Exploring the Current Trends and Future Outlook for Facility Management
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UNDERSTANDING THE FUTURE OF FACILITY MANAGEMENT
In keeping with the International Facility Management Association’s (IFMA) purpose of promoting the facility management profession through education, credentialing, government relations, leadership opportunities, publishing, recognizing excellence, research and standards development, IFMA aims to lead the progress of the profession by identifying facility management future trends, needs and outcomes. To further this goal, IFMA periodically conducts a forecasting workshop to examine the emerging trends and issues that will influence facility management in the coming years.

ABOUT THE STUDY
This study was conducted in two parts:

I. Panelists’ Workshop
A panel of industry experts was invited by IFMA to represent the various industry sectors and constituencies of the facilities management profession. The panelists selected for this year’s retreat represent various areas of interest to facility management today—corporate real estate, government policy, energy, risk management, technology and work space issues. A total of eleven participants attended the forecasting session. The two-day conference was held at IFMA headquarters in Houston, Texas on Sept.15 and 16, 2010.

II. Industry Research
Following the workshop, IFMA conducted a broader industry scan, including literature searches, other IFMA research, and trends gleaned from IFMA members and industry conferences throughout the year. All of this material was then sorted, prioritized and distilled into this document.

THE PANELISTS ATTENDING THE CONFERENCE WERE:
Ken Burkhalter, CFM, The RAND Corporation
Chris Congdon, Steelcase
Ray Dufresne, Vice President, Consulting Services, VFA, Inc.
David Martinez, PhD, Asset Management Business Director, Bureau Veritas
Jim Peck, RPA, FMA, CB Richard Ellis
Jim Pines, Division Chief, Facility Management Group, U.S. Dept. of State
Jim Sinopoli, Principal, Smart Buildings
Virgil Slivka, Senior Vice President, Jones Lang LaSalle
Mike A. Thomson, Business Continuity Program Manager, ImpactWeather, Inc.
Brian Weldy, Vice President, Hospital Corporation of America (HCA)
Rob Zimmerman, Sr. Staff Engineer, Water Conservation Initiatives, Kohler Company

IFMA PARTICIPANTS INCLUDED:
Tony Keane, CAE, President and Chief Executive Officer
Shari Epstein, CAE, Director, Research

The facilitators for this retreat and documentation were:
Kurt Neubek, CFM, FAIA, LEED®AP, Page Southerland Page LLP
Joanna Yaghooti, AIA, LEED®AP, Page Southerland Page LLP
OBJECTIVES
The specific objectives of this forecasting study were to:
1. Provide insights to help IFMA maintain its leadership position regarding the future of the profession;
2. Identify how IFMA can help prepare members for the most relevant issues anticipated in the future;
3. Understand the changes that facility managers will face in the future;
4. Assess what skill sets facility managers will need to stay competitive; and
5. Recommend what facility managers should do to position themselves for changing industry trends in the years ahead.

EXECUTIVE SUMMARY
Globally, the profession of facility management continues to mature and evolve in many facets. Facility managers today are expected to understand their company’s core business and contribute to the bottom line—not only by reducing facility costs, but also by improving the productivity, revenue generating capacity and image of the entire organization. Evolving trends indicate that FM professionals have greater opportunity to add value to their organizations through efficient management, improved technology, and strategic planning.

It is up to the facility management profession to ensure that we are all performing at a level that will meet or exceed these expectations. To help prepare its members and the profession for the future, IFMA periodically conducts a trend forecasting retreat to identify those trends in and out of the profession which will continue to have the greatest impact on facility management.

The 2010 IFMA forecasting retreat highlighted the many challenges and opportunities that await the FM professional in the coming years. Some of the key topics discussed have been identified in previous IFMA forecast reports, and continue to be as relevant today as in the last decade, sometimes with a new emphasis. Though the topics discussed throughout the workshop are interwoven, they have been organized into three categories:

1. Externally-driven trends,
2. Internally-driven trends, and
3. Organizationally-driven trends.

A. EXTERNALLY-DRIVEN TRENDS
Trends which are occurring, in varying degrees, and will continue to have an impact on the profession

1. Sustainability continues to grow in importance and prominence worldwide. Though it has been in the FM lexicon for years, it is now receiving even greater visibility and wider recognition. Organizations have begun to incorporate it into business goals and culture, and many have integrated it into their company strategies. Furthermore, within FM, it has moved from an emphasis primarily for new construction to influencing existing building operations as well. Therefore, sustainability presents a significant opportunity for facility management to maintain its leadership of the topic in any organization.

2. Increasingly complex building systems and controls offer both opportunity and challenge for the profession. FM can leverage new technologies to better conduct short-term and long-term management of facilities, but it also needs to ensure adequate training is in place to educate FM on new systems.

3. Beginning in 2009, many countries were affected by a global economic recession. In most parts of the world, new construction and capital improvement projects slowed significantly and capital funding for facility management grew tight and is expected to remain tight in the near future. At the same time, facility management will continue to face problems stemming from the aging building stock it manages. As facilities and mechanical systems reach and exceed their expected operating lives, significant issues of “repair or replace” must be addressed. The global economic recession compounds the problem of deferred maintenance by causing much greater competition for capital investment once it does return.

4. Facility management also plays a critical role in business continuity after a disrupting event—not only by crafting and implementing the prepared response plan, but also by serving as role models for the organization in emergency preparedness and business continuity.

TERMINOLOGY
Throughout this report, we have used “facility management” (FM) rather than the singular “facility manager” to convey that these challenges and opportunities apply to the entire profession and to the full range of FM professionals within an organization. Also, “organization” is used to mean the parent company, employer or customer of facility management services.
B. INTERNALLY-DRIVEN TRENDS
Trends which derive from within the profession

1. The increasing quantity and complexity of data available to facility management through new reporting protocols poses challenges and opportunities for the profession. More FM organizations have added the expertise to convert raw data into usable and meaningful information that fosters informed decision making.

2. Finding top talent in facility management is gaining greater importance. Recognizing that FM is often not the first choice of today’s new graduates, the profession will need to increase its branding and outreach. Training FM professionals in the wide range of FM topics—from traditional topics to sustainability, commissioning, lean and six sigma—is more important than ever. Fortunately, studies have shown that FM training yields nearly 400 percent return on investment.

