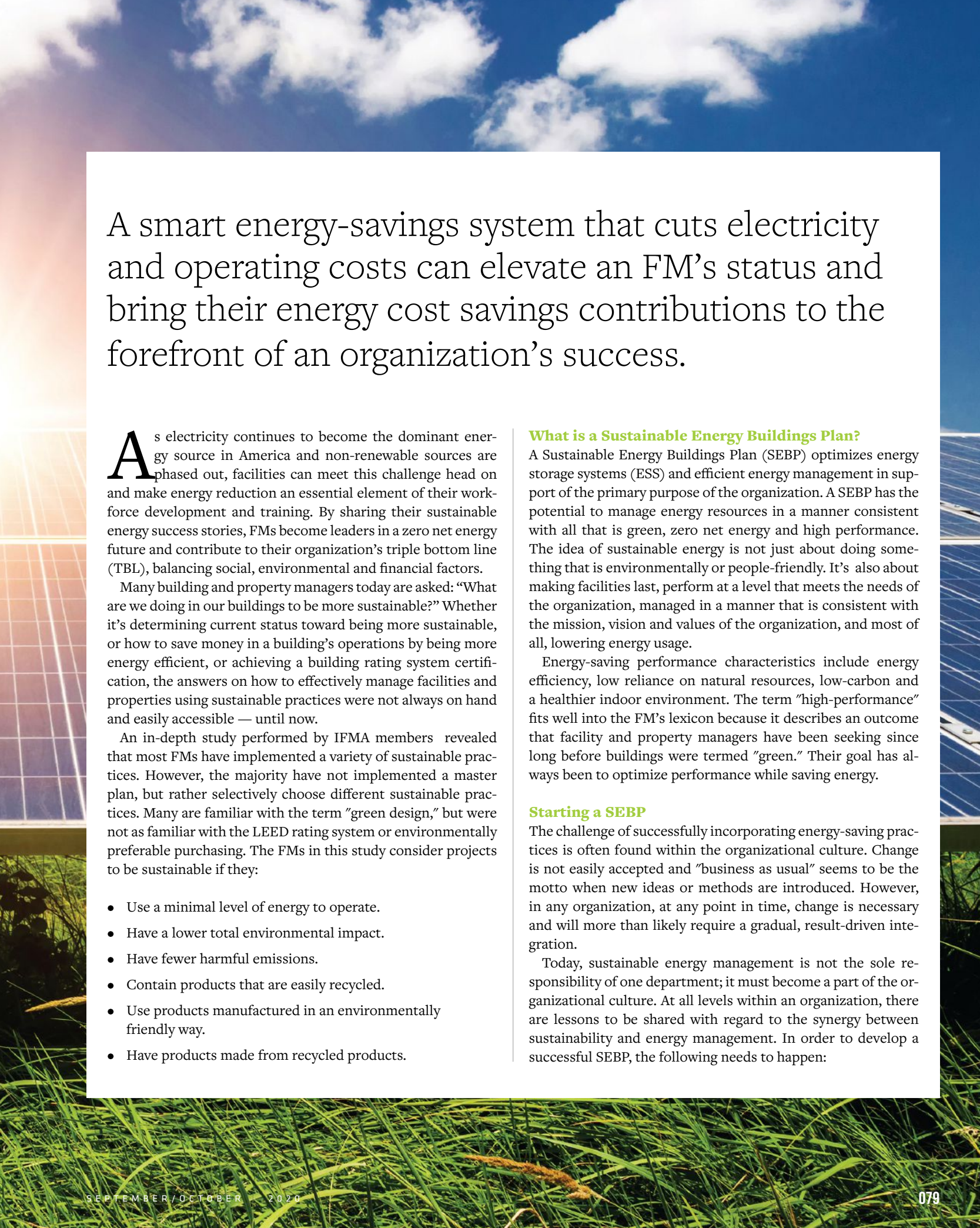
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BY COREY LEE WILSON

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SUSTAINABLE ENERGY BUILDINGS



A smart energy-savings system that cuts electricity and operating costs can elevate an FM's status and bring their energy cost savings contributions to the forefront of an organization's success.

As electricity continues to become the dominant energy source in America and non-renewable sources are phased out, facilities can meet this challenge head on and make energy reduction an essential element of their workforce development and training. By sharing their sustainable energy success stories, FMs become leaders in a zero net energy future and contribute to their organization's triple bottom line (TBL), balancing social, environmental and financial factors.

Many building and property managers today are asked: "What are we doing in our buildings to be more sustainable?" Whether it's determining current status toward being more sustainable, or how to save money in a building's operations by being more energy efficient, or achieving a building rating system certification, the answers on how to effectively manage facilities and properties using sustainable practices were not always on hand and easily accessible — until now.

An in-depth study performed by IFMA members revealed that most FMs have implemented a variety of sustainable practices. However, the majority have not implemented a master plan, but rather selectively choose different sustainable practices. Many are familiar with the term "green design," but were not as familiar with the LEED rating system or environmentally preferable purchasing. The FMs in this study consider projects to be sustainable if they:

- Use a minimal level of energy to operate.
- Have a lower total environmental impact.
- Have fewer harmful emissions.
- Contain products that are easily recycled.
- Use products manufactured in an environmentally friendly way.
- Have products made from recycled products.

What is a Sustainable Energy Buildings Plan?

A Sustainable Energy Buildings Plan (SEBP) optimizes energy storage systems (ESS) and efficient energy management in support of the primary purpose of the organization. A SEBP has the potential to manage energy resources in a manner consistent with all that is green, zero net energy and high performance. The idea of sustainable energy is not just about doing something that is environmentally or people-friendly. It's also about making facilities last, perform at a level that meets the needs of the organization, managed in a manner that is consistent with the mission, vision and values of the organization, and most of all, lowering energy usage.

Energy-saving performance characteristics include energy efficiency, low reliance on natural resources, low-carbon and a healthier indoor environment. The term "high-performance" fits well into the FM's lexicon because it describes an outcome that facility and property managers have been seeking since long before buildings were termed "green." Their goal has always been to optimize performance while saving energy.

Starting a SEBP

The challenge of successfully incorporating energy-saving practices is often found within the organizational culture. Change is not easily accepted and "business as usual" seems to be the motto when new ideas or methods are introduced. However, in any organization, at any point in time, change is necessary and will more than likely require a gradual, result-driven integration.

Today, sustainable energy management is not the sole responsibility of one department; it must become a part of the organizational culture. At all levels within an organization, there are lessons to be shared with regard to the synergy between sustainability and energy management. In order to develop a successful SEBP, the following needs to happen:

- Identify the impact of existing facilities on the TBL.
- Understand total cost of ownership, return on investment and life cycle costing (LCC).
- Determine if the organization’s mission statement includes corporate social responsibility (CSR), which is the commitment to contribute to economic development while improving the quality of life of the workforce, their families, the community and society at large.
- Align the facility and property management strategies with the organization’s commitment to the TBL and CSR efforts.
- Create a strategy for delivering sustainable energy management.
- Secure senior management buy-in and/or a policy champion to make it happen.
- Create a process for measuring and monitoring energy, resources, use and savings.

- Develop a change management strategy and communications plan to engage the workforce in sustainable energy management.

In the past, daily grid demand ramped up in the morning, peaked from noon into the early afternoon as temperatures and air-conditioning usage increased; then gradually decreased as the day progressed. Though there is some additional nuance to the scheduling, California’s utilities have long scheduled on-peak hours — during which rates were the highest — from around 11 a.m. to about 6 p.m. Off-peak hours, meanwhile, were generally applied through the other hours of the day.

For utilities, time of use (TOU) rates helped increase revenue to cover the high costs of delivering power when demand was high. For energy consumers, this created an incentive to minimize reliance on the grid for power during on-peak hours. This has long been a significant part of the value of on-site solar photovoltaics (PV) for the state’s large energy consumers. The

hours when solar generation is at its highest levels happen to coincide with the on-peak hours, enabling large energy users to rely on their on-site solar power and avoid exposure to several hours of high on-peak rates every day.

However, the rise of solar power generation in the state — both behind-the-meter (BTM) and at the utility scale — has disrupted the dynamics of the supply mix supporting California’s electric grid. Utilities are adapting to these new realities with changes to their TOU rate schedules, which will have a significant impact on the business case for behind-the-meter solar PV and ESS.

California’s utilities respond to the duck curve

For utilities, electricity is generally more expensive and complex to deliver when demand is high. To help cover these costs, California’s utilities have traditionally imposed TOU rates, which created a daily schedule that applies different prices for power-based, on-demand trends on the grid.

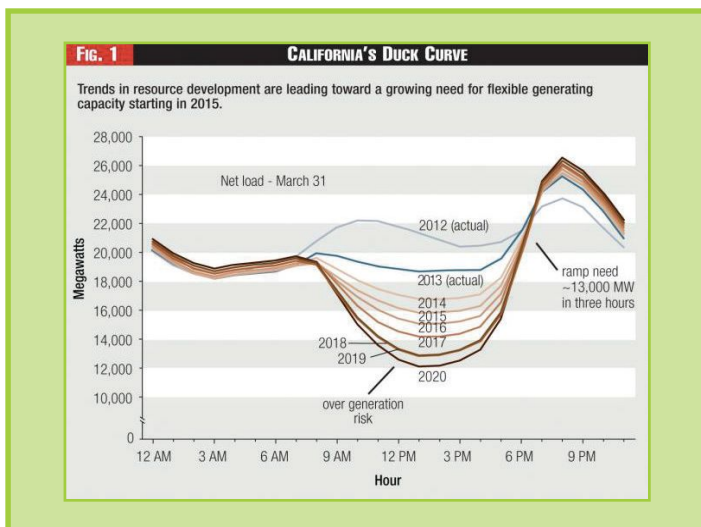


When demand is highest, prices are highest under TOU rates.

From 2007 to 2017, utility-scale solar power generation in California grew from 557 GWh to 24,353 GWh, according to the U.S. Energy Information Administration. This rapid increase has created several serious challenges for the state's utilities, which rely largely on natural gas generation to supply the majority of power on the grid.

Solar production increases in the late morning hours and peaks around noon before tailing off in the late afternoon and early evening. This reduces demand for natural gas during the midday hours when utilities traditionally imposed higher, on-peak TOU rates. Then, as solar power generation diminishes in the late afternoon hours, utilities face a spike in demand for power from natural gas.

California's Independent System Operator illustrated this trend in the graph below, now commonly known as the duck curve.



The duck curve creates several challenges for utilities. The first is accommodating the late-afternoon spike in demand. This often requires a reliance on natural gas peaker plants, which can generate power quickly but are expensive to operate on a regular basis. Compounding the cost problem is that much of this early evening spike in demand falls outside the traditional on-peak hours when utilities could expect to make up the high cost of delivering power.

In addition to the high costs, the reduction in midday demand has depressed a traditional source of revenue for natural gas generators, while high levels of solar production have decreased electricity prices, sometimes leading to negative prices. For utilities, TOU rates helped increase revenue to cover the high costs of delivering power when demand was high.

In response, California's utilities have begun adjusting their TOU rate schedules to account for the duck curve. San Diego Gas & Electric shifted on-peak hours for its summer season to 4 - 9 p.m., from its previous schedule of 11 a.m.-6 p.m. Pacific Gas & Electric and Southern California Edison implemented the same types of schedules for on-peak hours in 2019.

Under these new schedules, the utilities apply on-peak rates when demand for natural gas spikes in the late afternoon to ear-

ly evening hours, helping them adapt to the economic realities of the duck curve. For the state's large energy consumers, meanwhile, the shift disrupts the economics of behind-the-meter solar PV and energy storage.

The Impact of New TOU Rate Schedules on Solar PV and Energy Storage

Under the new TOU rate schedules, peak production for a solar PV system will occur largely during the new off-peak hours at midday. This undercuts the value of stand-alone solar PV as a source for off-grid power to avoid on-peak rates.

To illustrate the impact of the shift in TOU rates on a stand-alone solar PV system, analyzed was a 2-MW solar PV system installed at an office building with US\$1.2 million in annual energy spend, 7 GWh of annual energy usage, and a peak load of 1.6 MW. The latest TOU rate schedules reduce the value of the solar PV system by 19 percent over a 20-year period.

However, combining solar PV with energy storage can enable large energy users to use their self-generated power more strategically. If customers can charge an ESS with their on-site solar PV assets during off-peak hours, they can transition their facility onto that low-cost energy during on-peak hours. Distributed energy resources (DER) optimization software facilitates this process, charging the ESS with power generated via solar PV and automatically transitioning the facility's load onto the on-site capacity available to reduce consumption from the grid when on-peak rates are applied.

Looking at the same building analyzed above, adding a 500 kW/1 MWh ESS with the existing on-site solar PV actually makes up the value that the system would have lost as a result of the new TOU rate schedules. That equates to a difference of about US\$1.9 million.

The shift in TOU rate schedules will also affect the business case for stand-alone energy storage. Again, DER optimization software plays an important role in managing these costs, automatically charging the batteries at times when power prices are lowest and deploying the power during on-peak hours.

To understand the impact on energy storage, calculated was the value of a 630 kW/1 MWh stand-alone ESS for a food-processing facility with annual energy spend of about US\$650,000, annual usage of 3 GWh, and a peak load of 1 MW. For this facility, the new TOU rate schedules would increase the value of an ESS by 16 percent, resulting in more than US\$3.1 million in total value over a 20-year period.



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United Facilities Management | www.ufm.com.kw

JANITORIAL SERVICES/CLEANING PRODUCTS

Excel Dryer | www.exceldryer.com

LANDSCAPE/MAINTENANCE/PLANTS/ SERVICES/SUPPLIES

Ambius | www.ifma.ambius.com

RESTROOM PRODUCTS

Kimberly-Clark Professional* | www.IFMAandChess.com

SECURITY

Kastle Systems | www.security.kastle.com
Securitas Security Services USA | www.securitasinc.com

TECHNOLOGY SOFTWARE TOOLS

ARC Technology Solutions | www.e-arc.com
SCLogic | www.SCLogic.com
Spacewell | www.spacewell.com

WATER & FIRE RESTORATION

COIT Cleaning & Restoration Services | www.coit.com

WASTE MANAGEMENT

Republic Services | www.republicservices.com



**FM DEALS & DISCOUNTS
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Behind the Brand



COMPANY NAME FM:SYSTEMS
EXPERTISE FM Software
CSP LEVEL Silver
CSP SINCE 1998
WEBSITE www.fmsystems.com

FMJ What research or product innovations is your company currently working on that will help facility managers be more successful in their roles?

FM:SYSTEMS FM organizations are adapting and evolving in a world of coronavirus, social distancing, and shutdowns. As authorities around the world loosen restrictions and organizations re-enter their workspace, FM:Systems helps clients ensure a safe return for their employees. FM:Systems recently released FMS:Analytics updates allowing users to create customized congestion thresholds that trigger email alerts once exceeded and is actively developing additional Safe Space solutions to ensure our clients and employees remain safe and informed during this time.

FM:Systems is committed to providing innovative workplace management solutions as we navigate these unprecedented times, and we are uniquely positioned to help clients plan for a safe re-entry to the workplace. Our Safe Space Solutions help ensure safe, clean workspaces for your employees with workspace technology.

FMJ What has been the most positive feedback you've received from clients?

FMS "As we continue to build this out, we can get senior leadership and paint that picture for them and really be able to generate valuable usable reports that show how we're using our space, where our space is, and the utilization."

