

# Current Trends and Future Outlook for Facility Management





## **Current Trends and Future Outlook for Facility Management**

One important purpose for the existence of the International Facility Management Association (IFMA) is to understand the emerging trends and issues that impact the profession in order to educate the membership to better perform in their roles as facility managers. To further these goals a workshop was held in Pine Mountain, Georgia in March 2005. That workshop served as a foundation for further research, interviews of expert panelists, analysis, and follow-up questionnaires via telephone on the part of Future Impact Education, primary author of this study.

### **The Panel of Industry Experts Participating in the Workshop:**

Steven Beattie, Vice President, Organizational Strategies, Inc. Universal Solutions Engineering Division

Stephen Bennett, Knowledge Manager, British Institute of Facilities Management

Trevor Foster, Manager of Global Operations, Trammell Crow Company

Sari Graven, ASID representative, Associate Principal Callison Architecture

Ellen Keable, National Workplace Specialist, Jacobs Advance Planning Group

Kurt Padavano, Chief Operating Officer, Advance Realty Group, Vice-Chairman BOMA

Kathy O. Roper, CFM, associate professor of facility management, Georgia Institute of Technology

Nick Sterghos, Regional Vice President for the Corporate Segment, Interface

Ron Zimmer, President and CEO, Continental Automated Buildings Association

### **IFMA Staff Participants**

Dave Brady, President and CEO, IFMA

Shari Epstein, Associate Director of Research, IFMA

### **Report Author and Workshop Facilitator**

Keith Orndoff, president of Future Impact Education facilitated the meeting, conducted post workshop interviews, research and analysis, and authored the final report.

## **Objectives of the workshop and follow-up report:**

1. Provide IFMA leadership with a broad understanding of the forces driving business, political, and social change as it relates to the profession of facility management.
2. Provide a foundational piece for the annual strategic planning process by IFMA leadership.
3. Provide one tool for planning the allocation of IFMA resources
4. Help IFMA leadership understand the skills sets most likely to be important for the facility manager of the future
5. Consider how the needs of membership may change based on several future scenarios.

## **Workshop and report methodology**

The workshop consisted of one day of presentations by the expert panelists. All nine panelists presented and a time was reserved for post presentation questions and discussions. The second day consisted of several interactive exercises among workshop participants. The first exercise involved the grouping of issues around clusters of thematic elements such as “energy” and “managerial skills,” etc. The first exercise’s primary purpose was to identify the issues of greatest importance that emerged from the prior day’s presentations and discussions.

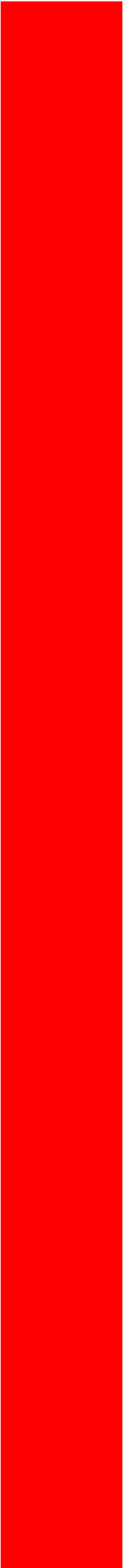
Participants then evaluated these “idea clusters” and ranked them based on the importance of the role those idea clusters might play in an “upside scenario” called “Temporary Setback on the Road to Paradise” and a “downside scenario” called “The New and Forever Urgent Future.” Under the “upside” scenario the expert panelists were asked to consider a world where business conditions were very good, security concerns were minimal and capital improvement budgets were steadily increasing. They were asked to consider what impact this might have on the tasks, and skills demanded of a successful facility manager specifically, and on the profession generally.

Under the “downside” scenario the expert panelists were asked to consider a world where energy and security have become critical drivers of the future and where business is constantly struggling to meet new challenges and stay profitable. They were asked to consider what impact this downside scenario might have on the tasks, and skills demanded of a successful facility manager specifically, and on the profession generally.

The expert panel added commentary and discussed with fellow participants why they believed an idea or issue to be of particular importance in one of the given scenarios for facility managers.

## **Limitations of workshop and report**

Scenarios are simply stories about the future and what could happen. Scenarios can serve as tools in training, practice for emergencies, opportunity and threat identification, creative brainstorming, and in fact have become one of the most important strategic planning tools in executive board rooms across the world. Although scenarios first originated in the military, they have now become an integral widely accepted planning tool in a variety of business and public decision making environments. Scenarios are useful but have limitations. It is impossible to “imagine” all the things that can or will happen in the future,



and even if it were possible, there is only so much an organization can usefully consider at one time.