3. There is a growing desire to elevate the facility management profession, to improve the recognition and perceived value of FM within the organization. Many have achieved success in this arena through careful alignment with the organization’s mission and by emphasizing FM’s role as managers of significant assets and enablers of the organization’s mission, vision and values.

C. ORGANIZATIONALLY-DRIVEN TRENDS
Trends which derive from the organization and are having, and will continue to have, an impact on the profession

1. More and more organizations have expanded their expectations of FM to include both technical and business acumen, driving the need for an evolving skill set for facility management. While the technical aspects are generally well understood by FM, the increased focus on business acumen will require FM to think and act strategically and to communicate the position of FM in the language of the C-suite (chief executive officer, chief operations officer, chief financial officer, etc).

2. There is a growing recognition that facility management contributes to the health and well-being of building occupants, thereby contributing to their efficiency, productivity and profitability, which lead directly to the organization’s bottom line. Lean management processes can also be utilized to increase the productivity of FM itself, although more education may be needed across the profession on how this may be done.

3. Changing work styles significantly affect both occupant behavior and the vacancy rate of buildings, which impacts how buildings must be operated. FM increasingly faces challenges posed by open work plan arrangements, differing hours of operation and varying occupancy rates and densities, which all have a particular impact on power use and demand for ventilation.

These trends do not stand alone as solitary influences on the profession. Rather, there are strong interconnections across this spectrum of trends. The most successful FM organizations will be those that proactively rise to the challenges before them, leading the way for their organizations and for the FM profession.
FINDINGS AND FORECASTS
The primary drivers identified in the workshop are shown in this section of the document. Each of the trends in these categories is listed with the corresponding demands on FM (the expectations or demands being placed on them) and the learning challenges/opportunities for FM (suggested actions).

1. Sustainability

Globally, the impact of buildings on the environment and on natural resources are well documented. With the growing recognition of these negative impacts, more and more organizations are making sustainability a part of their vision, values and branding. From looking at the “triple bottom line” (of people, planet and profit) to following the framework of the Global Reporting Initiative, more organizations are actively accepting sustainability as a responsibility and a value they embrace. Sustainability has transitioned from being an emerging novelty into a fundamental expectation across many industries, and a requirement in many locations. The rapid pace of development, especially in Asia, makes depletion of environmental resources a growing global concern. Around the world, an increasing number of building owners and governments are asking for their buildings to be more energy efficient and sustainable. In many areas, government mandates for sustainability already exist or are anticipated; but many organizations around the world are not waiting for a mandate. They have accepted that sustainability is worth pursuing.

In the U.S., to achieve federal goals for reductions in energy, water use and greenhouse gas emissions, the Federal Buildings Personnel Training Act requires all federal employees and contractors who design, build, operate or maintain government facilities to have appropriate skills and training.

Some organizations are taking the next step by investing in net zero-energy buildings, facilities that generate as much power and energy as they consume with zero carbon emissions.

DEMANDS ON FM:
For those in facility management, the expectations can be very high.

■ Sustainable construction usually requires high performance building systems, increasing the skill sets needed to operate the facilities. Green buildings increasingly employ more sophisticated systems such as computerized building controls, sub system metering, demand control ventilation and rainwater harvesting. Those in facility management must be educated and trained in operating and maintaining these systems.

■ With the enormous stock of existing buildings worldwide, there is growing recognition of the importance of operating them to be more energy efficient and sustainable. This is leading to growing demand for existing building commissioning which involves testing protocols that may be new to facility management. This retro-commissioning is being done whether or not the organization is pursuing 3rd party green certification.

■ Operating buildings in a more green or environmentally friendly manner requires different supplies and techniques than traditional practices. Everyday items such as cleaning supplies, paint and fertilizer now have environmentally friendlier alternatives.

■ Management of the organization’s supply chain is also becoming more strongly influenced by the building market, which continues to be transformed by sustainability. Many organizations are likewise adopting more sustainable purchasing practices for durable goods coming into their facilities.

■ Many organizations want to know more about their carbon footprint and how to track and reduce its negative impact.

■ Monitoring and reporting building performance data such as ENERGY STAR® will become the norm. In many locations building owners are mandated to provide operational data for the benefit of prospective tenants and buyers. Better building performance will lead to higher occupancy and rents.

■ Many building occupants and tenants are asking for greener facilities, with requests ranging from more recycle bins and better indoor air quality to bike racks and charging stations for electric vehicles.

For all of these issues, organizations typically turn to facility management for solutions, which has historically been underequipped to take them on.
Externally-driven Trends
Even buildings that are not designed specifically for sustainability are getting more complex building systems. Changing building and energy codes, the global computerization of systems, and changes in products on the market are some of the external factors that are shaping the way buildings are operated and maintained. Integrated building technologies allow a convergence and integration of systems to play a greater role in overall building performance. They help synthesize vast quantities of data into information usable in facility planning and decision making. This also requires the development of new skill sets for facility management to leverage this information.

A recent research study funded by the U.S. National Science Foundation noted that there are palpable gaps between the people, processes and technologies currently in place versus those required to manage today’s facilities, particularly in using and optimizing building controls. The study found that the number one challenge facing the facility management profession is workforce education and training.

Beyond the growing complexity of building systems, “smart” building technology is seen by many as a natural evolution and convergence of various building systems. Smart building technologies can not only control the building automation system (BAS), security, fire suppression and elevators, for example, they can also be used to reduce energy use. They may also be used to help leverage the potential of the newest on-site renewable energy technologies such as photovoltaic arrays, solar thermal collection, wind turbines, vehicle recharge stations, electrical switchable glass, automatic shading devices, demand control ventilation, energy dashboards, personal Radio-frequency Identification (RFID) systems, and structural anti-corrosion monitoring. Proper initial commissioning, followed by periodic tunings, will become increasingly more commonplace.

More and more buildings are being designed using building information modeling (BIM) software, which links model-based drafting technology with a database of project information, creating a virtual information model that can be passed from design team to contractor to building owner. Facility management will be expected to use and extend the lifecycle of this model.