— Dan Yohey, University of Delaware

When Dan Yohey started his new position as Space Manager for the University of Delaware, he quickly realized they could no longer effectively manage their campus space. Floorplans were out of date, drawing conventions were inconsistent, space data was kept in spreadsheets, and there was no set system of record. Everyone he asked had a different picture of what the campus looked like.

FM:Systems' technology helped Dan quickly and easily identify what he calls the key building blocks and foundation needed to operate: who, what, where, and how much. He was able to consistently provide accurate, real-time utilization data without visiting multiple sources, helping create transparency across the entire campus and build confidence in facility data.



COMPANY NAME Tarkett
EXPERTISE Flooring Installation/Maintenance
CSP LEVEL Silver
CSP SINCE 2000
WEBSITE www.commercial.tarkett.com/en_US

FMJ What research or product innovations is your company currently working on that will help facility managers be more successful in their roles?

TARKETT Last year, Tarkett introduced Techtonic™, a proprietary polyurethane coating for LVT that provides top-of-class protection against scuffs, stains, scratches and abrasions. While our competitors boast about what they add to their surface coatings, those additives can increase the likelihood of ugly whitening when scratching occurs. Because Techtonic doesn't include unnecessary composite materials, it offers dramatically stronger protection against scratches and whitening, as well as abrasions, scuffs and stains—defending your floors, and simplifying your maintenance routine. One year after Techtonic's creation, Tarkett has already shipped more than 10 million square feet of Techtonic-protected LVT flooring—and has not received a single claim being filed over issues related to scratching, scuffing, staining or abrasion. By combining rugged protection with a beautiful matte finish, Techtonic keeps your floors' surfaces looking better and lasting longer. Techtonic is available on these Tarkett LVT collections: Contour®, iD Latitude™ and Collections Infinies™.

FMJ What's on the horizon in your field/industry, and how is your company meeting those challenges and opportunities?

T If this year has taught us anything, it's that we need to make sure our physical spaces are taking care of the people in them. Tarkett has always taken an inward look at how we can best support designers, maintenance professionals and inhabitants with thoughtfully designed flooring solutions. This year, we're focusing on an idea we call Tarkett Human-Conscious Design™. This phrase is a promise—both internally to our employees, and externally to our customers—that we will put people first in everything we do. This promise certainly shapes the way we approach the visual design of our products, making sure we're helping to create spaces that inspire and connect people. It also drives our passion for sustainability, circular economy, and the endless quest for healthier materials. Tarkett Human-Conscious Design is also a reminder that, at its core, our work has always been about supporting people. Not just a few people. All people. We'll soon be introducing a new CEU that discusses how we can improve diversity, equity and inclusion within the A&D community, to make sure everyone is represented in this important work.



COMPANY NAME Vari
EXPERTISE Furniture
CSP LEVEL Silver
CSP SINCE 2016
WEBSITE www.vari.com

FMJ What research or product innovations is your company currently working on that will help facility managers be more successful in their roles?

VARI Our company is built on a vision of workspace flexibility, and as the pandemic continues, we have firmly positioned ourselves to help facility managers provide safe and agile workspaces.

Many businesses are looking for ways to implement social distancing and de-densify workspaces. Workspace flexibility is the key to the future.

We're using distance-based design to create a workspace that keeps your team safe and productive, meaning that desks and workstations are spaced out. Our products can help facility managers create socially distanced spaces easily and within minutes. Open office layouts may need to add barriers – for instance, transparent QuickFlex Walls offer separation in shared spaces while still allowing for an open feel. As needs evolve, our moveable walls easily adjust and reconfigure.

We also have new acrylic panels that attach to desks and surfaces to create barriers between individual workstations – a convenient way for facility managers to implement extra protection.

Our durable solutions are built to last for years to come. Vari

designs all of our products to be easy to assemble, reassemble, and reconfigure so you can change your space as needed.

Business needs change and the workspace of the future should be able to easily change too.

FMJ Why did you change your name from VariDesk to Vari?

V Vari (formerly VariDesk) is best known for pioneering the height adjustable standing desk. We started with one simple product seven years ago and rapidly grew from 2 employees to 350+ employees. Today we have over 3 million fans worldwide.

In the past years, we have developed over 200 workspace products, including conference tables, lights, moveable walls, seating, storage, electric standing desks, and more. We offer much more than standing desks, but we realized that when people heard our name, they just thought “desks.” We hired the company that took Federal Express to FedEx to transform our brand. Our multi-million dollar rebrand went into effect in February 2020.

As Vari, a workspace innovation company, we have the freedom to expand our product offerings. We even have a space-as-a-service commercial real estate venture, VariSpace.

Another big change in 2020? While we ship products to countries all over the world, our headquarters has always been in Dallas, Texas. This year, we have expanded into new markets – Austin; Baltimore; Denver; Houston; Phoenix; and Washington D.C. We have a showroom in each city, so people can take a tour and experience our full line of innovative office furniture. We can't wait for what's next.

GET THE FMJ DELIVERED TO YOUR MAILBOX!

FMJ, the official magazine of IFMA, is written for and by professionals who develop and maintain productive workplaces.

It is the only industry publication that draws on the collective knowledge of IFMA's highly connected global network of FM thought leaders to bring you insights on current and upcoming facility management trends.

Get your copy — subscribe to receive a full year (six issues) of the best source of information for workplace professionals. Visit www.ifma.org/publications/fmj-magazine/subscribe

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ACCREDITED DEGREE PROGRAMS

SCHOOL NAME: Breda University of Applied Sciences, Breda, Netherlands

FM-RELATED DEGREES OFFERED:
Bachelor of Science in Facility Management

IFMA AFFILIATION: Since 2007

WHY AND WHEN WAS THE PROGRAM INSTITUTED?

The program started in 2000 and has more than 1,200 alumni. It is a full English-taught program.

WHY IS THE FM PROGRAM COMBINED WITH THE HOTEL PROGRAM?

The Academy for Hotel & Facility consists of two bachelor programs: International Facility Management and International Hotel Management (IHM). Both programs are fully taught in English and overlap to a great extent concerning staff, facilities, curriculum set-up, didactical principles and organization.

The combination of the two programs leads to cross-pollination as well as efficiency. There are also some differences to be found between the students of both programs though. Whereas students of International Hotel Management are generally more externally oriented, finding their drive to constantly improve and having a natural taste for hospitality, the FM students are usually more focused on internal efficiency and challenge themselves to constantly improve the way facilities are managed. Our academy offers a unique and stimulating combination of these two programs, faculty and students.

We want to create value by developing and sharing knowledge in partnership with students, faculty and industry. We play a prominent role in the triangle between “education,” “knowledge development and research” and the “hotel and facility industry.”

WHAT TYPES OF PRACTICAL APPLICATIONS DO YOUR STUDENTS LEARN?

Apart from a clear research line, our program emphasizes professional skills throughout our curriculum. Professional skills are explicitly part of our learning outcomes and are a common thread throughout our curriculum. Engagement with industry ensures that students have a wide range of opportunities to develop these skills. Students develop their professional skills through practical learning in real-life settings,



Church tower of Breda, Netherlands

and gain extra operational skills in various service-related events, focusing on branch related skills, guest interaction and hospitality. The main component for the development of professional skills is the mandatory placement abroad for one semester in a facility management company. During this placement, students acquire professional and management skills and experience other cultures. As part of personalization in the graduation phase, students can opt for a second practical placement, enabling them to gain further practical knowledge and experience.



WHAT COURSES ARE OFFERED?

	4-year track - group A		4-year track - group B			3-year track - pre university (vwo) / hbo- or university - wo propaedeutic
YEAR 1						
Semester 1	Understanding the Facility Industry		Knowing the Fundamentals of Facility Management Operations	Sibelicious (training company)		
Semester 2	Knowing the Fundamentals of Facility Management Operations	Sibelicious (training company)	Understanding the Facility Industry			
YEAR 2						
Semester 3	Developing People and Organizations (+ integrated project)		Developing People and Organizations (+ integrated project)			Developing People and Organizations (+ integrated project 'Introduction to the Facility Industry)
Semester 4	Managing Business Performance and Hospitality Innovation (+ integrated project)		Exploring the International Hospitality Industry (placement)			Managing Business Performance and Facility Innovation (+ integrated project training company Sibelicious)
YEAR 3						
Semester 5	Exploring the International Facility Industry (placement)		Managing Business Performance and Facility Innovation (+ integrated project)			Exploring the International Facility Industry (placement)
Semester 6	Creating Excellence in Facility Management		Creating Excellence in Facility Management			Creating Excellence in Facility Management
YEAR 4						
Semester 7	Minor (graduation)	Minor (graduation)	Research assistant (graduation)	Entrepreneurial graduation (graduation)		SBM pre-master (graduation)
Semester 8	Bachelor thesis (graduation)					SBM pre-master (graduation)

In addition to the different semester themes, students will attend recurrent curriculum components throughout their entire study program, such as English, research, management skills, Management Development Programme (MPD), study trips and projects.



TELL US ABOUT YOUR FORMER STUDENTS AND WHAT THEY HAVE GONE ON TO ACCOMPLISH.

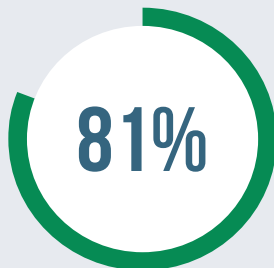
We have almost 1,200 alumni. The results of an annual alumni survey show very positive results.



of the respondents have found a job within 18 months of graduating.



are satisfied or very satisfied with their study program; the national average of comparable programs is 77%.



are satisfied or very satisfied with their teachers; the national average of comparable programs is 67%.

For the sixth year in a row, Breda is the top Facility Education in the Netherlands based on research by Elsevier.

WHAT ARE THE ISSUES FACING THE NEXT GENERATION OF FMS AND HOW WILL THEY BE ADDRESSED?

One challenge is achieving the United Nations 17 Sustainable Development Goals as one of the major challenges for the future. Our students see that our FM profession is one of the key players in helping solving these issues.

Another challenge is that focus needs to be on service design, optimizing your processes, and focusing on the client and customer. With our second professorship in service design, we want to prepare our students for this challenge.

WHAT IS THE DIFFERENCE IN FM IN THE US, UK AND THE NETHERLANDS?

In the United States, “facility” refers to anything that is built, constructed, installed, or located. The emphasis there is more on the architectural and technical aspects. Facility managers in the US

often deal with housing from an architectural and technical angle. In Britain people prefer to speak of “facilities,” which gives more emphasis to the services and facilities that can be used. This simplifies the ease of an action, execution, settlement or policy. Facility management in Great Britain stems from the management of buildings (caretakers) and resources. Facility managers in the UK are mainly concerned with housing, which is strongly focused on providing the right housing services to users. In the Netherlands, the facility manager has both American and Anglo-Saxon aspects, with a growing preference for managing services with the associated resources. It is still possible to distinguish the traditionally known civil, construction and technical services, but no longer (easily) separate them. The interwovenness promotes the so-called synergistic effect ($1 + 1 = 3$). This means that, “the whole is more than the sum of its parts.”

The combination with the Hotel Academy is ideal because of the focus on hospitality and service design which will help the FM industry to improve and accelerate.



Breda, Netherlands

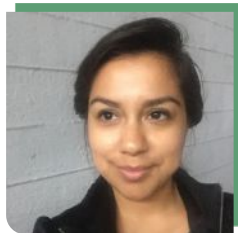
Brings to you...



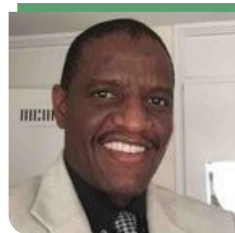
Eric Teicholz Sustainability Facility Professional



Congratulations to the three winners of this Sustainability Credential scholarship:



Ishah Ahumada
KIPP SoCal
USA



Michael Mafa
Independent
Business Owner
Botswana



DeMarcus Means
Florida A&M University
USA

You can make a positive difference in someone's life.

As a scholarship sponsor, you open a world of opportunities to future FMs. You directly support students who have the talent and drive but lack the means to pursue their FM studies. In a year fraught with uncertainty, there's no better time to champion hope for the future.

Contact Program Support Specialist Christina Gonzales at christina.gonzales@ifma.org to become a sponsor.

IFMA Foundation scholarship sponsorship opportunity is still available. An additional joint scholarship option is now available.

Joint Scholarship Sponsorship

The IFMA Foundation recognizes many organizations are determined to provide the most needed scholarship to future FMs and accomplishing this by offering joint sponsorship towards a scholarship. Two or more organizations agree to fulfill the minimum full scholarship commitment of \$3,500, to be determined by each organization.

Current signed sponsors:



** Joint Sponsorship



SOCIAL JUSTICE AND FACILITY MANAGEMENT:
JUST FM

BY DIANE LEVINE & NANCY J. SANQUIST

Before the onset of COVID-19 in the U.S., Adia Marble and Kipeni (Alex) Suapaia jumped on a bus to attend a facility management program created by the IFMA Foundation and sponsored by the Denver Economic Development and Opportunity organization (DEDO). This successful FM Talent Development Pipeline Program (TDP) is a new model for a community partnership (see Figure 1), which consists of DEDO, the IFMA Denver Chapter, industry partners, Denver Community College and local community organizations. Students enrolled in this TDP represent 100 percent minority, 50 percent women and 50 percent veterans. Students earn a globally recognized certificate of completion in the IFMA Essentials of Facility Management and participate in an IgniteFM! Student Challenge, where they present a solution to a real-life industry problem for the opportunity to earn a monetary prize.

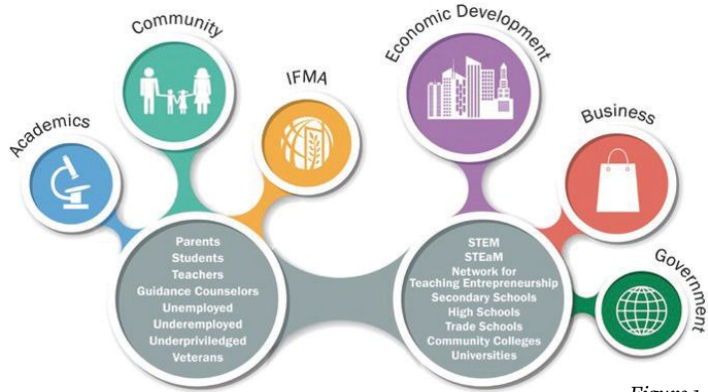


Figure 1

Also included in the TDP is a paid FM internship, along with a Career Connections event with the IFMA Denver Chapter and IFMA Foundation Global Workforce Initiative (GWI) Advisors Sodexo and ABM Industries, as well as major IFMA Foundation donor A&A Maintenance, which support the students in career advancement and opportunities.

THE FM JOB MARKET AND OPPORTUNITIES TODAY

The average FM's age is 49, and 50 percent of the existing FM workforce will retire in the next decade. There are approximately 4,000 graduates per year from FM accredited degree programs, yet the annual demand for graduates from just a few global firms alone is greater than this number. In the last 12 months, there were more than 39,000 FM job openings in the U.S. alone. Today's buildings are smarter and require more advanced technical knowledge than what normal training programs offer. Therefore, the need for skilled FMs is increasing, while the supply to fill the vacancies is not nearly enough.

In the U.S., the FM industry is predominantly Caucasian due to lack of marketing to the global labor market and introducing the profession later in a student's life, if at all.