This report is a result of these exercises plus further research and analysis based on the direction given by the workshop and extended interviews with workshop participants.

During the one and one-half day workshop literally hundreds of ideas, thoughts, and concerns about issues potentially impacting the facility manager of the future surfaced. It was impossible to cover each one in a report of this scope. This report is a compilation of those issues and concerns that were most frequently voiced. The report can in no way be taken as a reflection of all issues of importance for the facility manager of the future.

# TRENDS & ISSUES

## Real Estate Trends

### The Public Arena

One major area likely to impact facility managers through the year 2010 is the Federal Real Property Asset Management Executive Order 13327. This executive order was delivered on February 4<sup>th</sup> of 2004. The executive order establishes a Senior Real Property Officer at federal agencies. It establishes a Federal Real Property Council, and contains provisions aimed at reforming the authorities that manage federal real property.

The executive order defines real property as being

- Any real property owned, leased or otherwise managed by the federal government both within and outside the U.S.
- Improvements made on public lands
- Exclusions are wilderness preserves, national parks (except for improvements on those lands) and for land in the care of Native American tribes such as reservations

Among the more serious problems identified within the federal government related to real property that helped to lead to issuance of the executive order were considered to be:

- Lack of appropriate accountability within the federal government
- Lack of useful and effective property information within federal agencies
- Abundance of underused or unneeded federal property
- Excessive cost to the federal government
- Lack of necessary tools and incentives for agency disposal of underused properties

Effective execution of Executive Order 13327, whereby federal agencies would consistently recognize the importance of real property resources, should provide the enhanced senior level management attention critically necessary to make operational and budgetary decisions indicative of a public corporation responsible for approximately \$300 billion in property, plants, and equipment holdings. Anticipated results would likely include enhanced employee morale, improved safety in the workplace, most effective utilization of the taxpayers' funds for professional facilities management, increased productivity of the overall government workforce, and an overall increase in the federal agencies' ability to meet their critical missions.

### The Private Sector

General trends in commercial real estate impacting the facility managers broadly are a consolidation in mature American industries such as financial services, and telecommunications. In these areas there is no doubt that total square footage will decline and square footage per employee will fall as efforts are made to squeeze new efficiencies in every aspect of operations leads to efforts to squeeze efficiencies from the facility side as well.

This will be contrasted with areas such as pharmaceutical, biotechnology and healthcare, which should continue to see growth both in square footage and in the complexity of tasks demanded on the part of those working in these fields, including the facility managers

serving these industries. Many of the demands in these industries stem from the heavy regulatory climate with regulations such as HIPAA (Health Insurance Portability and Accountability Act) and “Stark II” having major impacts on how facilities must be managed.

Stark II is a recent regulation that will greatly impact real estate in the medical fields. The primary purpose of the regulation is to prohibit a physician from referring Medicare or Medicaid patients to other medical facilities in which the physician has a direct or indirect interest. The implications of this seemingly simple law are wide ranging.

One historically common practice was for a hospital to provide below market rental property for the physician’s practice in exchange for an agreement to make patient referrals to that hospital. Under Stark II this is illegal. But the challenges imposed by Stark II go well beyond this example—one that is among the more simple to understand.

Also important in the commercial real estate market is the shortening of lease cycles as business demands ways to respond more quickly to changes in business conditions—upsizing and downsizing quickly if and when needed. Although hard data is difficult to come by, anecdotal evidence strongly suggests that businesses are demanding ever more flexible lease arrangements which will make conditions at the rented facility much more likely to change rapidly and unpredictably.

Although specific projections are difficult to come by it is believed by the panel of experts that there will be a significant need for large-scale capital improvements to the existing commercial real-estate stock. Properties for which routine maintenance has been put off are entering a cycle where maintenance and capital improvements can no longer be deferred as properties that were built in the 1980s during the “quick and cheap real estate boom” enter a period where maintenance cannot be postponed.

## **Public/Private Partnerships**

A variety of public/private partnerships were mentioned as being an important trend for facility managers in the coming years. Among the initiatives mentioned was “substantial public/private financing of family housing [for the military] both domestically and overseas at such locations as Sicily in Italy.”

In the Seattle, Houston, and many other major metropolitan areas large facilities, such as football, baseball, and basketball facilities are public/private partnerships with a portion of funding from the private sector and a portion of funding from the public sector. Frequently part of the private funding is provided in exchange for naming rights of the facility and rights to sell concessions in the facility.