The face of facility management software is also changing. Computer-aided facilities management (CAFM) and computerized maintenance management systems (CMMS) are still important, but there are also newer strategic tools available. Integrated workplace management systems (IWMS) and infrastructure life cycle management (ILM) are two examples.

DEMANDS ON FM:
As organizations invest in more complex systems, they expect that facility management will be able to use the...
Externally-driven Trends
latest technologies to operate and maintain the buildings at optimal performance. Unfortunately, many high performance buildings have not been meeting expectations, often because the people operating them have not been fully trained or are otherwise ill-equipped to manage the complex systems. There has been, and will continue to be, a learning curve in operating complex building technologies which demands that facility management maintains a strong understanding of the most appropriate tools, processes and technologies.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
■ In light of these demands and changes in the marketplace, more technological-savvy individuals are required, particularly of the building operators. Thorough education and formal training in the operation and maintenance of all the building systems will be increasingly essential. The costs of underperforming in this area are extremely high, both in operating costs and in political costs within the organization.

Today, the world faces the largest collection of aging building stock ever encountered. As facilities and infrastructure approach the end of their planned working life, facility management will increasingly face the question of “repair, reuse, or replace?” For many organizations, years and years of deferred maintenance has been exacerbated by the recent global economic downturn. And, when capital expenditure on facilities does return, there is a widely held belief that there will be more competition than usual for slices of the budget.

DEMANDS ON FM:
Facility management needs to be able to analyze the condition of aging building stock including infrastructure, skin, etc., and determine recommended steps, such as: maintain, upgrade, downgrade or demolish. Increasingly, one must also be able to analyze the presence of hazardous materials and develop appropriate strategies to deal with these materials, such as: abate, encapsulate, or leave as-is in present state.

Facility management then needs to be able to weigh various issues in addressing the backlog of deferred maintenance, including the calculated return on investment (ROI), the initial cost expenditure, the potential for business disruption, and the upside or payback of the investment.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
Management of the aging building stock requires both technical and management skills.
■ A widely-recognized approach to analyzing existing building stock and developing strategies is the facility condition assessment and the resulting facility condition index (FCI). The FCI helps to triage and prioritize the needs and plan what needs attention first. IFMA recommends that facility condition assessments be performed on a regular basis, approximately every three years.
■ Once an existing building analysis is performed, it can be used as a beginning in creating a five-year strategic facility plan for each facility. This helps facility management to identify improvements at multiple scales and to schedule them based on feasibility and need. The strategic facility plan can then be shown to be in alignment with the organization’s goals and needs, which better positions facility management to have the recommended improvements approved by decision makers.
■ Once the issues are analyzed and cost effective options are identified, facility management must be able to build an effective business case and present the analysis and recommendations to senior management in the organization. These analysis and presentation skills are essential to success in facility management, and if they are lacking, they must be acquired and practiced in order to be effective.
Externally-driven Trends
Natural and man-made disasters happen every day across the globe. Earthquakes, severe weather and other adverse events wreak havoc on facilities and business operations. Recognizing the crippling effect a major disaster can have on its citizens, many large cities in Asia and the Middle East have developed disaster risk management master plans. Beyond disasters, workplaces are vulnerable to violent acts that can impact well beyond those workers directly affected by the incident.

In many countries and industries, organizations expect their buildings to continue unabated during and after an event. This is particularly true for mission-critical facilities such as data centers and hospitals. But even organizations with less critical facilities are developing policies for emergency preparedness and business continuity.

**DEMANDS ON FM:**
Implementing the organization’s disaster response plan is a critical function for facility management. Organizations that expect emergency preparedness and business continuity rely on facility management to have plans and procedures already in place. Facility management often holds partial responsibility for ensuring business continuity after a disrupting event such as a natural disaster, act of terrorism, workplace violence or other unforeseen events (such as a power outage).

Facility management must ensure protection equipment, such as back-up generators and fire pumps, are properly maintained and regularly tested so that they are available and operable when needed. Critical components and supplies should be sourced from multiple providers should a disaster cause an interruption in the supply chain. Facility management must take a proactive approach in eliminating hazards within physical work environment, such as poor lighting or limited visual access, that could enable violent incidents to occur.

Post-event business continuity relies on facility management to be on-site implementing the organization’s planned response. However, these critical responders can only be on-site if they’ve taken the steps to personally prepare for the same event, thereby enabling them to return to work in as little time as possible. In situations such as hurricanes, tornado and earthquakes, critical employees who have no disaster preparedness plan for their family or homes can hamper the organization’s recovery plans. To avoid such situations from happening, some organizations have promoted personal preparedness or implemented an employee support network enabling critical responders to return to work quickly.

**LEARNING CHALLENGES/OPPORTUNITIES FOR FM:**
- Facility management must be able to plan, manage and support the organization’s preparedness and continuity program(s). This includes participating in the risk management assessment, developing the plans, leading rehearsals and drills, and ensuring appropriate materials are on hand (such as supplies, fuel, food, etc.). Some FM groups even anticipate housing families and pets on-site during and after an event.

In summary, emergency preparedness and business continuity are significant challenges or opportunities for facility management. If an event is handled extremely well, FM may be recognized as the heroes for their thorough preparation and implementation, saving the organization significant funds. But handled poorly, the FM reputation can be seriously tarnished.
Internally-driven Trends
Both the quantity and complexity of information available to facility management continues to explode with advancements in technology, controls and reporting tools. However, this information is not always available in a format that offers usable information; often it is merely unanalyzed data. This leads to facility management increasingly needing to serve in a data analyst role. This expanding role requires an equally expanding set of skills incorporating both the advanced technical know-how associated with managing complex building systems and controls as well as the business acumen in data analysis and presentation.

This surge of available building data began without the benefit of recognized industry standards for interoperability. To address this need, the Open Standards Consortium for Real Estate (OSCRE) has been driving the creation and adoption of data standards for real estate. They have been gaining momentum and members over the last few years, primarily in North America and Europe. The International Organization for Standardization (ISO) also has standards relevant to facilities.