"When you compare to Generation Z," as one researcher put it, "nearly half of Gen Z is non-Caucasian and 81 percent of Gen Zers said they have friends of a different race." Noting this new generation's multicultural demographic allows companies to understand that valuing diversity is not simply a cause Gen Zers advocate, but rather, multiculturalism is a criterion of who they are."¹



Figure 2

When discussing FM with younger generations, veterans and incumbent workers, five features of the job catch their attention and encourage them to enroll in an educational program.

1. High FM salary
2. FM's impact on sustainability and the planet
3. Impact of new technologies (IoT, robotics, AI) on the FM profession
4. FM's impact on people's daily lives
5. Many opportunities for advancement (Figure 2)

PROVIDING FM EDUCATION AND MARKETING TO MINORITY COMMUNITIES

While interest is gaining traction in growing FM education, more programs are needed in minority communities to meet the industry's looming talent gap. With a near-100 percent job placement for accredited FM degree graduates, IFMA and the IFMA Foundation have the credentials and educational programs to train the future workforce and unleash their potential with new skills and opportunities for employment for both mid-level skills and college-educated job seekers.

National Outlook on Education ranked Chaffey College the No. 3 California community college to enroll and graduate Hispanic students.² Minority enrollment is 75 percent of the student body



Chaffey College, Rancho Cucamonga, California: IFMA Student Chapter of the Year 2019

(the majority Hispanic), which is more than the state average of 68 percent. In 2017 Chaffey, started an associate degree in business with a certificate in FM and formed an IFMA student chapter. After two years in existence, this student chapter won the prestigious 2019 IFMA Student Chapter of the Year award. Several California IFMA chapters and FM community members mentored the students, sharing their experience, providing scholarships, internships and monthly educational programs.

The GWT's programs address the triple bottom line values of economy, equity and environment, and were created based on research that identified an annual industry gap of approximately 6,000 workers in California. Pipeline programs are offered through the California Community Colleges, where more than 50 percent of the student population qualifies for fee waivers based on their economic status. Named a California Economic Summit Top 10 Partnership in Industry and Education (PIE) award recipient in 2019, this program has specifically targeted a large, diverse student population enrolled in the business and technical programs, and Chaffey College, College of San Mateo and West Los Angeles College have had success in finding their graduates FM-related employment.

Florida A&M University has a "historic mission of educating African Americans. FAMU embraces persons of all races, ethnic races and nationalities as lifelong

members of the university community."³ With two accredited degree programs credited through the IFMA Foundation — bachelor's of science degree in business administration with a program major in facility management and a master's degree of science of architecture: facility management — FAMU graduates the highest number of African Americans in collegiate FM. These programs are highly respected and graduate some of the finest students in the industry, many of whom are IFMA Foundation international scholarship recipients and IgniteFM! student competition winners. Students receiving scholarships are awarded a free trip to IFMA's World Workplace Conference and Expo where they can meet potential employers, network with FM professionals from around the world, attend educational sessions and participate in student competition.

One of the first adopters of GWT, Dr. Roscoe Hightower, a FAMU professor of marketing and FM, began introducing FM to grade-school students through tennis and a sports video game. Collaborating

with a local non-profit organization, the FAMU students' "company" teaches FM practices to a grade-school tennis and nutrition program for under-privileged children. FAMU students obtain credit for this, said Hightower. The students also use the Madden Football video game to explain FM through a feature of this popular e-sports game that requires users to build a football stadium and create a facility budget to operate and maintain it.

"FAMU has its own K-12 school district within the campus. The primary, middle and high school district is part of the university making it advantageous to introduce grade-school students to facility management," he said.

At FAMU "there are two one-credit internships required to provide students with experiential opportunities in the field to practice what they have learned in the classroom. Many of these opportunities are with external enterprises such as Leon County Facilities Management Department, Minor League Baseball, Atlanta Hartsfield-Jackson Airport, NASCAR, Jones Lang Lasalle, Sodexo and Aramark."⁴

Angela Johnson, P.E., PMP, MBA and NORAM (North American), an account vice president of FM service development at Sodexo and IFMA Foundation Trustee, has marketed her field and opportunities at Sodexo to K-12 students for years. During a presentation at World FM Day 2019, her passionate speech on attracting students to the profession moved senior executives at marketing company Image-Media to create an "FM Ambassador Kit"



Dr. Roscoe Hightower with Florida A&M University Facility Management degree program students.



Angela Johnson (center) with students from St. Andrews Middle School, Columbia, South Carolina on World FM Day

pro bono to spread the word about FM careers to IFMA chapters. Johnson, in turn, brought in the IFMA Foundation to co-brand this kit for chapters, global communities, companies and educational institutions to use in marketing FM, a US\$1 trillion industry with more than 25 million professionals worldwide.

A CALL TO ACTION — A JUST FM PARTNERSHIP

In addition to ensuring building safety in emergency and crisis situations, FMs also contribute to Corporate Social Responsibility and Environmental and Social Justice (ESG) measures that businesses are tracking today. One measurement tool is the JUST label, which came after the creation of ESG, helping enhance the concept. The label was designed by the International Living Futures Institute (ILFI) for companies to measure and track their social justice policy's progress. There are 22 criteria for diversity, equity, safety, worker benefit and stewardship.

The IFMA Foundation is behind a JUST FM movement to establish how FM practices contribute to the social justice policies of an organization; FM's benefits to health and well-being, productivity, cost savings and experiential, creative environments; and positive contributions to local and global communities. JUST FM is a newly coined term used to emphasize the social justice policies of an organization contributed by the Facility Management group, which includes hiring and sustainability practices, and partnerships with community, economic development and academic organizations. JUST FM was created to bring attention to the work of the IFMA Foundation's GWI program in its efforts to attract and promote the social justice work of this Initiative which is to grow the facility management profession for all segments of society.

It is an area in which heightened global discussion and research are needed. Through the GWI programs like the one in Denver, the IFMA Foundation — together with its partners and major donors JLL, Sodexo, ABM and A&A Maintenance — is working on JUST FM programs to attract minorities and women to the field through education, outreach and internship programs. More help is needed to expand this program.

Partnerships work and can make a difference in social justice

and FM. The IFMA Foundation will continue to invite partners to participate in the shared-value investment of a better-prepared sustainable future and workforce. The key to unleashing a company's competitive advantage and increasing corporate growth and potential lies in training today's youth and incumbent workers for tomorrow's business challenges. To do this, the Foundation needs to work closely with multinational corporations, national companies, and small- to medium-size businesses to identify, design and implement alliances that leverage the strengths of the corporate sector on behalf of FM for social good. Anyone can help by demonstrating leadership among their corporate peers by participating in an opportunity to shape the future.

1. Sherman, Scott and Levine, Diane. *Recruiting Generation Z Into the Field of Facility Management*. FMJ, September/October 2019.
2. Pinion, Melissa (2019) Chaffey College Top Ranked for Hispanic Enrollment, Graduates. Feb 25. www.chaffey.edu/releases/2019/2019-feb-25-hispanic-enrollment.shtml
3. Hightower, Roscoe, Ph.D. *Accredited Degree Program: Florida A&M University*. *Facility Management Journal* May-June 2020, p.71.
4. Hightower, Roscoe, Ph.D. *Accredited Degree Program: Florida A&M University*. *Facility Management Journal* May-June, 2020, p.71.



Diane Levine, MCR, IFMA Fellow, is the executive director of the IFMA Foundation. She is a former IFMA board member, and also an award-winning co-editor and author of the "Work on the Move" book series. Diane is one of the pioneers of the foundation's Global Workforce Initiative.



Nancy J. Sanquist, an IFMA Fellow, is a professional involved with the built environment for the last few decades. She currently serves as the chair of the IFMA Foundation with which she has worked with the last five years. She is a co-founder of the Global Workforce Initiative (GWI) and the Workplace Evolutionaries, and is the author of numerous books and articles on FM, technology, architecture, urban planning and maintenance including the award-winning book series titled "Work on the Move."



JUST FM PARTNERSHIP GOALS

1. FILL THE FM TALENT GAP WITH WELL-QUALIFIED PROFESSIONALS.
2. EXPOSE YOUTH, INCUMBENT WORKERS, THE UNEMPLOYED AND UNDEREMPLOYED TO FM CAREERS.
3. EDUCATE GUIDANCE COUNSELORS, PARENTS AND TEACHERS ABOUT FM.
4. ENGAGE LOCAL FM PROFESSIONALS IN STUDENT OUTREACH PROGRAMS.
5. INTRODUCE THE FM PROFESSION TO HIGH SCHOOLS AND COMMUNITY COLLEGES.
6. GROW THE NUMBER OF FM EDUCATIONAL PROGRAMS IN MINORITY COLLEGES AND COMMUNITIES.
7. INCREASE THE NUMBER OF EMPLOYMENTS, INTERNSHIPS, APPRENTICESHIP AND JOB-SHADOWING OPPORTUNITIES IN FM.
8. INCREASE THE NUMBER OF ANNUAL SCHOLARSHIPS OFFERED TO STUDENTS.
9. MAKE PEOPLE AWARE OF FM'S SIGNIFICANT ROLE IN IMPACTING THE UN2030 SUSTAINABLE DEVELOPMENT GOALS (SDGS).
10. EDUCATE AND ENCOURAGE THE FM AND BUILT ENVIRONMENT INDUSTRY TO PRACTICE JUST FM PRINCIPLES.
11. CONNECT WITH STEM, STEAM AND OTHER EXISTING OUTREACH PROGRAMS TO PROMOTE FM EDUCATION AT AN EARLY AGE.
12. EDUCATE GOVERNMENT AGENCIES, WORKFORCE AND ECONOMIC DEVELOPMENT PROFESSIONALS ABOUT FM CAREERS AND THE IMPORTANCE OF THE PROFESSION.

IFMA Membership enables, empowers and equips FMs to solve today's workplace challenges.



Network with FM professionals worldwide



Obtain globally-recognized credentials and continuing education at any career stage



Gain field-tested strategies for elevating facility performance



Keep pace with cutting-edge FM best practices

Find out which membership benefits will take you, your team and your organization to the heights of FM success.

“

IFMA is a true asset for FMs worldwide. I find value in the networking and plethora of resources that help me find solutions to the FM challenges I face. It's comforting to know that the FM professionals I meet through IFMA are international peers and help me find solutions, improve processes, decrease operational expenses, improve health and safety and overall maximize your facilities' potentials. I find IFMA to be a “must” for any FM out there.

Carlos Rodríguez
Santo Domingo, Dominican Republic
IFMA Member since 2016



Learn more at

www.ifma.org/membership/membership-benefits.

THE PEOPLE



Using culture to create a meaningful workplace

BY ROBERT HEMMERDINGER

Today's office worker is pickier than ever. Not necessarily about cafeteria food or perks like unlimited vacation; rather, they are fickle about their work environment. As the space where most employees spend at least eight hours a day, is it unreasonable to want that space to be comfortable?



Results of a survey of 1,601 North American workers published by Harvard Business Review had the researchers floored. The question: What wellness perks mattered the most? Surprisingly, the answer was not standing desks or access to elaborate gyms. Those polled wanted a well-controlled environment with plenty of fresh air, accurate temperature control and access to natural light. For those in the facility management field, this may not come as much of a surprise as many daily complaints stem from basic comfort requirements. But what's interesting is how much an office environment factors into the rest of the organization. Enterprises are relying on a strong brand and company culture to help attract the industry's top talent.

Salary aggregator Glassdoor's recent study suggests that company culture may be more important than salary for some job seekers.

"Across the countries we surveyed, it's clear that job seekers are seeking more meaningful workplace experiences," Christian Sutherland-Wong, Glassdoor president and COO, said of the study. "Job seekers want to be paid fairly but they want to work for a company whose values align with their own and whose mission they can fully get behind."

"Job seekers want to be paid fairly but they want to work for a company whose values align with their own and whose mission they can fully get behind."

A key metric behind this stunning finding is the growing millennial workforce. According to Glassdoor, the millennials, defined generally as those born in the 1980s to 1990s, are more likely to put culture above pay, with 65 percent of those surveyed believing in this mantra. That speaks loudly to the shift in employer benefits. Building a culture starts from the ground up, and certainly a company's physical work environment cannot be discounted.

But how does environment factor into culture? Why should FM collaborate closely with recruiters and employee retention specialists? These studies suggest that it has to do with the authenticity of culture messaging. When an organization claims to have an "employee-first culture," workers are less likely to believe that message when they're asked to work in small, enclosed spaces with artificial lighting and stale air.

Prominent global organizations are at the forefront of this evolution and change in mentality that begins at the executive level. Thrive Global, Pinterest and GE Healthcare Korea are prioritizing office environment as an extension of their company culture. They join well-publicized tech leaders such as Google and Microsoft that have spent millions of dollars to design and build world-class



facilities to help establish their company culture. That being said, does a company need to belong in the Fortune 500 to create a superior working environment? The key factors in an individual's assessment of a working space are identified as lighting quality, air quality, environmental temperature and noise levels. Office layouts are often determined by the need for collaboration. Teams are placed together based on a job function or project focus. However, individuals in these teams can have myriad preferences for their work environment. Just because an individual is working on the same project as the person next to them does not mean they want to collaborate in the same way, or they prefer the same temperature while working. Companies are paying more attention to the individual as a way of reinforcing their company culture.

When focusing on the individual instead of the team or business, the key word here is choice. People feel more satisfied when they are given options or choices about their environment. Some companies are switching to unassigned seating in their facilities as part of the transition to an open office floor plan. In that scenario, employees are fully empowered to make choices about where they sit based on the noise level, temperature or brightness of a space. People who enjoy more extremes in the temperature of their environment can move to the peripheries of the building. They can sit next to windows, where indoor temperatures fluctuate in line with outside weather conditions. Those individuals can take more advantage of natural light. If freedom of choice is a given, they can select collaborative environments that might be noisy or quiet environments where concentration is maximized. However, not



every business can design their workspace around an unassigned seating layout. There could be constraints on the amount of space as well as concerns about the benefits of increased productivity. Nonetheless, individual choice can still be maintained in those cases. Harvard Business Review indicated that “nearly half [of the employees surveyed] want an app that will let them set the temperature in their workspace.”

Thanks to advancements in building automation technology, individual choice is more accessible than ever. It starts at the networks that run building automation systems (BAS). The standard network type of BAS communications is RS-485: a low-bandwidth network that is inexpensive to install, comprised of twisted pair wire and low-cost communication hardware. These networks were more than enough for the bandwidth and speed requirements when they were designed. The low cost of hardware and installation helped keep construction and retrofit costs low. These networks are not very accessible to other systems, though, and data needs have exceeded their capabilities. This caused BAS integrators to incorporate Ethernet backbones in their networks, evolving to full Ethernet networks and eventually Ethernet networks using IP communication. This means that BAS networks are now using the same technology found in computers and communication systems. The most advanced BAS networks incorporate wireless IP, Bluetooth and IoT protocols. All these communication methods are making it easier and more cost-effective to bring control to the individual. BAS devices that individuals can use to interact with the system are not limited to thermostats and proprietary touchscreens. Users can access their systems with computers and smartphones.

With this enhanced connectivity to their building systems, companies are now able to increase worker satisfaction of the environment without making any other system changes. Just as people want more say in controlling projects, deadlines and workflows, they also want to be able to influence the surrounding environment. Collectively, these elements come together to cement the foundation for a workplace culture. Companies nowadays are ex-

perimenting with flat organizational hierarchies and employee-run projects. For instance, executives are offering more leeway to staff members on how and when projects are carried out. The Harvard Business Review study, however, revealed that all these strategies might not be the most important factor to employee satisfaction.

“Our survey revealed that employees, by a margin of 42 percent to 28 percent, would rather be able to personalize their work environment than opt for unlimited vacation,” the study found.