Increasingly, cash-strapped local governments seek more resources for their parks by creating partnerships with private for-profit or not-for-profit associations. If the group is for-profit, then it will frequently establish a concession or some other in-park attraction, the partial proceeds of which are used to fund the park while agreeing to undertake the day-to-day park operations.

In Washington, D.C. in 2001 a public/private partnership completed the 47,000 square foot James F. Oyster Bilingual Elementary School. Additionally, the company completed construction of a luxury apartment, for \$29 million on a piece of the land. The city issued a tax-exempt bond instead of raising tax money for the school and Berwyn, PA based LCOR pays the debt service from the margins on its rental property, giving the school system, in essence, a free school.

In November of 2004, the Urban Land Institute awarded one of ten prestigious Awards for Excellence to University Park at MIT, a mixed-use biotech park. The mixed-use biotech

park is now considered a model for public/private partnership and is located on 27 acres in Cambridge, Mass. University Park at MIT is a master-planned, 2.3 million-square-foot, mixed-use development. It includes ten state-of-the-art bioscience research and office buildings; 674 units of mixed income apartments; a 210 room hotel and conference center; restaurants and retail space; a health club and childcare center with parking for 2,700 cars.

In the United Kingdom, public/private partnerships have become a major driver in facility management after legislation known as the Private Finance Initiative (PFI) passed in 1992. Between 1997 and 2003 more than 450 new public facilities were completed using PFI.

One critical difference between the U.K. example of public/private partnerships and the U.S. examples is in the standardization of the process. The legislation is national, which makes research and judgments into the success of the U.K. initiative relatively easier to compare than those in the U.S., where initiatives are diverse, scattered, and predominantly local in origin.

## **Land Use Trends**

In many major primary markets new development has become prohibitive because of requirements for wetlands maintenance, run-off restrictions for water, and a host of environmental preservation and anti-sprawl measures at the Federal and State level. The practical result has been, and will continue to be, increased demand for urban redevelopment instead of simply pushing "further out" for the needed space. Many of the most restrictive requirements however are local and/or state leading to a wide regional variety in challenges for those in the real estate professions including facility managers.

## **Security and Terrorism**

The expert panel saw terrorism and security related issues as an important area of concern extending through 2010. Members of the panel believe that the economic as well as psychological fallout from another major attack of similar or greater size than September 11, 2001 is not being addressed by facility managers or by their organizations. While no panelist at the retreat would make an outright prediction of another terrorist attack in the near future, most acknowledged that it was not an event that would particularly surprise them.

Europe and Asia, and obviously the Middle East have dealt with issues of terrorism long before the U.S. and incidents of actual terrorism have been much more frequent in these locales. Any facility manager willing to look to these regions for information may be able to develop both greater strategic as well as hands on tactical knowledge of how security challenges are handled at the facility level.

Within a year after the attacks of September 11th, 2001, 45 states had moved to approve terrorist loss exclusions in commercial policies. The only exceptions were California, Florida, Georgia, New York, and Texas (Source: information obtained from the General Accounting Office (GAO), testimony before the Subcommittee on Oversight and Investigation, Committee on Financial Services, House of Representatives, 2002). In November of 2002, President Bush signed into law the Terrorism Risk Insurance Act as a "backstop" to protect commercial real estate where the private market was perceived to have "failed."

The inability or unwillingness of the U.S. government to extend the backstop protection of the Terrorism Risk Insurance Act of 2002 could threaten property development. Many

experts maintain that the result could be a “sluggish” commercial and multi-use property market.

### **Likely targets through 2010**

Although North Americans are without question more aware of the risk of terrorism than before, the fact is that on multiple fronts and in multiple ways the U.S. remains unprepared and unaware. “Soft targets” abound. Soft targets are targets such as the water and food supplies; chemical plants; the energy grids and pipelines; bridges, tunnels, and ports. Even today millions of cargo containers pass through multiple U.S. ports without inspection of any kind. In his recent book “America the Vulnerable” author Stephen Flynn argues that the U.S. has “cobbled together” a disconnected and strategically ill-thought through set of security measures which offer the illusion that big steps have been taken while in reality serving to do nothing more than deter amateurs and vandals.

On April 5th 2005 an extensive terrorist response scenario exercise was sponsored and carried out by the Department of Homeland Security. The scenario exercise, which occurred in Northern New Jersey and portions of New York, was created to simulate a terrorist attack on a public facility and involved at least 10,000 people. Should a major attack occur by 2010, Americans can expect these kinds of exercises to become common place, and facility managers would most certainly play an integral part.