DEMANDS ON FM:
Today more than ever, facility management is expected to proactively manage increasingly sophisticated systems, to understand the wealth of data available, and to make appropriate decisions and recommendations to optimize facility operations. The skills required to manage today’s facilities are broader than they were a decade ago. These additional skills may be added through training, hiring or outsourcing—as appropriate to the organization. Personnel are expected to be appropriately educated and properly trained to succeed in their roles.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
FM organizations must critically re-evaluate the following to ensure they are meeting current and anticipated demands:

- The FM organization and job descriptions (Are we organized to succeed in today’s environment?)
- Recruiting practices (Are we attracting the best and brightest?)
- Training and certification (Have we worked with colleges, universities, industry groups and others to provide tailored degree programs, workforce training, and certifications?)
- Career paths (Have we provided mentoring and clear growth paths?)
- Tools and processes (Can we evaluate and measure building performance, schedule maintenance, analyze systems, and calculate return on investment? Are we using industry standards and best practices?)
- Ongoing performance measurement (Can we track critical criteria such as energy efficiency, carbon footprint, comfort, uptime, occupant productivity and satisfaction?)
- Strategic leadership (Can we present a compelling business case and gain approval of needed resources?)
Internally-driven Trends
FINDING TOP TALENT
Attracting, recruiting and retaining top people are essential to the future of every organization. This is equally true in facility management. It is widely recognized that people from different generations often have different motivators. So to attract top people from a different generation, it is important to understand what motivates them and to value the skills and ways of thinking that they bring to an organization.

For example, new graduates increasingly look at an organization’s branding to determine its attractiveness as an employer. New graduates want to relate to the organization’s vision and approve of its track record on social responsibility. Conversely, organizations looking to attract the best new talent need to emphasize their work culture and marketing image to potential employees.

Training is also pivotal to the success of an FM organization, and the benefits far outweigh the costs. FM training has shown to have a nearly 400 percent return on investment, according to research conducted by IFMA. Other research has shown that ongoing training also reduces turnover.

DEMANDS ON FM:
Historically, the professions of building operator, technician and some other FM roles have garnered relatively low status in many organizations, sometimes making recruiting difficult. Meanwhile, the demand has never been greater for top people who can interact with building owners and occupants, understand complex systems, think strategically, and communicate effectively with senior management.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
In light of these demands, facility management needs a careful strategy and program to attract, recruit and retain top people:

■ Attract – Make the organization attractive through branding and facilities that people will be proud to work in. Make the opportunities attractive by marketing the challenge and rewards available in facility management. Advertise the interests and skill sets that are needed to succeed in FM.
■ Recruit – Seek top people through a wide range of venues, from in person to online. Work with schools and associations to identify top candidates.
■ Retain – Once hired, keep people happy through training, mentoring and recognizing good work. Provide long-term career paths and opportunities to contribute to the profession such as participating in building international FM standards or serving as a subject matter expert for industry groups.
Internally-driven Trends
There is a widely held belief that facility management is underappreciated. Those who work in facility management nearly universally wish to elevate the profession. Put another way, they wish to raise their status and perceived value within their organization and community. Many people who have studied this phenomenon believe the key reasons for the undervaluation are:

1. FM has yet to convince the C-suite that optimizing the performance of its largest asset is in its best interest or have been able to participate in board room discussions on developing long-term business and facility strategies.
2. FM personnel are most visible while in the midst of repairs, adjustments or construction. Though FM is significantly more than these things, “perception is reality.” The obvious strategy to counteract these perceptions is to make the best of facility management much more visible within the organization—clearly demonstrating the connection between facilities and the organization’s core business.

It is also important for facility management to be involved with capital improvements from their inception. This not only ensures that facility management has a clear voice in the design and construction of space (which impacts maintenance and operations), but also allows facility management to hear firsthand the overall strategic goals of the organization and the project.

DEMANDS ON FM:

In order to elevate the profession—or at least one’s reputation within the organization—facility management needs to improve its visibility, strengthen its recognition as the manager of the organization’s single largest fixed asset, and establish itself as a critical enabler of the organization’s business culture and brand.

Elevating the profession also requires a shift in the beliefs—instilling in people that facilities are an effective component of business strategy and more than just the cost of doing business.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:

- Improve the professionalism of the FM organization. Fundamentals such as properly preparing for meetings, dressing and speaking the part, and following through on every request, are important and should become ingrained in the culture of the FM organization.
- Establish clear and visible performance measures that link FM performance to the organization’s mission, vision, goals, values and brand. Learn from mistakes and share your successes.
- Make the time to develop thoughtful strategies to add real value to your organization. Be proactive, don’t wait to be asked.
- Keep up with industry best practices, both in FM and in your organization’s industry. Establish yourself within your organization as a subject matter expert and internal resource.
- Participate in peer organizations and gain recognition as a leader.
- Promote the FM organization. Communicate the value that FM brings to the organization through periodic presentations, newsletters and the web.
- Increase accessibility and visibility of top FM personnel. For example, some FM leaders stand in the lobby or the cafeteria every day, keeping an eye on the facilities and operations and making necessary adjustments. Just as the captain of a cruise ship has to be “a people person” who visits the passengers periodically, the visible presence of a senior facility manager can improve recognition and instill confidence in building occupants and managers that their well being is in good hands.
The skill set required of facility management professionals spans a broad spectrum ranging from specific tactical knowledge of building systems to strategic long-range planning. The requisite range of skills has evolved over the years, and there is little reason to believe this will change. It is therefore critical that facility management keeps up with these trends and the evolving skill set, or they will be left behind.

A further indicator of the expanding skill set required of facility management is IFMA’s list of core competencies for the Certified Facility Manager® credential. This list was originally eight items, but it has since grown to the following 11:

1. Communication
2. Emergency Preparedness and Business Continuity
3. Environmental Stewardship and Sustainability
4. Finance and Business
5. Human Factors
6. Leadership and Strategy
7. Operations and Maintenance
8. Project Management
9. Quality
10. Real Estate and Property Management
11. Technology

Each of these core competencies is expected to influence facility management in the future by challenging the professional to remain current, especially in the areas of sustainability and technology which are evolving rapidly.

DEMANDS ON FM:
Facility management is demanding, and both the range and depth of knowledge and skills required has expanded over recent years. This certainly places demands on facility management leaders to keep up with the times, always improving their people, processes and services.