Specifically, the study found employees want to personalize workspace temperature, overhead and desk lighting, and the ability to “soundscape” their workspace. With connectivity in automation systems becoming so prevalent, it makes perfect sense to invest in something that can contribute so heavily to the perception of a company’s culture, which serves to lift employee productivity and reinforce worker loyalty.

When considering workplace culture, it is no longer leadership styles or job perks that solely define an organization. As employee well-being emerges as a top concern among executives and HR professionals, sending mixed messages is frowned upon: “You have a choice about how to complete your projects, but you can’t

dim your lights.” “You can choose when to take vacation, but you can’t control the temperature.” “We care about you as an individual, as long as you like your workspace exactly the same as those around you.” The advancement, accessibility and ease of use for building automation technologies enables employers to do away with the constraints that

once bogged down old facilities. Whether the answer to an organization’s workspace culture is unassigned seating, a BAS retrofit or just increased access to the system they already have, it is evident that an organization cannot control their culture if their team members cannot control the lights.

“Our survey revealed that employees, by a margin of 42 percent to 28 percent, would rather be able to personalize their work environment than opt for unlimited vacation.”





Robert Hemmerdinger is the chief sales and marketing officer for Delta Controls, Inc. and a member of the executive management team. His role includes global responsibility for sales growth and driving brand awareness. Hemmerdinger started his career in 1997 as a technical support engineer. With a background in engineering, he served in a variety of positions including product management, strategic sales and business development for the U.S., EMEA and Asia-Pacific markets. He holds a BSc (Hons) in IT Engineering from De Montfort University in the United Kingdom and resides in Boston, Massachusetts, USA.

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Exclusive online section
featuring expanded
FM coverage.

- 106 Ask the Experts**
Contributed by IFMA's Facility Management Consultants Council
- 109 Member Spotlight**
- 112 Ahead of the Curve**
The changing role of data-driven FM
James Lane & Jeff Peterson
- 116 Supply & Demand**
Smart strategies for the HR side of supply chain
Jeff St. George
- 120 Park(ing) & Restoration**
Preparing the lot for returning workers
Bob Lester
- 123 Reentry Essentials**
Focus areas to support reopening facilities
James Junkin
- 126 Consider This**
Adapting to change while reopening
Bob James & Mike Halligan
- 129 Smart Buildings**
Leadership, data & accountability
Bill Moten
- 132 Challenge Accepted**
Building new leaders in the virtual workspace
Andrew Mawson
- 136 Vendor Profiles**

FMs WEIGH IN

Ask the Experts

In each issue of FMJ, IFMA's Facility Management Consultants Council shares some commonly asked FM-related questions accompanied by advice from top FM consultants. The questions and answers presented in this section align with IFMA's core competencies following the themes outlined for the given edition of the magazine. While the following answers are intended to be helpful, these responses should not be deemed complete and are limited in context by the space allocated. Please contact the individual consultants directly for further explanation of the opinions expressed.

CONTRIBUTED BY



The Facility Management Consultants Council (FMCC) represents more than 300 FM consultants from various countries around the globe. Its mission states, "The FMCC is the resource and voice for facility management consultants worldwide to leverage our collective expertise to benefit IFMA members, and the facility management profession."

**FMCC members welcome challenges.
Send your question to Ask The Experts.**

James Delgado, CFM
ask-the-expert@fmcc-ifma.org

Please cc
FMCC Admin Terry Cocherl
admin-fmcc@fmcc-ifma.org

Your client is director of facilities for a multi-campus urban university of 12,000 students, faculty, and staff in a metro area of 2 million people. The university halted in-person classes several months ago.

The medical school, teaching hospital and health science research facilities, all located downtown, remain fully active.

The main campus, several miles away, includes dormitories for up to 2,100, in rooms and suites of two to four students.

Living on campus is normally required for 1,400 undergraduates in their first year of study. After that, students occupy rental properties off campus, commuting via walking, bicycle, motorbike and motorcycle, automobile, and public transportation streetcar and bus.

The executive committee, headed by the university president, wishes to begin reopening in late October, starting with first-year undergrads. They have asked FM to provide assistance and information to help decide which buildings to operate and the resulting numbers that can be accommodated.

First-year students have priority.

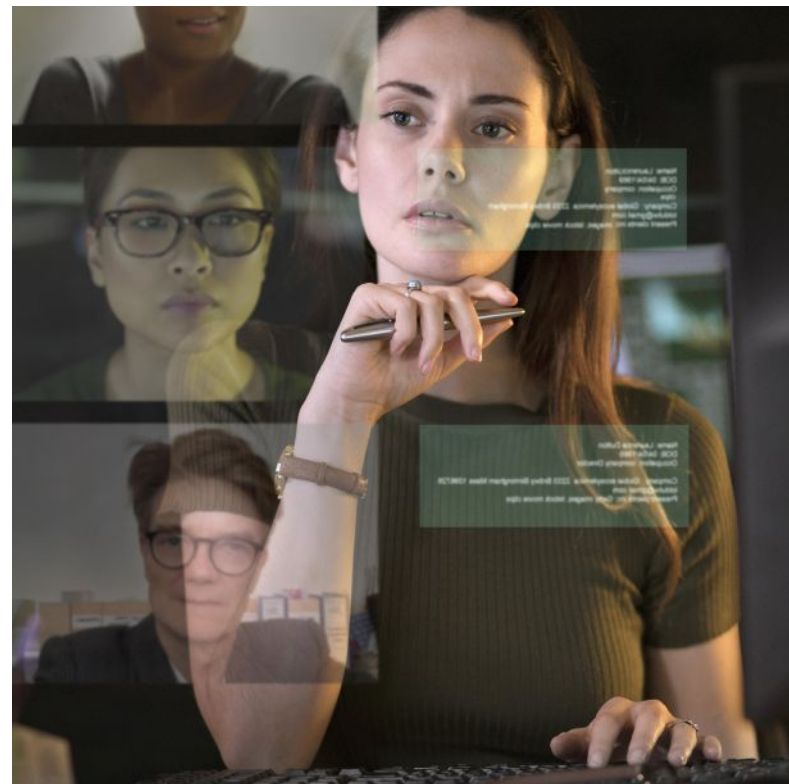
What are the considerations for reoccupying buildings required for lodging, instruction, study, and meals? What data and support will your staff need so that FM can assist the Executive Committee?

To best answer the scenario, other questions must be answered.

What extraordinary uses will the facilities have to accommodate?

A Facilities to be operated will include specialized instruction rooms and labs, lodging, dining, and student services, including a much-enlarged clinic for testing and even temporary separation in the event that someone tests positive for infection. Parking, walkways, doorways, stairs, hallways and elevators may be limited. Bus and car pickup areas outdoors are considerations and may impose limits even when meeting areas are sufficient. FM consultants working in space management are rapidly calibrating their services to support capacity planning.

Supplies will be a challenge. PPE and cleaning supplies can limit operations, especially when someone has tested positive and deeper cleaning ensues, along with a required wait before reoccupying.





What are the staffing needs?

A Staff is under exceptional demand. Cleaning requirements will increase substantially. All FM staff — every O&M role — will require initial and ongoing updates on hazards and techniques, team orientation toward student behavior, virus testing, and flexible scheduling including time off for rest and family. With substantial parts of the university shut down, employees in those areas may be prepared to work in the occupied areas and participate in training. Certain FM technical staff may be able to work from home via the CMMS. Take full advantage of online gatherings such as Zoom, GoTo (Meeting or Webinar), Teams, etc. for communications.

In addition to facilities and their operation, what else would be necessary?

A Messaging at all levels, definitive communications that are persuasive, instructive, and repeated often and everywhere by everyone, FM staff included. The university will have to gain and keep the attention and support of faculty, families of incoming students, and especially the students themselves. Pressures and priorities vary among students. Some who will be pushed hard with difficult studies at once and others will expect to socialize. Both priorities invite bypassing healthful behavior, emphasizing the need for watchfulness and reminding. Messaging in every form and at every opportunity will be top priority, with consequent expenses.

CONTRIBUTORS

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Margaret Reynolds *specializes in health and wellness of graduate and professional students at Tulane University*

* Full responses can be found at FMCC Ask The Experts.

GOLESEDI CHANKULUBA



Gaborone, Botswana
 Managing Director
 Years in FM: 10 years

What kind of facility do you manage?

I manage sports and health facilities.

How did you get into FM?

When the Botswana National Sports Council (BNSC) recruited for the position of Lands and Facilities Manager in 2009, the job description just suited me as a town planner; and I never looked back. In 2015, I registered my own company and have practiced as a private consultant since then.

What has been your biggest FM challenge and what have you learned?

FM is rarely allocated enough funds into areas that need it the most and this can be challenging working with a very limited budget. I have learned that it is very important for budget allocations to be done well on time and to meet the needs of planned projects and emergencies.

What advice would you give to someone starting in FM and what is the best advice you have received?

I would advise them to benchmark, share ideas, network and learn all the time. The FM industry is vibrant and compelling, and I really cannot imagine a more satisfying field.

Where do you want to take your FM career in the next few years?

I want to grow by equipping myself with all the necessary information through benchmarking and knowledge sharing while growing my company to be one of the best in the FM Industry. My company slogan is "Upgrading the standard of facilities."

What do you hope to gain from your IFMA membership?

I want to engage with other members and explore opportunities and knowledge sharing.

KRISTA MANNA



Abington, Massachusetts, USA
 Owner/Principal
 Years in FM: 1

I've been in the architecture industry since 1995 (I was in high school). I started managing my own residential rental properties this year. My grandfather was in the construction business, so I grew up around construction and architecture. I have more than 15 years' experience in the commercial interiors and retail design industry helping my clients to achieve their business and personal goals.

What has been your biggest FM challenge and what have you learned?

As part of my business I rehabilitate run down properties and resell them. My biggest challenge is often overcoming misconceptions about a female working in a male-dominated field. I often work with contractors and subcontractors and they are continually astonished that I'm capable of doing the construction side of the work as well as design.

What advice would you give to someone starting in FM and what is the best advice you have received?

The best advice I can give anyone is to enjoy what you do. If you don't wake up most mornings wanting to do what you spend most of your time doing, it might be time to consider something else. Life is too short to spend it doing something you don't love.

Where do you want to take your FM career in the next few years?

My goal is to grow my business to help more FMs be able to have spaces that function, people love and feel safe.

What do you hope to gain from your IFMA membership?

I hope to meet FMs and build relationships with people to help them whenever they need any space renovation or addition needs.

Tell us a fun fact about yourself.

I have a garden that has more than 100 plants in it and I have plans to expand every year. My goal is to someday be able to produce the majority of my food myself.

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ARCHIE ARSHAD



Toronto, Ontario, Canada
 Director, Support Services
 Years in FM: 15+

What kind of facility do you manage?

My facilities are in hospital and health care.

How did you get into FM?

Facility management is a growing field where I can use my extensive and versatile experience and education.

What advice would you give to someone starting in FM and what is the best advice you have received?

Learn and implement new technology.

Where do you want to take your FM career in the next few years?

I want to discover opportunities and gain FM industry knowledge in other FM sectors such as education, commercial and municipalities.

What do you hope to gain from your IFMA membership?

I am looking to gain more FM-based knowledge, best practices and networking.

Tell us a fun fact about yourself.

I love traveling and relaxing at the beach.

Member Spotlight

CHIBUYA L. NG'AMBI



Lusaka, Zambia
CEO
Years in FM: 17

I have been in facility management, in one way or another for 17 years now, having started out running a cleaning and janitorial family business straight from university.

What kind of facility do you manage?

I am running a facilities services company integrating most of the facets of FM including property management. Our goal is to grow into a fully fledged FM company with a full complement of FM services from security, to space planning and custodial services.

How did you get into FM?

I first heard of FM from my brother who had worked for a large FM company in London. He pitched the idea that because I was already running a company which offered some FM service, why not open a company that will integrate all the services of FM and offer a one-stop shop. There were very few, if any companies offering such services at the time in the country. The industry is still in its infancy and very few companies offer these services.

What has been your biggest FM challenge and what have you learned?

The biggest challenge in this part of the world is that FM has not fully been appreciated with most organizations engaging different service providers for different services and have an in-house FM

manage the suppliers. While this is good for individuals in FM, it becomes very difficult for companies such as ours to fully offer all the FM services. My biggest lesson so far is that you do not always get the contract by lowering your costs. I have come to realize that FM is a quality game. Organizations will spend on quality and consistent service, and not necessarily on the cost of the service.

What advice would you give to someone starting in FM and what is the best advice you have received?

The best advice I would give for anyone starting FM is do not procrastinate in getting your FM qualifications and credentials. The IFMA FMP® would be the best place to start.

Where do you want to take your FM career in the next few years?

I hope to complete all the IFMA credentials in the next two years and become a certified IFMA member and, grow my business into a fully fledged FM company.

What do you hope to gain from your IFMA membership?

One of my goals is to be able to impart some of the knowledge I have acquired over the years to young and new FMs. The other is to open an IFMA chapter in Zambia for the young but growing FM profession in the country. I hope my membership of IFMA opens doors to opportunities of networking, knowledge sharing and of course, mentorship in the FM journey.

Tell us a fun fact about yourself.

I can read horror and thriller novels but I cannot stand the movies of the same genre.

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JESSICA BARE WILLIAMS



Nashville, Tennessee, USA
Account Operations Manager
Years in FM: 20 years

What kind of facility do you manage?

I support the FM operations for our account. I have a few roles in my current position which include HSE lead, janitorial and sustainability SME, FM, CMMS administrator and a few others. Previously I managed FM services in Class A and B facilities which were manufacturing and a parts distribution warehouse.

How did you get into FM?

My mentor and manager got me excited when I started my career 20 years ago as a facility coordinator. It also didn't hurt that my dad was a master electrician. He taught us great life skills from FM.

What has been your biggest FM challenge and what have you learned?

Not having a college degree in this industry in the past has hindered people for vertical growth. Degrees are great and required in many specialty fields, but FM roots are blue collar and if you have a passion for learning all the ins and outs under a great mentor, soak up the knowledge like a sponge. Years of experience and additional FM certifications in this industry go a long way now

than it did before. Women are becoming a powerful force and we are not afraid to get on the roof.

What advice would you give to someone starting in FM and what is the best advice you have received?

Put the work in, believe in yourself, read your O&M manuals, review leases backward and forward, do not assume you can manage your site by not walking daily and don't be afraid to get dirty. You must be the expert of your site's systems to ensure you know how to manage your site.

Where do you want to take your FM career in the next few years?

I would like to become director of facilities.

What do you hope to gain from your IFMA membership?

When we can go back to social gatherings and regular meetings, I would love more networking. I plan to start my SFP within the next few months as I already have my FMP.

Tell us a fun fact about yourself.

I am a native Nashvillian but a die-hard Ohio State fan because my dad was born and raised in Ohio. In honor of my dad, I attend at least one OSU home game a year despite my husband being a die-hard Alabama fan. We must be in separate rooms when our teams play.

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ANDREAS WINARDI



*Bellevue, Washington, USA
Senior energy engineer
Years in FM: 16*

What kind of facility do you manage?

My focus is to maintain the engine of the building to run efficiently and managing both energy and overhead cost for facilities, which include municipalities, healthcare, higher education, museums, commercial offices/warehouse and industrials. I branched out last year to include renewable and battery as part of my skills, and want to see if we can have more and more distributed energy system install and integrated within facilities utility central plant.

How did you get into FM?