## **Intelligent Buildings and Building Automation Systems Trends**

It is probably not a coincidence to see an article titled “Year of the Smart Building” in the February 2005 issue of *Energy User News*. As of early 2005, oil prices had risen over 20% from the prior year making energy prices potentially the driver of a coming intelligent building boom. And there are many indications that, even should the price of petroleum fall in the short run, the intermediate term trend for petroleum prices, short of an economic slowdown in the economy, is up.

Dr. M. King Hubbert, a geophysicist, has recently published a controversial but influential study indicating that the world is now at the highest level of oil production that will ever be attained. This would not be a problem if oil demand was not continuing to rise, but oil, and virtually all petroleum-based products, have seen steadily rising demand in recent years.

At the very moment that the globe may be seeing indications of peak oil production and a continuing rise in need for energy, there are powerful intersecting trends to enable, finally, the rise of the true “smart building.” Experts at the March retreat who spoke to this issue seemed to feel the time “was right” for the rise of the intelligent building.

The generally accepted definition of intelligent building technologies are “...integrated technological building systems, communications and controls to create a building and its infrastructure which provides the owner, operator and occupant with an environment which is flexible, effective, comfortable and secure.” Facility managers are pushing Building Automation Systems (BAS) vendors to transform today’s closed technologies into Web-enabled applications running over industry-standard IP networks. And the management of BAS is likely to increasingly fall to IT. “But while the management of BAS is likely to fall to IT,” Mr Ron Zimmer, of the Continental Automated Building Association said that “BAS is not being driven by the IT side but...[i]t’s being driven by the building side” (Computerworld, March 14, 2005).

Multiple experts in the panel contended that facility managers are driving building automation systems by demanding more-open systems. Open architecture is the widespread acceptance and sharing of hardware and software designs, standards, and protocols and is seen as being critical to the successful spread of intelligent building technology. It will lead to a greater interoperability of various systems. In a downside scenario in which energy supplies might be tight and/or expensive, a greater utilization of such technologies for the purposes of managing energy costs and utilization is reasonable to expect.

An example of some of those uses, already in play and especially emphasizing energy management and conservation, include a at 27-story A-RE-A Shingawa office building opened in June 2003 in Tokyo, Japan. The intelligent automated system components of the building include an energy management system, an IP telephony system and an IP-based security system that includes IP cameras, card readers and door locks. The entire system runs on a gigabit Ethernet fiber backbone (Computerworld, March 14th, 2005).

Another example includes the new Seven World Trade Center, the buildings designed to replace the World Trade Towers, elevators will use a dispatch system whereby people traveling to the same floor every day will simply carry a card with that information and swipe it at a terminal near the elevators. The terminal will then tell the person what elevator to use and people going to floors in the same proximity will be directed toward a single elevator. This serves to save elevator users time and to save the facility energy by reducing duplicated elevator stops

At the Dallas Ft. Worth Airport, sensors that measure sunlight control indoor lighting. The lights dim immediately when it's sunny and brighten when a passing cloud blocks the sun. The airport also installed a system of thermal storage tanks that allows the airport chill air-conditioner coolant at night, when energy is cheapest, for use during periods of peak electrical demand (Washington Post, October 30, 2004).

## **Europe as a Bellwether for Energy and Materials?**


One special note of interest is that the relatively higher costs of energy in Europe means that for IFMA European applications of energy savings technology could serve as a bellwether for both intelligent technology and new energy saving building materials. Such technologies frequently hit the marketplace and are used in Europe before being accepted in the U.S. One reason for this is that "life cycle cost analysis" is increasingly being legislated across much of the E.U.

In the U.S. building technologies used for saving energy in facilities is gaining momentum but there remains a long path to widespread implementation. In fact, according to Srinivas Katipamula, a research engineer at Pacific Northwest National Laboratory "Of the 4.7 million commercial buildings in the United States, [only] 10% have energy management systems or time clocks that turn lights on or off based on the time of day."

## **Other Drivers of Intelligent Building Design**

Efforts to improve indoor air quality are also an integral part of many intelligent building initiatives. "The overall U.S. indoor air quality market (IAQ) was \$5.6 billion in 2003, and is expected to rise at an average annual growth rate of 11% to \$9.4 billion by 2008 (Source: Building Communications Company Inc., March 2005).