Of all the skills needed in facility management, one of the most significant to the profession is business acumen. Facility management has such a significant role in the success or failure of any organization that FM leaders should be part of the core group of decision makers in an organization. Alas, that is not always the case, particularly when the FM leaders lack the business acumen to be respected as peers by board members and those in the C-suite. Facility management leaders must be able to communicate a measurable return on investment and demonstrate how a given proposal can help to differentiate the organization from its competitors. Top FM leaders are able to speak the language of key decision makers, analyze problems, generate responsible alternatives, evaluate the financial and triple bottom line impacts, and present their findings credibly and persuasively.

There are numerous different hats which may be worn by facility management, from technical expert to liaison with the organization’s board room. Rarely can one person perform all duties with all the required skills for any given organization. The management challenge is to place the right people in the right positions.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
In light of the evolving skill set needed, FM organizations should:

- Honestly assess their current capabilities in each of the core competencies and take appropriate steps to bolster any weaknesses. This may require recruiting, training (or retraining), adding credentials, updating processes and procedures, etc.

In light of the demand for greater business acumen, FM organizations should:

- Develop management and leadership skills beyond traditional facility management. Learn the current best practices of managers, with emphasis on the topics that other senior managers in your organization are studying. For example, what books are they reading now?
- Improve public speaking and presentation skills.
- Learn “the language of the C-suite.” What types of information and analyses do top leaders in your organization need to make decisions?
Organizationally-driven Trends
It has long been recognized in the FM profession that a critical success factor for facility management is the ability to link the physical facilities and FM services to an organization’s core business goals and strategies. Physical facilities convey an image. Are your facilities consistent with the organization’s brand and the image it wishes to portray? Are the FM services responsive to occupant needs? These questions are not new, though they are still important.

A recent shift, however, is the growing recognition of facility management’s impact on the efficiency, productivity and profitability of its occupants. Organizations wishing to be known as the “employer of choice” recognize that facilities affect their ability to attract top people. In some cities, tenants are using a form of sustainable report card to compare the desirability of various buildings.

Organizations are also being asked to do more with less; to produce faster, better and cheaper; to reduce waste and improve quality. Facilities can foster or enhance these operational initiatives in many ways. Facilities affect the health and wellbeing of building occupants (for better or worse), which affects employee satisfaction and retention, which has a direct effect on the bottom line. Therefore, knowing what aspects of facilities affect these measures is a valuable perspective that facility management can represent. For example, thermal comfort, acoustical comfort and controllability over the interior environment have been shown to increase productivity in office environments, teaching environments and healing environments. Even small changes that improve productivity can yield large revenue gains and cost savings for organizations of all types—since people costs (salaries etc.) are the most significant expenses for most organizations.

In order for facility management to recommend changes, however, it needs to learn the vocabulary of the occupants. For example, a thorough understanding of lean processes and six sigma may be needed to reduce waste and improve quality. When successful changes are implemented, it is worthwhile to communicate these impacts to decision makers and building users alike. Such communications can also contribute to elevating the profession.

Facility management also has a responsibility to improve the productivity of its own work by acting strategically and creating a five-year plan for operations and maintenance. This plan requires an inventory of existing problems and issues as well as projected estimates of future problems. Effective and proactive facility management will also foster increased facility management productivity through fewer work orders and fewer occupant trouble calls.

DEMANDS ON FM:
An increasing number of organizations have recognized that facilities have a direct impact on employee productivity and operating costs, and they expect the people in facility management to be knowledgeable about these topics.

LEARNING CHALLENGES/OPPORTUNITIES FOR FM:
■ Evaluate what aspects of facilities keep people satisfied, comfortable and productive.
■ Understand what keeps people happy and what makes the organization their “employer of choice.” These might include such facility-related topics as amenities, alternative work strategies, alterations to existing spaces, sustainability, customer service or training.
■ Study your organization’s strategic plans and find opportunities for facility management to have a positive impact on achieving key goals and improving the bottom line.
■ Learn the processes and techniques to improve productivity, such as lean processes to reduce waste and six sigma to improve quality (reduce defects).
■ Keep up with “evidence-based design” or “research-based design” to foster informed facility decisions.
■ Understand your organization’s key business indicators. Where does the revenue come from and where are the costs spent? What are the total costs of operations? How much does it cost to replace a person who leaves the organization—including recruiting, hiring, training and achieving the productivity of the person being replaced? Where are all the facility costs spent?
The changing workplace stems from an increased focus on complexity, innovation, speed, flexibility, corporate branding and sustainability. Each of these things speaks to a changing office environment which is much more collaborative and interactive, with a changing vacancy rate. Office environments increasingly contain more collaborative spaces which introduce greater concentrations of occupants in selected areas. Oftentimes, offices are not used to their fullest potential; in many organizations, this is an opportunity that facility management may be able to increase the utilization.

Changing workplace environments (such as increased access to daylight and other green building strategies) contribute to the overall look and feel of office environments which has an important impact on the organization's branding. The office space itself contributes to the organization's image as the preferred place to work, and the “employer of choice.”

The changing workplace involves shifts in space entitlement policies at many organizations as well as changes in the workforce itself. The shift from closed to open offices challenges the sense of space entitlement for many workers, often among older generations. Technology advances enable work to be performed outside of the traditional office workspace; and changing work styles may lower the total amount of time that staff members spend at their designated workspace throughout the average day. The result is a higher “vacancy rate” at assigned work areas for many office environments. These changes in the usage pattern and densities affect changes in how buildings are operated and maintained. The increased vacancy rate represents an opportunity for redeployment of the space asset—potentially leading to changes in the entitlement policy, the types of workspaces and technology provided, and limits on real estate expansion.

The increased vacancy rate at regular assigned workspaces is also fed from the increase in social networking and the tendency of employees to use alternate work arrangements off site. More employees work from home at least a portion of the time, meaning that the home environment becomes their second office; and increasingly, places such as coffee houses (and others) are becoming the “third office.”

**DEMANDS ON FM:**
People work differently than they used to. More and more people work 24/7, whether or not they are asked to do so. They work from home, from their car, from a coffee shop and from other people's offices. But they also need some traditional office support, such as administrative support, IT support, printing, getting their mail, etc. This presents an opportunity for facility management to be a leader in these changes, to participate in setting policies for alternative work environments, and to be a trusted advisor to the C-suite.