I have a passion for buildings, both the architecture and the design. I love problem solving and interacting with people.

FM combined the best of both worlds, engineering and people management. I believed a well-run facility is a balancing effort of both the facilities equipment and people.

What has been your biggest FM challenge and what have you learned?

Maintenance budget is the first reduction when there is budget shortfall, which leads to tons of deferred maintenance. I learned it will cost a lot more to come back and try to fix something neglected for years, instead of maintaining it and make it run as efficient as possible in the first place. Buildings are now treated as an asset, but operating each building is different, and that is what make an FM job very important.

What advice would you give to someone starting in FM and what is the best advice you have received?

Facilities are a living being, because facilities work to meet the needs of people and businesses that occupy them. There are standards and code that we must follow but treat them more as a guideline, because our main customer is not satisfying the standards. To achieve the balance between managing operational cost and satisfying the customer is the main challenge. Most of the problems can be solved through great communication and trust between FM and building occupant.

Where do you want to take your FM career in the next few years?

It will be interesting to figure out what will comes after 2020 COVID crisis, and how it will change the way FM's approach their own facility. I am looking to grow in my career by developing my leadership skills and seek an opportunity to lead a campus-wide community.

What do you hope to gain from your IFMA membership?

I want to participate and contribute more to IFMA, learn from fellow members, and network.

Tell us a fun fact about yourself.

I am crazy about LED lighting – where it is to the point that my garage is filled with multiple samples that I tear down to the component level and try to put it back together.

I think lighting is a perfect combination of art and science, and it can be the differential factor overlooked by building owners.

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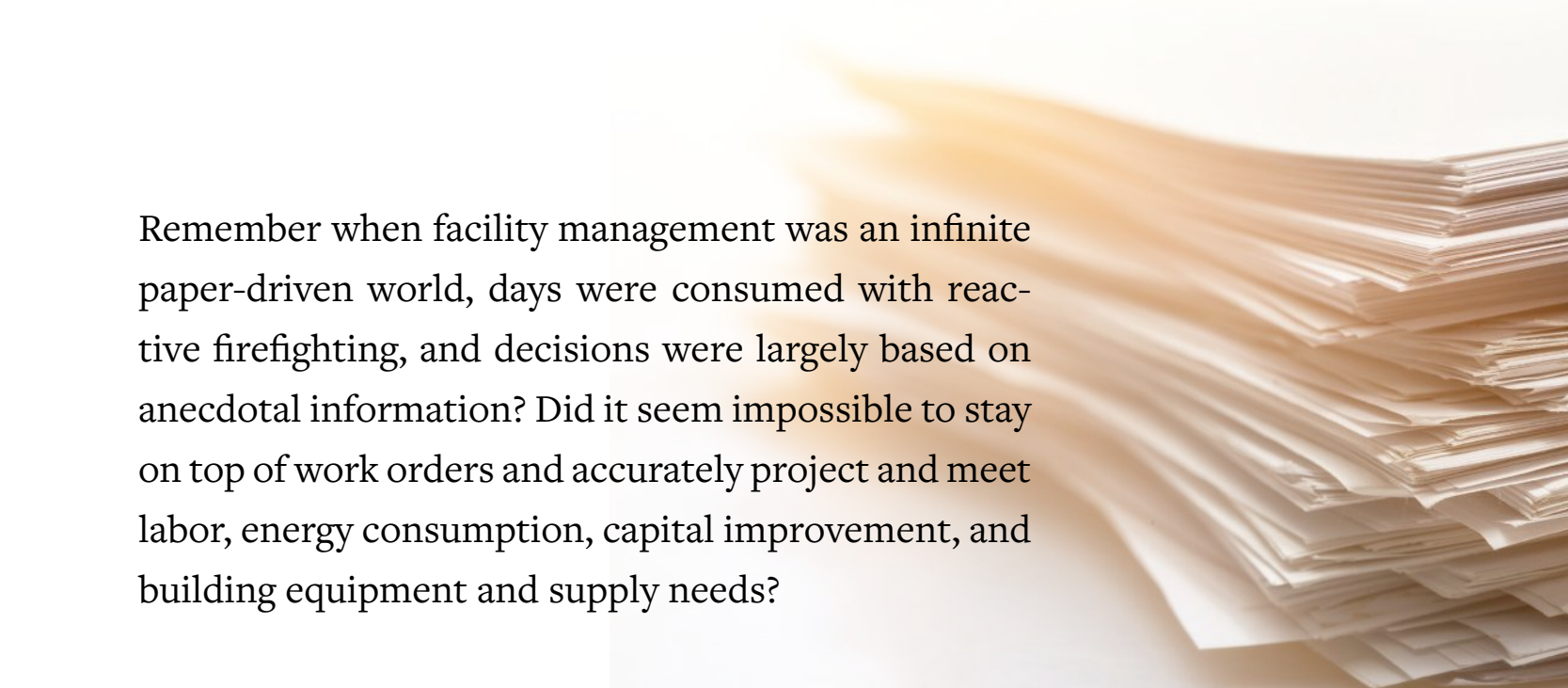
Reach out and share your chapter, council or community news with other members and FMJ readers. Send details and photos (if available) to fmj@ifma.org with the subject line: Components in Focus.

We look forward to featuring your component in an upcoming issue!

AHEAD OF THE CURVE

The Changing Role of Data-Driven Facility Managers

BY JAMES LANE & JEFF PETERSON



Remember when facility management was an infinite paper-driven world, days were consumed with reactive firefighting, and decisions were largely based on anecdotal information? Did it seem impossible to stay on top of work orders and accurately project and meet labor, energy consumption, capital improvement, and building equipment and supply needs?

Those days weren't too long ago, and for many organizations, many of these challenges still plague their reality. However, in the wake of data-driven technology advancements and new innovations, these challenges are receding fast. With new IoT, sensor, artificial intelligence (AI), mobility, satellite, and cloud-based technologies, FMs can easily gather more accurate, comprehensive data on just about anything. The challenge today, and moving forward, is to make sure the right business data is collected — and to prevent being so inundated with data that FMs can't strategically leverage it for business decision-making.

FIRST THINGS FIRST: BUSINESS GOALS

FMs wear many hats, have seemingly endless responsibilities, and work with multiple internal and external stakeholders. The job can seem overwhelming.

Having the right data can make a huge difference for facility services organizations. The more they can use data to drive decisions, the more control they can have, and the more proactive and efficient they can be in planning, budgeting, managing, setting strategy, and delivering quality facility services.

To get the most value from data, the first thing to do is identify clear and quantifiable business goals. For instance, is the objective to drive efficiencies in energy management? If so, gather data that helps decide appropriate levels of lighting in

outdoor and indoor spaces, how much and when to trigger cooling and heating, and the like. If improving asset management while minimizing expenditures is the goal, then getting a handle on asset usage and lifecycles and determining when to run-to-fail makes sense.

And then there's COVID-19. For now and the foreseeable future, FMs must focus on minimizing the risk of novel coronavirus and other contagious infections. This means determining the best utilization of space, and how often, where, and when to clean and disinfect surfaces, refill soap, hand sanitizer, and paper towel dispensers, remove trash, change HVAC system filters, and more. Getting all of this right is critical to giving occupants, employees, and business owners the confidence needed to return to offices, schools, retail, hospitality, and entertainment establishments.

NEXT: DATA TYPES, FREQUENCY AND SHARING

After solidifying business goals, it's time to determine the types of data needed to make informed decisions.

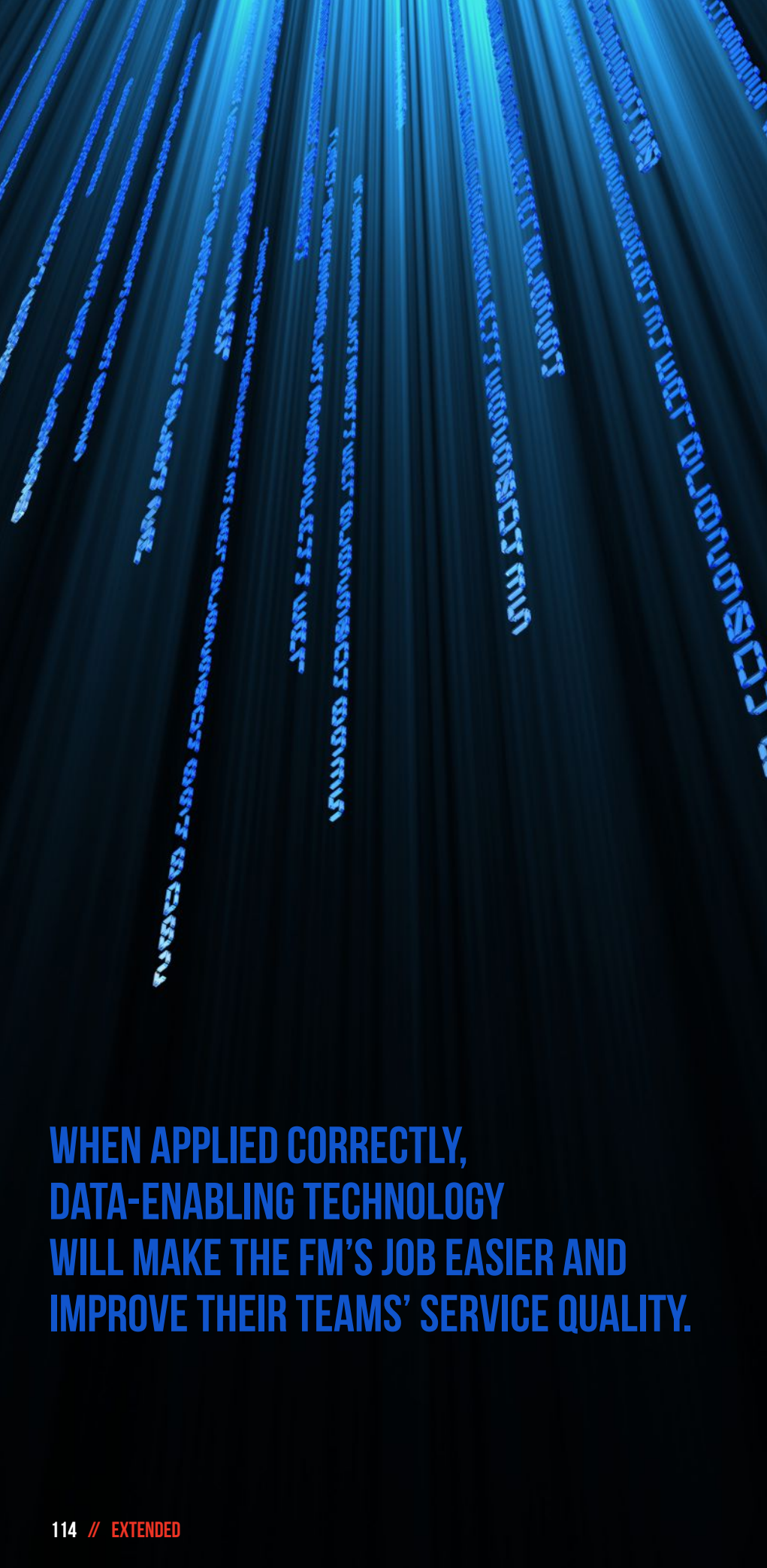
Consider space management. Until now, the trend has been to use open spaces to foster collaboration, and recreation and foodservice areas to build culture, attract employees, and keep them on-site. The number and location of building occupants were relatively stable. Changes in space allocation didn't happen often and were primarily driven by major

moves and headcount additions. Now, however, with physical distancing mandates, and the number of people working from home or the office on any given day in flux, space management is more complex and crucial. It requires real-time, highly accurate occupancy and traffic data. More frequent data gathering and analysis is a must.

This same data also impacts a wide variety of other engineering and janitorial services, all of which will require constant monitoring and tuning. Everything from trash and recycling removal, to asset maintenance and replacement plans, to lighting, cleaning, and disinfecting, is affected.

Costs are also impacted. Data-driven FMs have a significant advantage when it comes to planning and managing budgets. This is especially true in today's environment. Having real-time data enables better planning for different occupancy and traffic scenarios and the services and supplies impacted by them. For instance, in the past, using MERV 8 filters in HVAC systems may have been sufficient. With potentially contaminated air streams, moving to more costly MERV 13 or even MERV 18 for more stringent filtration should be considered. Additionally, more advanced technology may be required, such as ultraviolet germicidal irradiation (UVGI) or bipolar ionization.

FMs must also look more closely than ever at labor requirements—both internal and outsourced. By tapping into accurate asset management data and integrating



**WHEN APPLIED CORRECTLY,
DATA-ENABLING TECHNOLOGY
WILL MAKE THE FM'S JOB EASIER AND
IMPROVE THEIR TEAMS' SERVICE QUALITY.**

information about training, administrative, and vacation hours, they can perform comprehensive labor needs analyses for various scenarios, determine respective costs, and adjust priorities or build business cases, as appropriate.

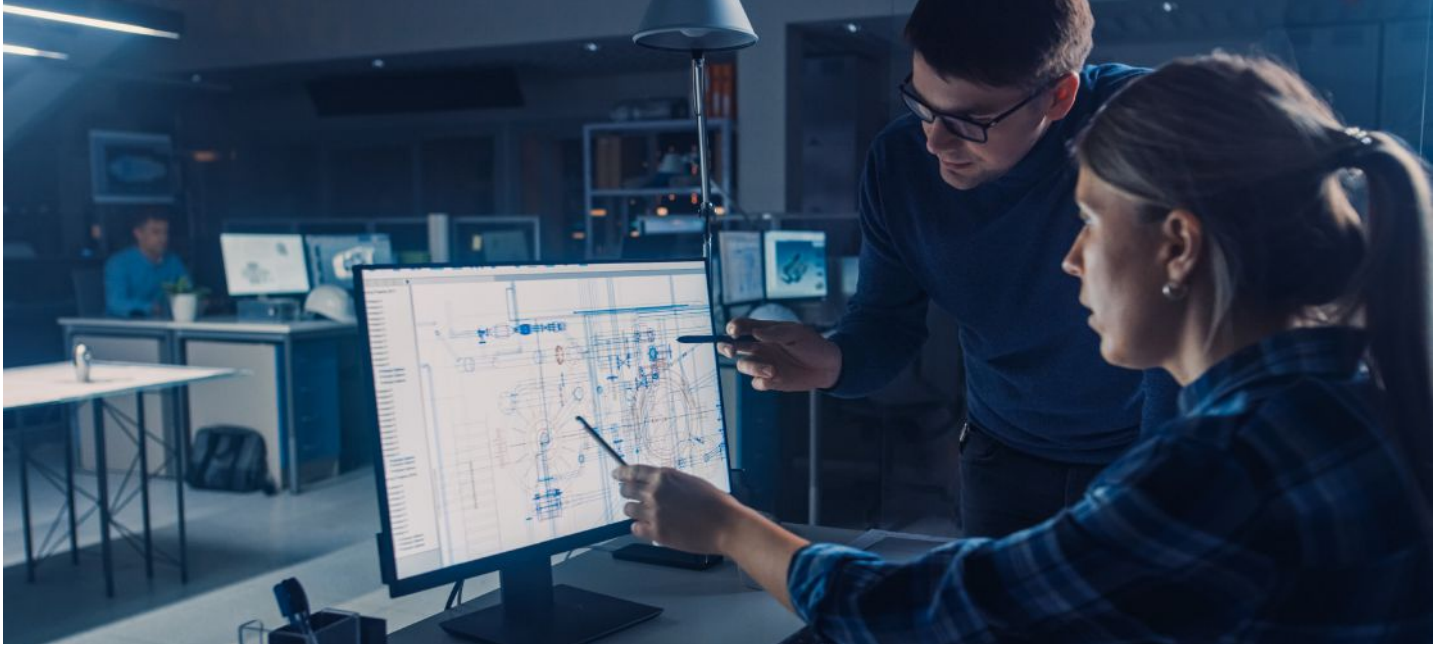
These days, most FMs rely on outsourced providers because they don't have the time or internal resources to effectively handle everything. If service providers are part of an organization's strategy, it's imperative to be mindful of how proprietary data is shared. Service providers need access to their client's enterprise asset management, real estate, occupancy, traffic, safety, and other data in order to plan and deliver quality services. FMs should take care to work with trusted service providers whose culture and goals are aligned with theirs. It's important to feel confident that the providers can secure and protect any data they access and will use it prudently.