While some facilities are overtly 24/7 operations, many others end up with extended hours due to the schedules and deadlines of the occupants. Still other organizations have locations in multiple time zones or outsource work to people across the globe, which also causes many locations to have extended hours. Supporting these extended or ad hoc hours leads to increased operating and energy costs.

**LEARNING CHALLENGES/OPPORTUNITIES FOR FM:**
- If your organization doesn’t already have one, consider developing a building user guide to inform occupants about topics such as acoustics, thermal comfort, lighting controllability and indoor air quality.
- Work with the senior managers to establish policies for supporting people in alternative work environments.
- Proactively seek industry best practices related to the changing workplace. You may find a great idea that will save your organization time or money.
- Explore solutions for increasing the utilization of your facilities, such as online room scheduling and tracking underutilized spaces.
- If your facility does not have occupancy sensors, evaluate where their use will pay for themselves through reduced operating costs.
PANELIST WORKSHOP TOPICS:
(In order of presentation)

TRENDS IN CAPITAL PLANNING
—Ray Dufresne, Vice President, VFA Inc.
Three trends emerge in facility management:
1. Effects of the Economic Recession
   In 2010, in the U.S. and in other nations affected by the global economic crisis, capital funding for facility management remains tight and is expected to stay this way in the near future. Capital investment from the corporate sector and from higher education remains relatively flat. While there is some variation by market, selected areas have seen some spending activity. Specifically, spending by U.S. federal agencies is increased due to the availability of funds from the American Recovery and Reinvestment Act of 2009.
2. Expanding Access to Data
   Building technology systems and controls have made (and will continue to make) data available to facility management; however, the need to simplify and synthesize this information is growing in importance.
3. Sustainability
   Sustainability remains an important trend; however, facility management is currently struggling with how this is to be implemented and on the long-term effects on building operations. The minimal levels of capital investment into facilities and real estate also extend to strict spending habits on sustainable building technologies. The demand for a low return on investment prevents large scale sustainable technologies from being implemented in any projects which are moving forward.

TRENDS IN FACILITY MANAGEMENT
—David Martinez, PhD, Asset Management Business Director, Bureau Veritas
The dynamic responsibility held by facility management serves as evidence that the facility manager is acting as the asset manager for the organization. Increasingly, facility management adds significant value to an organization by reflecting the strategic long term mission and vision of an organization. However, public perception differentiates asset management from facility management by linking facility management too closely to the everyday operation of a building.

It is important for facility management to be involved in capital improvement projects from their inception. This not only ensures that facility management has a clear voice in the design and construction of space (which impacts ease of management post occupancy), but also that the goals of facility management align with the overall strategic goals of the organization.

Facility management must write and implement a five-year strategic plan for each facility. Once written, this plan can bring facility management closer to the centers of decision making in an organization if clearly presented to senior management.

Facility management also has the unique opportunity to contribute to the health and wellbeing of building occupants, thereby contributing to their productivity and to the organization’s bottom line. The relationship between thermal comfort, acoustical comfort and controllability over the interior environment has been shown to increase productivity in office environments, teaching environments and healing environments in health care facilities. Even small improvements to the productivity of a space yield large revenue savings for organizations of all types. It is important for facility management to communicate this impact to decision makers and building users alike, as this contribution helps to elevate the profession.
STATE OF THE INDUSTRY
—Jim Peck, RPA, FMA, CB Richard Ellis
The global economic outlook for 2009-2010 indicated seven trends:

1. Employment numbers appeared to have stabilized
2. Slight increase in availability in credit
3. Some activity in CMBS marketplace
4. Small increase in sales and transactions
5. Shorter term lease agreements
6. Decline of the Euro
7. Re-pricing of real estate

The Kiplinger Letter from August 6, 2010 indicated the U.S. Gross Domestic Product at 3.1 percent, prime interest rates at 3.25 percent, inflation under 1 percent. Predictions on unemployment indicate it will be 9.4 percent at the end of 2010. There is small growth in employment in education and health, professional services, government, information and finance.

Vacancy rates vary regionally across the U.S. and the average value of Class A office space has stabilized (while the value of Class B and C continues to fall). In the U.S, the national vacancy rate is 17.8 percent (up from 17.4 percent end of year 2009); and in Canada, the average vacancy rate is 10.1 percent (up from 9.9 percent end of year 2009). However, 43 percent survey respondents in Canada indicate plans to increase spending on machinery and equipment over the next 12 months.

A Building Owners and Managers Association (BOMA) International survey of attitudes regarding the most pressing challenges facing the real estate industry reveals that the economy was listed as the primary concern by nearly 90 percent of respondents, followed by real estate values, the work/life balance, job security, and finally, access to capital markets.

Predictions on trends for 2011 and beyond include:
1. Uncertainty in the U.S. on issues related to the economy, the deficit and anticipated regulations.
2. The workforce is expected to change in the next few years as the baby boomer generation reaches retirement; however, it is also predicted that this generation may delay retirement due to multiple factors, including the economic recession.
3. A need to focus on a workforce that spans multiple generations and is generally more mobile than ever before. A stronger emphasis on staff retention will require a focus on differing work styles (whether due to different generations or due to the changing office environment physically).
4. More sustainable and energy efficient buildings will contribute to the ever increasing complexity of building operations, an increase in value for green facilities and in the attraction and retention of staff.

LIVING IN A NETWORKED WORLD
—Chris Congdon, Steelcase
The changing workplace stems from an increased focus on complexity, innovation, speed, flexibility, corporate branding and sustainability. Each of these things speaks to a changing office environment which is much more collaborative and interactive. Office environments increasingly contain many more “we” spaces and “I” spaces. These collaborative spaces greatly affect the density of facilities and introduce concentrations of occupants at multiple levels. Small collaborative spaces mix with medium sizes conference rooms and a small number of large meeting spaces respond to the worker’s need to work collaboratively.

Technology allows the rate of change to accelerate exponentially; and globalization allows the power to reside in the hands of companies and entities, not just governments.