LASTLY: TECHNOLOGY

Many people are surprised that technology is last on the list. This is not because it's not important. Technology is the glue that holds the data-driven world together. Using the right technologies will make or break the ability to gather meaningful data and draw valuable insights. It will also influence whether stakeholders leverage the technologies for decision-making purposes. Without first defining what to accomplish and which types of data to collect and analyze, trying to choose best-fit technologies can be an exercise in futility.

Some FMs are concerned that adopting new technologies will complicate their work because of the changes required and the knowledge that they need to gain. However, when applied correctly, data-enabling technology will make the FM's job easier and improve their teams' service quality.

Best practice is to collaborate with their service providers in driving a technology roadmap and data management strategy that meet the company's business strategies, cost management parameters, and long-term performance metrics.



FMs must consider several data-driven technologies

- **SENSORS** are the main tool for gathering data on occupancy, traffic, environmental conditions, and supply usage. Because they are no longer expensive, they can be installed in many places; their data can be used for a wide range of purposes, such as operating automated window shades, tracking refill points for soap and hand sanitizer dispensers, adjusting lighting levels in rooms, hallways and garages, determining how much tonnage to run in HVAC systems, where assets are in their lifecycles, and the type and frequency of janitorial services needed.
- **MOBILITY TECHNOLOGIES** make it easy to efficiently collect and leverage electronic data for tasks such as work order management. Technicians can obtain electric, gas, and water meter readings by scanning asset QR codes with smartphones during their rounds. By pulling that plant log data into an analytic platform, managers can see usage levels, anticipate when repairs may be needed, and take steps to proactively prevent equipment breakdowns.
- **DATA MANAGEMENT TOOLS** help filter through the deluge of data generated and identify which data is needed to manage performance and metrics. These tools immediately alert appropriate stakeholders to urgent issues and instances where KPIs aren't being met. Some solutions such as provide simple data visualization dashboards that make it easy to share and report on facility services performance.
- **CLOUD-BASED SOLUTIONS** are replacing paper. With asset management, work orders, and data from facial recognition clocks and other sources stored in the cloud instead of file cabinets, information is much more accessible and useable. It's also much easier to integrate with other systems and much less prone to the errors inherent with paperwork. Whichever cloud solution vendors facility managers choose, it's critical that the facility—and not the vendors—owns the data. The use of cloud-based solutions mitigates the risk of lost data and the need to manually re-enter data.
- **AI SYSTEMS** involve applying the right business rules, exceptions, and trend management for predictive data analysis. When used in conjunction with sensors, AI enables FMS and their service providers to gain the insights needed to make critical decisions. The information generated from AI feeds the data management and reporting solutions that stakeholders use to optimize services and contain costs.

Facility management is changing fast. To be successful in this often-unpredictable industry, FMs must be as data-driven as possible. When they have the right data at their fingertips and know how to use it, managers can deliver high-quality facility services with greater efficiency and within budget. They can stay ahead of the curve by more accurately predicting and meeting business needs, better managing vendors, and more easily scaling, course correcting, justifying, and evolving facility services practices. **FMI**



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Jeff Peterson has more than 30 years of management experience. He has helped propel UG2 to be one of the fastest growing facilities services organizations in North America. Jeff began his career at Arthur Andersen & Co. in 1981 and held several managerial positions during his 17-year tenure. He later joined UNICCO Service Company in 1998 and advanced in his career to become CIO of DTZ. Peterson managed global technology infrastructure and support services as well as the client-facing solutions team. Since 2013, he has been with UG2 and is the Senior Vice President of Strategy and Innovation.

Supply & Demand



Smart Strategies for the HR Side of Supply Chains

BY JEFF ST. GEORGE

Before COVID-19, some business sectors faced increasing demands coupled with a labor shortage. The pandemic has tilted that dynamic for logistics and warehousing, with skyrocketing demand for home delivery and a surge in available labor, as other sectors suffer slowdowns. That tilt forced human resources professionals to adapt quickly. With proactive strategies to meet talent, training and scheduling challenges, teams are optimizing operations in an era of fluctuating demands.

Start with the Right People

There is emphasis on handling the physical aspects of logistics, and responses to COVID-19 will likely add physical challenges to the job, including new personal protective equipment or steps added for health and safety protocols. But the real job is much more than moving boxes. Today's facilities are high-pressure environments that need great communicators and problem-solvers.

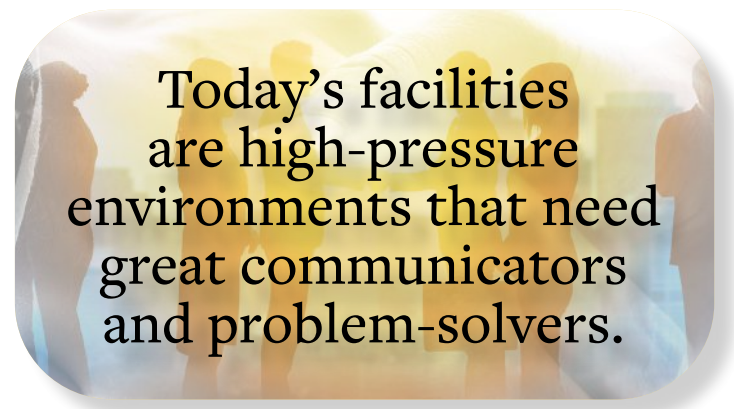
A single error can force delays or even shutdowns. It is important to have associates in place who can thrive under that pressure, who know how to adapt and help others adapt. Team members need to be able to ride the waves of overtime and downtime, work with changing technology, and step into new processes efficiently. Focusing on soft skills during recruitment helps build a resilient and productive team.

Make It Easy for Them to Apply

An easy application process may not seem like a priority, but with so many hiring decisions to make, easier applications should speed better applicants to an FM team and make sorting and finding qualified candidates easier.

In their study of 12 million users, Glassdoor found that 56 percent of jobseekers with at least a high school education used mobile phones to search for jobs. The logistics and retail sectors were the second- and third-most common industries to attract mobile job seekers. Mobile applicants, however, are more likely to have trouble with the application process, resulting in 53 percent fewer completions than desktop users.¹

That reduces the applicant pool and slows down the candidate evaluation process. A mobile-friendly applicant tracking system (ATS) enables an organization to capture attention quickly, simplify applications and expedite evaluations.





Take a Proactive Approach to Finding Talent

The most efficient recruitment process is still a process, taking hours and energy from the other parts of the talent management equation. This is where a facility solutions partner can be extremely valuable. Their recruitment teams already handle multiple job types, from janitorial to engineering experts. They can help build a database of qualified candidates for distribution and logistics positions. This helps you dedicate human resources teams to specialized roles that are more critical to an organization's core business.

Another approach is to partner with education programs that provide an alternative career path to young people who are not on the college track. Reach out to local schools to see if they work with employers to help place skilled graduates.

Healthy Spaces for Healthy Teams

Once the right people are in place, the organization needs to keep them. Employee turnover in this sector is high, as nearly one-third of companies reported employee churn between 10 and 25 percent per year (according to ARC Advisory Group²). A strong company culture will prioritize well-being to support their employee engagement efforts.

As part of a COVID-19 response, associates will want to know their workspaces are being cleaned and disinfected. From both a service and internal communications standpoint, clear protocols will help your team understand and trust the actions taken to protect them.

Employees are also more conscious than ever of health and safety issues like indoor air quality. In facilities where work is repetitive, it is easy for associates to focus on worries or disconnect from the positive impact they can have on productivity. It takes consistent effort to keep employees engaged. For instance, Gallup found that companies that invest in employee development are twice as likely to retain their associates.³

One way to promote employee development is with a strong feedback and evaluation process. Start by setting and communicating realistic performance goals. Make it clear how employees can contribute and grow and communicate progress on those goals regularly.

Feedback Goes Both Ways

The feedback process helps employees improve. Getting feedback from employees also helps solve problems. Associates on the floor can keep the team and its connected to key details. Employees in the thick of it, so to speak, can offer solutions that management may not think of without their input.

The experiences and ideas from associates are resources, so feedback and evaluation processes should make capturing that information a priority. And if associates feel heard, they are more likely to be invested in a process they feel a part of, improving engagement, retention, and productivity.

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Stay Connected

Another key component of an engaged and effective workforce is internal communications. With around-the-clock schedules that fluctuate with demand (and supply issues, too), associates can feel boxed into their roles, disconnected from you're the company's total success story. Technology can help them feel that they are a part of a thriving team. With social distancing and safety rules restricting workplace interactions, internal communications will be more important than ever.

An employee intranet can act as a hub for company news, employee recognition efforts, and important changes, to make it easy for everyone to feel informed and connected. The rise of smartphones (and the fact that some workers may not have broadband internet access at home) means that a mobile-friendly company intranet will help drive more interaction with internal communications.



Provide a Path for Growth

If an employee feels capped in their growth, they are more likely to leave. A rise in unemployment does not change the fact that talent is key, which includes the organization's time and effort finding and investing in that talent. They have developed key skills in their time with you that make a difference to you're the bottom line. To keep talent engaged, it is more important now than ever for people to feel there is a future.

If today's janitor can rise to be tomorrow's supervisor, then employees are more likely to stay engaged. This is why feedback and performance evaluations are so critical. When leaders give associates an opportunity to shine and be recognized, they'll be more likely to stay with the company or refer people they know.

Unique Strategies to Maximize Current Resources

Since the COVID-19 outbreak, logistics and warehousing have had to prepare for both increasing demand and possible surges in sick leave. Expanding the available labor pool through a facility service provider can help prepare for both.

Cross-training and cross-utilization can also be big factors in efficient, flexible work scheduling. Being able to shift from bundling boxes to changing a light bulb can be a great advantage. While there are many strategies for taking the pressure off HR teams and keeping productivity high, consider what an experienced service partner can provide, including a pre-vetted labor pool, flex-staffing resources, and cross-training expertise. FMJ

1. <https://www.glassdoor.com/research/app/uploads/sites/2/2019/06/Mobile-Job-Search-1.pdf>
2. <https://www.dcvelocity.com/articles/29021-nine-ways-to-boost-warehouse-performance-and-cut-turnover>
3. <https://www.gallup.com/workplace/311099/companies-getting-wrong-employee-development.aspx>



Jeff St. George is director of sales for ABM. He has 15 years of experience designing customized integrated facilities services solutions for clients across multiple industries. St. George has spent six years focusing on retail distribution clients.



Park(ing) and Restoration

PREPARING THE LOT FOR
A RETURNING WORKFORCE

BY BOB LESTER

The COVID-19 pandemic is changing virtually every aspect of life, work and play. Busy business, retail and entertainment centers suddenly experienced indefinite closures for public safety.

In the northern hemisphere, spring signals seasonal workers to make exterior facility repairs to windows, roofing, siding, and paving. But with government-mandated closures this year for non-essential businesses, the timeline for ensuring facilities are functional looks much different for many operators. This includes parking lots.

During the winter months, parking lots and driveways were likely a few of the items hit most heavily. Most people think a mild winter means that parking lots will have less damage, but the opposite is actually true. A mild winter with fluctuating temperatures means that the pavement is expanding and contracting at an increased rate, creating more cracks and potholes as spring approaches.

Once potholes are introduced to the surface, they can continue to “open up” as they sit for prolonged periods of time, meaning that the inside walls gradually chip away as they are perpetually exposed to the elements and vehicle traffic. Couple that with the fact that much of the damage has been sitting idle since mid-March, and operators could have substantial issues to address when it comes to lot repairs.

This creates a paradox for many FMs following the COVID-19 outbreak. With many companies feeling the financial crunch following the loss of revenue as a result of the pandemic, maintenance must be essential to be considered for this year’s budget. However, businesses also must be mindful of safety regulations as they prepare for reopening.

Understanding the different types of parking lot repairs. The good news is that parking lot and driveway repairs don’t always have to be a complete repave. It is important to know all the options available when it comes to repair methods can ensure the project comes in below budget where repaving is concerned.

Knowing the different types of repairs for various levels of damage will allow FMs to make sure their sites are safe for reopening without investing a huge chunk of the operating budget in repairs. It will allow the FM team to have a well-educated conversation with a paving professional, and it can help map out a more long-term strategy as needed.

GENERALLY SPEAKING, THERE ARE FIVE LEVELS OF REPAIRS:

1	2	3	4	5
CRACK SEALING: The least extensive repair, which involves filling small cracks (less than one-fourth of an inch wide) with a liquid filler.	SEAL COATING: If several cracks have already been filled, seal coating protects the vulnerable points in your lot from the elements. This process is ideally done every 2-4 years after initial crack sealing.	RESURFACING: This involves adding a new layer of asphalt on top of the existing lot's surface. Ideally, it can add about 10 years to the lifespan of the lot and is more affordable than a total replacement.	MILLING AND RESURFACING: Removing the first layer of asphalt and replacing the surface directly underneath it, which can be a costly repair, but it will extensively prolong the life of your lot.	FULL LOT REPLACEMENT: Lots typically only need to be completely replaced when 25 percent or more of the surface is damaged. Because this is the most extensive measure, it is generally only utilized when there are structural issues below the surface level of the lot.



Auditing the parking lot for damage.

Understanding the different levels of repairs ensures that the FM team is armed with the information needed to perform a site audit. How quickly and efficiently they're able to assess and address the issues will be the key to resuming operations safely, which is the key for survival across every sector, from education to transportation to retail to healthcare.

Before connecting with any outside paving professionals, the FM team should assess existing damage to lots, which will provide them with the information they need to set realistic expectations with the paving contractors.

Looking for items like potholes, cracks, and rutting — which is when the pavement shows grooves from wear and tear — is a good place to start an audit. While recording these damages, keep two elements in mind: the quantitative level of damage and the severity of damage.

The quantitative level of damage has to do with the number of issues you're the parking lot has. The FM team should calculate the number of potholes that need to be filled, the number of cracks that need to be sealed, and the number of spots showing signs of rutting. Having numbers ready will allow for a paving company to quickly provide a personalized, realistic estimate for repairs.

While accounting for the number of issues, they should also keep in mind the severity of damage. For example, a pothole that is several feet wide is generally more concerning than several small potholes and may cause structural damage to the lot that would require a complete repave. As the team notes the severity of each is-

sue in the lot, it will allow honest discussion with the paving contractor about the types of repairs needed versus the available budget.

Once the damage is assessed and the types of repairs are identified, contact a few different paving contractors for quotes. The sooner the call, the more likely the repairs will be completed on schedule.

Many businesses are beginning to reopen, so consider that many of them have un-addressed damage and will also contact pavement contractors. Prioritizing repairs that need third-party operators first is a smart move.

Make sure to consider an ongoing maintenance plan. While some businesses will have pressing repair needs in the midst of their reopening schedule, others may be able to get by without investing much in their parking lot.