Over the past several years, there have been subtle shifts in the external factors affecting the workplace. Technological factors and macroeconomic factors were increasingly influential in the workplace; however, the influence of people skills decreased slightly. Chief executive officers now report that keeping up with the rapid rate of change is three times harder than it was just two years ago.

The proliferation of social networking has connected people in a new way which further draws them away from time spent working independently at a solitary workspace. Work increasingly happens outside of the office environment at secondary and tertiary locations. This causes an increased emphasis on creating work environments which attract people, meet their needs functionally and aesthetically, and contribute to their health and wellbeing. People report a desire to feel good about the companies, work, coworkers and office environments.
CONTINUITY PLANNING AND PREPAREDNESS DEVELOPMENTS
—Mike Thomson, Business Continuity Program Manager, ImpactWeather

Facility management holds partial responsibility for ensuring business continuity after a disrupting event such as a natural disaster or act of terrorism. There are a number of areas that facility management must develop including: emergency notification systems, severe weather alerts, incident management programs, ePlan documentation and situations awareness monitoring. This presentation focused specifically on personal preparedness and resiliency.

According to the Red Cross, only 7 percent of Americans have taken the steps necessary for basic emergency preparation in their personal lives and in their homes. Post event business continuity relies on facility management to be on site implementing the organization’s response. However, these critical responders can only be on site if they’ve taken the steps to personally prepare for the same event, thereby enabling them to return to work in as little time as possible.

According to Forrester Research, 75 percent of all company response plans (in the U.S.) do not account for personal preparedness as a component; yet, unprepared employees cost on average US$2800 annually for organizations, according to the Society of Human Resource Development in unplanned absenteeism, lost productivity and presenteeism (at work, but not working).

Personal preparedness becomes even more critical when you consider that absenteeism during post-event response depends on the facility management and response teams working together. Bringing employees back on-site may even require accommodating an employee’s family (and pets) which must become a part of the overall response planning. Even for those facilities which do not operate as critical sites, selected sites may become critical during post-event planning. For example, a middle or high school may serve as a staging area or emergency shelter for a town. This speaks to the codependency of personal, organization and local preparedness.

Personal preparedness involves five dimensions: personal, financial, emergency, household and legal. Components in each area (such as legal or financial documents, or contact numbers and information on medication) must be centralized and protected. Development of a personal preparedness plan has two steps: conducting a personal impact analysis and preparing personal continuity plans. Organizations designated as Critical Infrastructure or Key Resources (CI/KR) by the federal government must have a business continuity plan in place, include personal preparedness in that plan and have emergency procedures that comply with a recognized national business continuity standard.

The Title IX, PL 110-53 Private Sector Preparedness Act (2007) is voluntary and states that the Department of Homeland Security is to identify standards for preparedness for organizations. Certifications are considered conformity or non-conformity (“pass/fail”). The program is administered by Federal Emergency Management Agency (FEMA) and in commonly known as PS Prep. The advantages of pursuing certification include: avoiding sanctions, minimizing liability, reducing insurance costs, improving credit ratings, enhancing the supply chains, and market differentiation. The first step that organizations should take is to assess the quality of any existing preparedness plan and educate employees on the value of their own personal preparedness plans.

THE OUTLOOK FOR FM IN HEALTHCARE
—Brian Weldy, Vice President, Engineering & Facility Management Services, Hospital Corporation of America (HCA)

The health care sector views facility management in one of three ways:

1. **As a business expense**
   Facility operating expenses for hospitals account for up to 20 percent of total costs. Salaries and benefits, supply expenses and bad debt comprise the balance. The 20 percent operating expense is largely from contract services and fees, with repairs, rent and utilities comprising only about 5 percent of the total.

2. **As impacting operational effectiveness**
   Operational effectiveness is a function of the usability and comfort of spaces. Contributing factors
include indoor air quality, comfortable lighting levels, overall aesthetics and the building occupant’s general perception of the facility.

3. As a strategic investment

Facility management (and facility design and construction) may be seen as enabling the advancement of new business lines or as a way to enhance competitiveness with peer hospitals.

The health care sector may make decisions based on “F.A.C.E.S.,” or Function, Aesthetics, Cost, Efficiency and Sustainability. The extent to which each decision factor is used will vary by organization and sector; but, health care facilities are increasingly using each of these criteria in decision making, especially for facility management.

BUILDING TECHNOLOGY SYSTEMS
—Jim Sinopoli, Principal, Smart Buildings

Smart building technology allows for a convergence and integration of systems which pushes the performance of these systems to play a greater role in overall building performance. They help to synthesize a vast quantity of data into information usable in facility planning and decision making. This also requires the development of new skill sets for facility management to leverage this information.

Many buildings feature multiple proprietary networks for building automation and associated devices (HVAC, security, access and fire and life safety). Expensive and complex network management systems are needed for integration. There is now an opportunity to integrate each system into a single IP network onto which every building system is connected.

Smart buildings integrate parallel systems in both a physical and a logical way—increasing functionality while potentially decreasing management costs. Studies show that annual operation and maintenance costs for integrated systems are 82 percent more efficient than non-integrated systems.

The estimated return on investment for integrated systems has been shown to be within two years, whereas envelop upgrades often average up to 10 year ROI. Some elements of the integrated system can be monetized by the technology based on error detection capabilities.

Integrate systems also help to leverage the potential of the newest on-site renewable energy technologies—including photovoltaic arrays, solar thermal collection, wind turbines, vehicle recharge stations, electrical switchable glass, automatic shading devices, demand control ventilation, energy dashboards, personnel RFID systems, and structural anti-corrosion monitoring.

These systems do (and will continue to) require enhanced training for facility management, not only in understanding the data, but in starting to monetize the error detected. However, the significant potential of integrated systems is to further define the role of facility management, enhance the profession and attract talent.