However, just because a parking lot is not compromised this year does not mean it will not need maintenance now to prevent long-term issues. Putting a plan in place for ongoing maintenance can help avoid costly repairs in the immediate future. Most businesses that took precautionary measures last year are finding themselves in a much better position to reopen quickly, safely, and affordably.

If there are no immediate needs for the lots or driveways, considering a quick seal coat is a great way to preserve its lifespan. The seal coat will freshen up the lot, showing customers that the FM team takes pride in their business and safety. It will also allow the parking lot to be prepared for any reopening timeline.

Empty parking lots are also a great time to consider other upgrades if there is room

in the budget. While lots are still empty, a restripe of the parking lines is a quick project for companies that don't have to reserve funds for heavier repairs.

After partnering with a trusted paving contractor, they'll be able to help create a plan to preserve the lot's lifespan.

Getting on a yearly plan with a quality contractor ensures the facility's parking lots and driveways are taken care of in the most financially efficient way, allowing FMs to focus on their organization's needs.

Normally, FMs should budget for larger restorations every 10 years, with total repaves typically happening every 15-20 years depending on how well the lot is maintained. By cleaning asphalt to remove debris, fuel, and oil each month with a pavement-specific cleaning agent and annually sealing and coating the surface, the parking lot can have a longer lifespan. Addressing damage as it happens also helps preserve its longevity.

Having an ongoing maintenance plan in place ensures that if another crisis situation arises in the coming decades, the FM team will be prepared to weather the storm long-term. **FMJ**



Bob Lester is president and CEO of Dura-Seal, a sealcoating, asphalt, and concrete services company. He has worked in the paving industry for over 20 years, leading two buyouts, an acquisition, and the sale of an equipment manufacturing company at Dura-Seal. Prior to joining the company, Lester studied business finance at Otterbein University.



REENTRY ESSENTIALS:

Focus Areas to Support Reopening Facilities

BY JAMES JUNKIN



After months of full or partial facility closures and adaptive measures that pushed the limits of remote working, organizations across industries are turning their attention to reopening for business. For many leaders, orchestrating the return to work during an ongoing pandemic is more complex than the shutdown, especially for companies that rely on a disparate and dynamic workforce of contractors and suppliers.

Organizations must not only prepare the workplace to reduce the spread of COVID-19, but must also establish or revise infectious disease policies and adjust a host of standard operating procedures to reflect new health and safety risks — which are likely here for the long term. Employees and contractors will require awareness and procedural training for new hazards, as well as retraining and ongoing support to maintain their skills and required competencies. Employers must be able to demonstrate compliance with these new policies and additional internal and external protocols, as there will be much to plan and more that will need to be tracked and documented.

The corporate executives and facility managers charged with ramping up workplace operations are under pressure to do it right, and they know the stakes are

high: Tasks allowed to fall through the cracks and deviations from new or established procedures may expose workers to life-threatening dangers and subject companies to liabilities and lost opportunities.

FUNDAMENTAL QUESTIONS

Overseeing reopening does not need to be overwhelming but will require an organized approach to coordinate many working parts. Companies that develop a holistic plan for reentry will be better prepared to maintain safety and business continuity and positioned to ramp up with confidence and at pace.

This big-picture planning requires the organization to address two fundamental questions:

1. What new policies and procedures are in place to protect employees and contract workers from infectious diseases?

Many firms will have already taken steps to ensure a safe and healthy work environment in a new era of communicable disease risks. The company's reopening plan should document these measures and any the company intends to implement before workers return. The plan can be used as a central repository of all preparations for the move forward, which may include new sanitation methods and schedules, the use of physical barriers between workstations, or adjustments to building ventilation systems.

Looking beyond the infectious disease policy, the reentry plan should include any alterations or additions to prior standard operating procedures, training and support. Spell out credentialing and verification requirements associated with reentry and future operations, including those for contractors.

2. Has the organization communicated these policies and procedures, and what systems are in place to enable and enforce them?

When workers begin returning to offices, processing centers, manufacturing plants and even open-air sites, all stakeholders must be clear on new expectations and how they should comply. Corporations must demonstrate command and

control of new SOPs. These policies must also be communicated to facility visitors including vendors. Companies should verify their understanding and ability to comply with the new policies and procedures.

Along with establishing reliable communication channels with workers, contractors and vendors, companies must identify reliable information sources related to COVID-19 and future health threats. Errant information on the virus and effective response measures are prevalent, and employers need to articulate infectious disease policies across a broad spectrum of workers. Conveying the most reliable information related to unique business operations and through multiple locations is critical.

IMPLEMENTATION CONSIDERATIONS

As reentry accelerates under the holistic plan, attention to the following key areas will help to improve the well-being of the company's workforce and their work:

Revisit training offerings. Returning workers may need to catch up on job-specific instruction programs or other requirements to reinstate certifications that may have lapsed during the months of sheltering in place. Managers should plan for the potential backlog of team members due for all manner of courses and should determine how any expected delays will affect operations.

The organization may choose to offer courses that address specific post-pandemic issues. A disease awareness program, for example, should outline facts from reputable sources, proactive prevention measures and appropriate behavior. This will provide companies peace of mind that their workforces understand the severity of the virus and its effects, can identify symptoms, take precautionary steps, and respond correctly if they or a coworker become ill.

On a related point, organizations may want to include behavior-based safety to their instruction programs. The heightened emotion and stress that many workers experienced in recent months may



impact their behavior in the workplace, affecting the safety of themselves and those around them. Including behavior-based safety with standardized disease awareness training emphasizes to workers how their attitude affects their behavior and how it has larger consequences on a company and its entire workforce.

Provide enforcement tools. Effectively administering new standard operating procedures requires a significant investment of time, people and systems. Building a framework and charting a course for implementation is vital.

Systems that track the completion of these tasks help individuals and teams to demonstrate compliance with government regulations, internal and client policies, health and safety requirements, contractual obligations, and standards for licensing and industry certifications. As businesses return to the workplace, that list is expanding to document the successful completion of disease-control protocols such as sanitation schedules and individual health screening information.

Regularly review — and adapt. Commit to monitor standard operating procedures and identify opportunities for improvement. Adopting a consistent approach for processing crucial insights and rolling out adjustments will minimize the confusion and disruption that can accompany changes, making it easier for the organization to enhance safety by applying lessons learned.

With the right tools, managers can know which employees and contractors are authorized to perform tasks, enter restricted areas or step into other specialized roles.

Doing so helps them to avoid exposing people, facilities and their company to legal and financial liabilities, health risks and other undesirable consequences.

By applying credentialing and verification systems to their reentry strategies, companies are able to protect their workforces as regulations evolve, documenting their awareness and understanding at any given point in time. Comprehensive tracking and verification as firms return to the workplace affords them a safe, precautionary route to continued business operations. FMJ



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Consider This

Adapting to change while reopening

BY BOB JAMES & MICHAEL HALLIGAN

The term “new normal” is everywhere, but what does it mean? What will it look like?

Some business owners eager to reopen are working to figure it out as they go. Yet, local authorities will expect a thorough plan that explains how businesses will address the new normal, according to various guidance documents emerging from the states. To craft a successful plan to reoccupy a building, particularly hotels and resorts, an organization must do more than simply bring back employees and open the door to guests — it must also help ensure safe and healthy environments.

Preopening assessments

The process to reoccupy a building starts well in advance of reopening day. Businesses that have been closed or have had equipment shut down for an extended time period may be required to undergo a health department reinspection. Equipment must be checked to verify that it is functioning properly, certifications and ongoing maintenance is current and there has been no vermin activity. An accredited third-party expert can help to determine that there are no issues.

One initial step is to review building operating status during building partial or full closure, such as vacancies, heating and cooling schedules and set points. For example, water systems need to be flushed and tested, as they can have quality issues and can cause major health issues such as Legionnaires' disease. In addition, both potable cold and hot water systems must be flushed and tested for quality. Potable water samples need to be collected to characterize post flush water quality. Hot water temperatures should be sampled at the point of use. Swimming pools and hot tubs also need to be tested for bacterial and chemical agents, and Legionella testing of water towers is recommended.

Ventilation assessments can determine if an issue, such as mold, has developed. The assessments will also determine if building systems are operating properly and providing adequate outside air for potential infection control. If the building requires additional air capacity, be aware that increasing air flow can affect the efficacy

of opening and closing fire doors. Increasing air movement will pressurize corridors and stairs, potentially in violation of the life safety code of the National Fire Protection Association (NFPA). While adjusting HVAC levels, adding different types of filters or closing off vents, be sure to test that the fire protection system is not impacted.

With low occupancy, a limited number of eyes have been in the building to provide reports of leaks and hygiene issues surrounding sinks, showers, toilets, kitchens, fountains, water coolers, refrigerators, janitor's closets, accessible pipe chases and decorative indoor plant containers. These areas can all harbor mold and have fungal issues. Outside water may have leaked through walls, windows, vents, and roof membranes without notice, so they must be checked to reduce mold and building damage. FM teams may want to perform visual and infrared inspection of representative available surfaces for leaks/mold (ventilation, filtration, and hygiene). An indoor air quality assessment, with emphasis on volatile organic compounds, is a smart investment.

Most buildings now have increased frequency and thoroughness of cleaning standard operating procedures. It's important to assess the use of any new/proposed cleaning products in rotation and review janitorial procedures and protocols, including environmental, health, and safety considerations. New and returning staff should be trained well and provided with appropriate personal protective equipment (PPE).

...an organization must do more than simply bring back employees and open the door to guests — it must also help ensure safe and healthy environments.

Keeping the business open

The process of keeping a hotel or resort in business is far from static. It requires substantial effort as employees return and more guests are in the facility.

The first step is to know what limitations are ahead. Regulatory guidance can vary from one jurisdiction to another and can change over time, so it's crucial to obtain reliable information from local, state and federal regulatory bodies. If possible, consider joining or

participating in a workgroup that helps set the guidelines and the site SOPs. This will allow opportunities to provide important input, help shape a location's response and provide early notification about potential changes.

The second step is to understand how and when employees interact with guests and with each other. Close interpersonal interaction is no longer recommended. Is it possible to alter the business model to reduce staff interactions? If not, what new physical changes need to occur? Consider adding PPE requirements, physical controls (such as temporary walls or shields) and changing SOPs. The organization or location may also need to limit the number of guests to a prescribed percentage of maximum building occupancy, limit the number in the elevators, and adjust the flow direction of entrances and exits.

In most countries, employers are obligated, legally and ethically, to provide safe and healthy workplaces. The stakes are high for staff; social distancing keeps them away from colleagues and guests who could potentially be carriers. The stakes are also high for continued operations. A single employee who tests positive in a facility without social distancing may cause the quarantine of all colleagues who were within six feet for more than 10 minutes over the two previous days. That can disrupt all the progress a team made in reoccupying.

Third, it is important to understand infection control. Frequent handwashing for all is one of the most important steps to help prevent the spread of illnesses. For critical employees who touch food, increasing handwashing frequency can also help prevent the transmission of other types of illnesses beyond respiratory viruses. Employees should take care to wash their hands before donning gloves for any food preparation, after touching exposed skin, after handling soiled utensils, and after engaging in any other activities that could soil hands. All employees should be encouraged to wash and sanitize their hands frequently.

Businesses would be making a mistake, however, if they simply install hand sanitizing stations and call it a day. Sanitizer, with 60 percent or more alcohol content, helps protect from infection but is also highly flammable. The NFPA specifies that sanitizer dispensers may not be installed in exits, over ignition sources, or over carpeted floors in rooms without sprinklers. They must be separated by not less than 48 inches and are limited in their liquid capacity. Adhering to these rules can prevent increasing fire risk.

Finally, facility sanitization is an essential aspect in preventing the spread of illnesses. When approved sanitizers run low, however, some people turn to chlorine sanitizing agents such as unscented bleach. Bleach can be a highly effective sanitizer, but it can also be potentially hazardous when misused, specifically, when mixed with other cleaning products that contain ammonia, it creates a highly toxic chlorine gas. The cleaning staff needs proper training on how to mix and use cleaning solutions, use the appropriate PPE, such as wearing gloves or a protective outer garment, and to provide appropriate ventilation in rooms where sanitizers are mixed and stored.

As regulations change, it is important for business owners to adapt and find trusted partners. There will be fluctuations in tightening and relaxing government requirements and recommendations depending on conditions. The floor spacing on one day might not be the layout for the next day. FMs also need to be engaged, learning best practices from others, or create them in house. Voicing concerns to regulators can help drive the conversation and improve the business ecosystem so other businesses can thrive too. FM teams may also need to draw on their creativity, relying on new models for the way they do business. Most of all, the FM team will need to be visible. Customers — and staff — are looking for reassurance. To regain confidence in business, seeing the extra effort put into safety can help reinforce their comfort level.

There is no new normal, other than constant change. Companies that develop the flexibility necessary to anticipate and adapt will be best positioned for whatever the future holds. **FMJ**



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SMART

BUILDINGS:

Leadership, Data and Accountability

BY BILL MOTEN



SMART

In January of 2020, the adoption of a smart building was not imperative for many building owners. Barriers existed, and time and time again, the adoption of a smart building was not technological; it was cultural. Within a few months, facilities managers are managing through unprecedented times, and the industry inflection point is here. Similar to the War on Talent¹ when a Human Resource Manager became a Chief People Officer and employees became the most significant asset, technology-advanced built environments and the FMs that run them, are at the forefront of organizational performance. Like how HR mastered workforce analytics, facility teams need to understand the building data available to them to support their strategic planning and technology implementations and hold their teams and the organization accountable.

Before COVID-19, a smart building was generally defined as an integrated set of technology, systems, and infrastructure to optimize building performance and occupant experience. This definition has not changed. The foundation is 100 percent valid. What has significantly changed is the prioritization of what building technologies are vital for an organization to succeed and the integration of these systems. Organizational leadership expected a slow rise to smart buildings. The trajectory has shifted, and to realize the benefits and long-term value of a building, FMs must lead the organization beyond the installation of random, siloed technologies. Smart buildings require an integrated, organizational-wide adoption and deployment model with data aggregation, reporting, and analytics at the front-line of decision-making.

Reporting Data Now and In the Future

As occupants arrive back to facilities and spend hours learning, working, living, and collaborating, people, building, and organizational-based reports are essential. Access to the data, in many instances, on-demand, is the defining moment of truth for

facilities managers as requests come hard and fast.

Those already deep into reopening plans know that requests will be ever-changing, exposure to building systems and their operations vast. Sample reporting includes current and past information on the building(s):

- >> OCCUPANCY
- >> OCCUPANT HEALTH AND WELLNESS
- >> BUILDING PERFORMANCE SUCH AS AIR QUALITY INCLUDING CO2 AND HUMIDITY
- >> WEATHER
- >> CLEANING AND DISINFECTION

The previous examples also include alerts and notifications of occupancy breaches, health issues, and more. The data is sent to personal devices, digital signage, websites, and used by communications professionals on employee and visitor messages to keep them calm and informed and better an organization's reputation.

The longer tail for FMs to address is the data that will be needed to support responses to building insights gathering such as employee engagement studies, visitor feedback polls, and patient satisfaction surveys. Identifying issues and trends will require data to either prove misinformation or implement critical changes to building systems. Once findings are shared, FMs must be visible and communicate with stakeholders using available data to hold themselves and the organization accountable.

Systems Integration & Data Aggregation

Accessing data with a click of a button to support the reporting is not reality. It took years for finance leaders to "easily" provide gross margin reports or the inventory at distribution facilities. Organizations had to implement the right software and hardware systems that could integrate and efficiently provide the manufacturing, supply chain, distribution, and sales data. For smart buildings, selecting the right technology cannot be done in isolation either. The use of systems thinking is needed to understand the relationship and opportunities that exist with building technologies. By using systems thinking, FM can better predict outcomes and ensure the built environment is safe, efficient, cost-effective, and has a lower environmental impact. Great building technology exists today, and powerful innovations will continue to come to the market to transform the industry. With data in mind, the following are a top list of considerations.

BUILDINGS:

- >> WHAT TECHNOLOGY CURRENTLY EXISTS IN THE BUILDING THAT CAN WORK FOR TODAY AND FUTURE REQUIREMENTS?
- >> CAN THE EXISTING BUILDING TECHNOLOGY INFRASTRUCTURE SUPPORT CURRENT AND FUTURE NEEDS? (POE, wireless, structured cabling, etc.)
- >> DOES THE SYSTEM VENDOR HAVE A PATH TO INTEROPERABILITY?
- >> CAN NEW TECHNOLOGY SUPPORT FUTURE REQUIREMENTS?
- >> ARE THERE AESTHETIC ISSUES OR NON-INTRUSIVE ATTRIBUTES TO CONSIDER?
- >> HOW IS CYBERSECURITY ADDRESSED TO MEET INFORMATION TECHNOLOGY STANDARDS?

Using the systems thinking approach, FMs will also begin to see how building systems work together as an interconnected ecosystem. It's a good reminder when presented with cool technology not to evaluate it for its single usage, consider its ability to participate, and improve the power of the building's technology ecosystem.

Like the CFO, the gross margin does not magically appear. Data aggregation brings all the data from disparate sources into a central point for analysis. Buildings have a lot of available data today. As smarter, more advanced technologies are implemented and effectively used, more data will be available. However, FMs must ensure they have the correct data in a consistent, integrated format to make informed decisions and present the data in a meaningful way. The integration of systems and the mapping of data is imperative.

By 2025, nearly 30 percent of the data generated will be consumed in real-time — think autonomous vehicles. With this example alone, ponder how critical it is for the data to be flawless, informing a driverless car. Today, the availability and aggregation of occupancy and air quality data are as crucial.

The chosen building technologies must have open protocols or an Application Programming Interface (API). API is a set of functions and procedures allowing the creation of applications or reports that access the features or data of an operating system, application, or another service. API

is not building technology specific. APIs, a technology standard, enable CFOs to track inventory and doctors to receive cardio readings from patients.


A Machine Learning On-Ramp

Managing a building system implementation during a crisis does have its advantages. In April 2020, McKinsey referenced a European survey citing 70 percent of executives from Austria, Germany, and Switzerland said the pandemic is likely to accelerate the pace of their digital transformation. They further state that the COVID-19 crisis seemingly provides a sudden glimpse into a future world, one in which digital has become central to every interaction, forcing both organizations and individuals further up the adoption curve almost overnight.

When building systems are fully integrated and sharing data, the path to effectively using machine learning and artificial intelligence is not a winding road. Machine learning has been part of technology innovation for quite some time. For smart buildings, having available data for machine learning has been the roadblock. The more building systems can use machine learning, the smarter the entire building ecosystem becomes. The addition of more smart devices, APIs, and external data sources to the building ecosystem allows for greater building autonomy. Build-

ings are fully integrated and connected and become more self-aware, providing leadership with predictive solutions instead of habitual responses.

Once machine learning is established and mature, an organization can start considering Artificial Intelligence (AI), where it makes sense for them. According to Prescriptive Data, AI has been shown to reduce tenant hot and cold complaint calls by 43% and lower utility costs by 21%. AI will enable predictive actions for optimal Building Management System (BMS) performance, occupancy, energy use, peak demand, carbon emissions, and more and support overall health and wellness initiatives that are priority for the foreseeable future.

Even in such uncertain times, a technologically advanced built environment is essential for occupants and building owners. Mastering the use of smart building data for reporting and predictive analytics is also essential for facility leaders to continuously improve occupant experience and building performance. Transformation is happening; the responsibility is more significant than ever before. The available data provides facility leaders what they need to provide insights, build trust, showcase outcomes, and hold their teams and the organization accountable. 



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✓ CHALLENGE ACCEPTED

Building new leaders in the virtual workspace

BY ANDREW MAWSON



Since March, around half of the global workforce has worked from home. For many people, the government-mandated lockdown is their first taste of working away from the office for an extended period.

This sudden but profound change will transform the role of work and how it functions in ways that are not yet fully understood. However, there is clear evidence that leadership methods have to evolve as individuals and organizations adapt to these new conditions.

New research from global workplace management body the Advanced Workplace Institute (AWI), warns that the organizations rapidly embracing the practice of virtual working in response to COVID-19 will risk damaging employee wellbeing and performance if they do not implement dynamic management changes.

Setting the scene

Virtual working had been growing in popularity before the pandemic hit. The International Labour Organization estimates that 260 million people worked from home permanently before the pandemic. Another study by Global Workplace Analytics found that regular home work had increased by 173 percent between 2005 and 2018. Data from Advanced Workplace Associates (the company that leads the AWI) projects prior to the pandemic showed that 50-60 percent employees were interested in working from home for at least two or three days a week.

Yet a great deal of suspicion and skepticism still surrounded the practice. In recent years, Yahoo and IBM hit the headlines when their respective leaders put a stop to remote working. In 2013, Marissa Mayer, then CEO of Yahoo, ordered hundreds of the tech company's remote staffers to return to the office. A memo from Yahoo's HR department while under Mayer's stew-

ardship read: "To become the absolute best place to work, communication and collaboration will be important, so we need to be working side by side. That is why it is critical that we are all present in our offices."

However, the COVID-19 pandemic has forced organizations' hands. To survive the crisis, they've had no choice but to implement home working. Yet something remarkable has happened. For thousands of knowledge-based businesses, home working has worked. Anecdotal evidence from the AWI suggests that most large organizations have adapted well despite early fears about how their teams and systems would deal with the change.

The positive reaction is also evident in just how many organizations have committed to home working in the long term regardless of government guidance. In May, Twitter told its employees that they had permission to stay home forever. Twitter CEO Jack Dorsey said that the "past few months have proven that we can make that work." Away from tech, Groupe PSA, a French car manufacturer, announced a new "era of agility" in which all non-production staff could work remotely from now on.

Groupe PSA said the move would allow the company to reduce its real estate footprint while providing employees with a better work-life balance and easier commutes. A similar sentiment is likely to be now shaping business leaders' decisions all over the world. Organizations aimed to reduce costly real estate, particularly in major Western cities like New York and London, even before the pandemic hit. As a report from the Financial Times last year points out, demand for total office space in the UK capital had shrunk in the

three years leading up to 2020.¹ The only thing stopping them is a deep-seated fear that shifting the emphasis from traditional workplaces to virtual working will not just erode trusted command-and-control methods but damage the organizational fabric itself. The Yahoo memo continues: "Speed and quality are often sacrificed when we work from home. We need to be one Yahoo, and that starts with physically being together."

Much of that fear is justified. The best offices provide occupants with a supportive, rich and always-on environment. They produce a constant flow of social information about the people and organizations that occupy them. Employees and leaders don't have to work hard to learn from others, share knowledge, understand the business's culture and expectations, and buy into the broader vision.

In contrast, virtual working limits people to viewing and interacting with one another for short periods through video or, worse yet, phone calls. This leaves people to make inferences from the little information they have — the tones of emails, facial expressions, and second-hand information passed on from colleagues — which increases the likelihood of misunderstandings and unintended outcomes.

The science behind virtual teams

With home working so high up on the corporate agenda, the AWI undertook a study this year to build a clearer picture of the factors that impact virtual working and the leadership traits and techniques necessary to manage remote teams. AWI carried out the initial research, 'Managing the Agile Workforce,' in 2015 in partnership with the Center for Evidence-Based Management. The study was what academics refer to as a 'rapid evidence assessment' (REA). By finding the world's best research on the topic, the study was able to identify the factors that make the most significant

difference to the performance of people, teams, and communities that operate in a virtual model. The REA approach examines research on chosen search terms, filters it for relevance, rates it for robustness and bias, and finally produces answers to the researchers' questions. The study was re-run in the spring of 2020, just weeks into the global lockdown, to update the research and capture the latest findings.

The REA revealed that the same factors influence the productivity of office-based workers' productivity and virtual knowledge teams but impact the latter group to a sharper degree. Less face time and immersion in a single physical environment mean that three of these factors — social cohesion, trust and information sharing — are more challenging to maintain on an ongoing basis if team and community performance are to be maintained in a virtualised model.

The six factors include:

1. SOCIAL COHESION

Effective teams depend on camaraderie, bonds of friendship, and the enjoyment of colleagues' company. The better people know one another, the more generous they are with their knowledge and time. Solid social cohesion allows people to build a much clearer picture of skills and expertise within teams, departments or workplace communities.

However, people who work virtually have fewer opportunities to interact or socialize with their colleagues. They also work asynchronously. So, if managers don't act, physical distance can soon turn into psychological distance.

To replace those lost opportunities, leaders need to develop more intentional connections with the tools that they have at their disposal, such as Zoom and other virtual communications tools. This will allow people to maintain those all-important friendships and set the right example.

2. TRUST

Trust is the foundation of social cohesion. When colleagues trust one another,

leaders and the organization at large, it is easier to build relationships, communicate and exchange information without fear of conflict or self-interest getting in the way.

Just as it is with social cohesion, a lack of visibility and immersion between virtual workers threatens to erode trust, increasing the risk of misunderstandings or disagreements if leaders fail to take the necessary steps.

One study from 2016 found that “team trust is most critical for team performance when team members work in a highly interdependent manner, with other members who possess unique skills and have different levels of authority within the team” (De Jong, 2016). So, leaders should use opportunities for virtual socializing to help teams identify each person's skills and capabilities.

3. PERCEIVED SUPERVISORY SUPPORT

A manager's support, including how he or she helps in times of need, offers praise, and recognizes extra effort, can have a huge bearing on an employee's mood, behavior and performance. People who feel the trust and support of their supervisors will feel psychologically safe to take risks without fear of the consequences should they fail or make mistakes.

In a virtual working model, however, supervisors have a similar lack of information about their team's needs and challenges readily available to them. To lead virtual teams successfully, managers need to understand how their people are, if they are coping, what support they need, and whether there are any issues between colleagues. This is especially true during crises like a pandemic, when people may have heightened anxiety, health problems and unique obstacles at home.

As a result, leaders need to replace transactional command-and-control approaches with steps that allow colleagues to share these responsibilities gradually. They need to know their people as people not as resources.

4. INFORMATION SHARING

This factor refers to the extent to which a team utilizes the expertise and knowledge of its individual members for the team's benefit. Trust and supervisory support will encourage colleagues to share information freely.

But, as another study with the REA reveals, “open information sharing facilitates team processes/outcomes that are arguably more challenging to handle in virtual settings but are nonetheless important to team functioning (e.g., cohesion building, cooperation, trust)” (Mesmer Magnus et al, 2011). The reason for this is that virtual teams tend to dedicate less time to problem-solving and sharing.

To help information sharing travel freely through virtual teams, leaders need to identify the appropriate communication channels. Choosing the right media for a task is essential, while managers should encourage team members to consider the style and frequency of communication that works for them.

5. VISION & GOAL CLARITY

Team members need to understand how their efforts contribute to an organization's broader goals. The best outcomes occur when people buy into a shared vision.

However, key management actions like assigning tasks and monitoring workload are more challenging when people work asynchronously. If managers are not clear about goal-setting and do not regularly update team members, feelings of unfairness, confusion and bias can manifest.

Leaders and team members should clarify roles and responsibilities within the virtual teams. They should also set a consistent line of communication to discuss any actions or changes. This will help virtual teams spot potential areas of conflict early.

6. EXTERNAL COMMUNICATION

Effective teams will seek information and resources from people or groups outside of their circle. Doing this opens people up to different ideas and new ways of thinking. But it requires a few elements to fit into place first, including the right connec-

AWI'S 'MANAGING THE VIRTUAL WORKFORCE' RESEARCH UNCOVERED SIX KEY FINDINGS:

tions, the ability to influence others, securing the information they need, and the coordination of everyone's efforts towards a successful outcome.

Virtual working simply adds another degree of separation from that external expertise. Traditionally, people and organizations build relationships in person at events or through face-to-face meetings.

To counteract this loss, leaders need to pay close attention to what their virtual teams need and foster an environment in which people can regularly share their networks, tips and knowledge. This begins by providing managerial support for communication with third parties.

Other factors

In addition to the core six factors, the research identified a number of other elements that affect virtual teams, including availability bias. The employees who are constantly visible to a leader through co-location have greater weight in his or her mind, which can lead to a perception that (all things being equal) they perform better than those working away. Leaders need to recognise this bias and then re-think the information flows and mechanisms that give rise to the understanding of performance.


Personality is another key factor. People who display a high level of agreeableness, conscientiousness and extraversion, as measured by the 'Big Five personality traits,' are more likely to be good virtual workers. People who exhibit these traits have a higher propensity to trust others.

Finally, information richness affects trust. The arrival of good quality, cheap video conferencing applications has played a significant part in enabling trusting relationships. Whereas face-to-face communication provides the ultimate in information richness, a number of studies have found that video to is an effective medium to enable the support of trusting relationships.

COVID-19 has accelerated the notion that the workplace stretches beyond the traditional confines of the physical office.

- > Working apart impacts **TEAM DYNAMICS**, the frequency and quality of communications, levels of consensus and conflict, and the amount and quality of social interaction. All of these elements impact the performance of teams and the outcomes they generate.
- > Successful virtual working requires an understanding of the **DIFFERENCES** that people experience compared with being co-located. To avoid damage to team and community performance, people need to respond to the differences and find alternative ways to operate.
- > Effective virtual teams are determined by the **STRENGTH** of their social and cognitive states — i.e., the degree to which they are socially cohesive, trust one another, operate within a psychologically safe climate and share skills, experience and knowledge freely.
- > While all factors interconnect, trust and communication lie at the **FOUNDATION** of cohesion, supervision, communication, the sharing of skills and knowledge, work relationships and the performance of virtual teams.
- > Trust, social cohesion and information sharing seem to be the most potentially **VULNERABLE TO DAMAGE** when people work virtually and must be consciously understood and actively managed — they can't be left to chance.
- > In virtual teams there is potential for everyone to be a **LEADER** — home-based employees respond well to more transformational management styles. This involves creating a strong team structure, empowering and guiding the team, involving them in the development of group goals and supporting them in actively reflecting on decision-making and outcomes.

However, if virtual working is here to stay, this brings serious challenges for managing the modern workforce. Leaders and workers will have to up their games to make it work in the long term.

The responsibility will fall on leadership teams to create the conditions for growth and direct the knowledge and energy stored within their organizations beyond the pandemic. The old models of management are dying. Business and departmental leaders need new understandings and practices to deliver success in a virtual world. 

¹ <https://www.ft.com/content/f7487f66-50a8-11e9-9c76-bf4a0ce37d49>



Andrew Mawson is the leader of global workplace change consultancy Advanced Workplace Associates and co-author of the IFMA-adopted Workplace Management Framework. From a general management career in the IT industry, his unrelenting curiosity for the transition to new models of work led to the founding of AWA in 1992. Since then, Mawson has worked with some of the world's leading organizations on their journey to explore and implement new forms of working and workplace.

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