FM DATA
—Ken Burkhalter, CFM, The RAND Corporation

Five trends can be seen in facility management:

1. Changing work model
2. Future of capital
3. The talent Issue
4. Data quality and sophistication
5. The ascent of facility management

The changing workplace involves shifts in space entitlement policies at many organizations, as well as changes in the workforce itself. The shift from closed to open offices challenges the sense of space entitlement for many workers, often among older generations. Technology advances enable work to be performed outside of the traditional office workspace; and changing work styles lowers the total amount of time that staff members spend at their designated workspace throughout the average day. The result is a higher “vacancy rate” at assigned work areas for many office environments; and these changes in the usage pattern and densities affect changes in how buildings are operated and maintained. This increased vacancy rate represents opportunity for redeployment of the space asset; potentially leading to changes in the entitlement policy, the types of workspaces and technology provided, and limits on real estate expansion.

The current reality is that many large companies with access to credit are taking on debt but not deploying the asset—choosing instead to save for the future. Surveys in the U.S. and Great Britain indicate little to no spending in the forecast as a downward trend within the past decade; and while inflation isn’t the problem, debt is.

The attraction and retention of experienced talent into the FM profession continues to present itself as a problem. While the aging baby boomer generation reaches retirement age, multiple factors have kept
them in the workforce, especially personal financial pressure. This leads to a workforce (in and out of facility management) which spans multiple generations more than ever before.

Both the quantity and quality of information available to facility management continues to explode with advancements in technology, controls and reporting tools. However, this information is not always available in a format which offers usable information; it is merely unanalyzed data. This leads to facility management increasingly needing to serve as data analyst.

The increasing complexity of data available to facility management has the potential to enable informed decision making in operations and maintenance. However, effecting change in operations and maintenance requires buy in from senior management who need to be able to rely on facility management to actively participate in decision making. The ascendency of facility management into the C-suite is seen as a critical element to informing this process. There is an increasing need for facility management to retain staff with Masters of Business Administration (or with similar speaking and communications skills).

**TRAINING OF FM PROFESSIONALS**
—Jim Pines, Division Chief, Facility Management Group, U.S. Dept of State

The traditional pool of candidates coming into the profession is evolving as the demands of the profession require new skills in addition to a solid understanding of modern building systems. A stronger understanding of technical skills for both emerging and conventional building systems becomes critical for the facility management professional to adequately oversee their operations. The emerging building systems require an increasingly divergent skill set for facility management.

The divergent skill sets required of tomorrow's Facility Manager include:

- a. Real estate issues
- b. Personnel management
- c. Fiscal responsibilities
- d. Facility safety and security
- e. Facility environmental controls
- f. Facility operations
- g. Asset management

Facility operations will require the largest change in education for tomorrow's facility management career candidates. In order to prepare for these changes in educational requirements, improvements will be needed in the programs currently in place, particularly at universities and colleges that offer FM curriculums. These changes could include:

- a. More internships offered through technical colleges;
- b. Greater concentration on building automation systems, digital controls techniques, advanced power management systems, security systems and fire alarm systems; and
- c. Heightened requirements for proven field experience prior to the presentation of certifications, requiring training or work on modern automated building systems.

**SUSTAINABILITY IN THE FM WORLD**
—Rob Zimmerman, Kohler Company

Sustainability can be thought of as:

- a. A holistic view of an organization’s impact on society and the environment
- b. A recognition that we are approaching or exceeding our limits
- c. An extension of established business practices such as quality and safety
- d. An opportunity to differentiate an organization on multiple levels
- e. A long-term vision for an organization’s continued success

Drivers for sustainability include:

- a. Public perception
- b. Utility costs
- c. Occupant safety, comfort and productivity
- d. Green building certification trends

Currently, facility managers who understand sustainability are able to leverage this information to run their facilities more efficiently, with lower operating costs and greater occupant comfort.

A September 2007 McKinsey survey of consumers in Europe, Asia and North America reveals that 21 percent are willing to pay a premium for sustainable products and services, 13 percent are willing to, but not currently, paying a premium, 53 percent are concerned
about the environment, but are not willing to act, and 13 percent are not concerned about the environment.

Because buildings use 39 percent of the total energy and 74 percent of electricity in the U.S. (Source: U.S. Green Building Council (USGBC), rising utility costs have a strong impact on adoption rates of sustainable design. It also puts building design and construction at the center of advancement in green design.

Occupant comfort and productivity are related to the indoor environmental quality of the space. The indoor air quality is directly affected by the chemicals and potential toxins entering the space through products and cleaning supplies. Facility management attuned to issues of indoor air quality will be able to filter out any products or supplies with toxins or volatile organic chemicals (VOCs) from entering the breathing zone of the building spaces. Local and state governments have started to regulate the indoor air quality of spaces most notably through anti-smoking laws. Interior improvements also have a strong influence on indoor air quality as low-emitting (low VOC) product lines for carpet, paint, adhesives and sealants are more readily available. Facility management can take a proactive role in ensuring the carpet approved by the Carpet and Rug Institute is installed or that only GreenSeal paint is used.

Many more organizations are committing to 3rd party green building certification programs for both new construction and existing buildings operations and maintenance. It is important for facility management to become familiar with programs such as LEED for existing buildings.

OUTSOURCING
—Virgil Slivka, Senior, Vice President, Jones Lang LaSalle
The most common reasons for outsourcing facility management include:
1. Focus on core business (in lieu of conducting facility management in house)
2. Cost savings
3. Consistency/centralization/transparency
4. Delivery speed
5. Access to best practices
6. Better technology and tools

There are a number of ways in which an outsourcing contract may be structured: cost plus, lump sum or guaranteed maximum price—any of which may have management fee at risk, subject to key performance indicator (KPI) metrics.

The success of any facility management program (whether or not outsourced) may be reported according to many measurable factors such as:
- a. Call center speed to answer and call rate abandon
- b. Service work order response time and completion time
- c. Building violations
- d. Recordable injuries
- e. Lost time incidents
- f. Training program compliance
- g. Periodic forecast accuracy
- h. Organization satisfaction surveys
- i. Supplier diversity
- j. Critical system uptime
- k. Energy consumption (savings)

In terms of potential job loss, typically 80 to 90 percent of any facility management staff is retained if outsourced, and sometimes a “severance” package is included. Further, outsourcing brings new opportunities for career advancement and sometimes alternative benefits packages.

The savings for organizations are seen in three main areas (in nearly equal amounts):
1. A new labor model employing fewer people but greater self performance of currently subcontracted work;
2. Operating efficiencies; and
3. Improved bundling of contract services.
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