Another area of significant resource expenditure has been in the addition of wireless networks (WiFi). According to a survey conducted by the Wireless LAN Association and NOP World Technology, the average payback for the initial costs of a wireless installation is about nine months. The survey concluded that the average wireless user is 22% more



productive than his or her wired counterparts. Productivity benefits are quantified at 48% of the total return on investment of a wireless network. While it is important to be cautious in interpreting data from an organization in whose vested interest it resides to assert such findings, anecdotal examples of the spread of wireless networks are easy to observe.

One theme that emerged repeatedly in the retreat was the move from facility management to infrastructure management. Should facility managers be concerned? A study of 60 commercial buildings in the U.S. found 50% had control problems and 40% had equipment problems. A similar study of 51 schools in Canada found that 40 had either maintenance or systems related problems.

The benefits to facilities and to facility managers who grasp the potential of energy savings through intelligent building technology are potentially enormous. This will require effective communication by the facility manager, to top management, of the potential of the technology to save money. Futurists frequently talk about “transformational technologies.” Transformational technologies are technologies that completely reshape markets and this convergence of technologies that make building intelligence possible, along with environmental conditions that create a timely need, is just such an occurrence.

# Environmental Trends

Sustainability and the green movement, have, without doubt, captured the imagination of many organizations and many professionals in a variety of industries in the last several years. Although LEED (Leadership in Energy and Environmental Design) might be the best known of the “green initiatives,” there are now literally dozens if not hundreds of company and state initiatives trying to achieve environmental objectives. The fact that there are so many initiatives is leading to the widespread belief that there is a need for more standardization.

The sponsor of the retreat, Interface, is an example of a company that has made monumental strides in moving toward sustainability. The Interface Model© consists of “The Seven Fronts”

## The Seven Fronts

- Eliminate waste
- Eliminate harmful emissions
- Use only renewable energy
- Create closed loop processes
- Resource efficient transportation
- Integrate sustainability into the culture
- Pioneer new business models for sustainability.

What Interface has achieved on a number of fronts is truly astounding. Interface has reduced solid waste to landfill by 65% since 1996. This represents a \$231 million saving in waste since 1994. In their efforts to reduce harmful emissions, Interface has reduced greenhouse emission by 46%, reduced the number of smokestacks by 33%, reduced the number of water effluent pipes by 47%, reduced by 78% the amount of water used to produce one yard of carpet tile.

Interface has also made great strides in moving toward using energy from sustainable sources. Interface has installed solar arrays to generate 17,000 kWh per year and is purchasing 19 million kWh of green electricity generated from wind turbines. Landfill gas (gas removed from landfills for the purpose of generating electricity) will displace 20% of Interfaces natural gas consumption in 2005.

According to Interface, companies are absolutely demanding sustainable products. Companies that have utilized sustainable products through Interface include Starbucks and Citigroup.

Expert panelists say sustainability will become an ever more important issue for facility managers everywhere and that a paradigm shift toward “Life Cycle Cost Analysis” must occur.

## Environmental Concerns become International and Local

Recently there has been a proliferation of state environmental regulations as states seek greater environmental protection than what they perceive as coming from the federal government. For example, California has created something called Open Office Furniture Systems, which specifies the minimum criteria for bidding on state contracts. This is one example of a sudden proliferation of regional standards and regulations. This proliferation

of local and state regulations promises to be a challenge for any organization trying to serve the needs of a national constituency, be they a non-profit association or a corporation. There are currently about 30 regional green building programs in existence across the nation.

On issues of energy consumption, California is currently moving, along with Canada, to increase auto mileage standards. New Jersey, Rhode Island and Connecticut plan to follow California's lead. This is indicative of a regulatory climate that will become more difficult for organizations needing to lead, train, and function in 50 diverging regulatory environments instead of one.

On the international front, many new environmental laws and regulations are taking effect. Currently, the European Union (E.U.) is implementing a policy known as Registration, Evaluation, and Authorization of Chemicals (REACH). Reach is an E.U. wide initiative that will require that all synthetic chemicals used in the environment be tested for human health impacts. Increased restrictions in Europe are leading to a marked turnabout in where environmental initiatives that impact global markets are now originating. Whereas it has traditionally been the U.S. leading in environmental initiatives it is increasingly becoming the E.U. that moves first on environmental regulations. Part of this increase in international environmental regulations stems directly from the adoption and implementation of the Kyoto pact by most of the worlds major countries. But environmentalism as a global movement now extends considerably beyond the Kyoto protocol.

One practical impact has been that American environmental groups wanting to make a case for new environmental regulations are increasingly foregoing approaching the Environmental Protection Agency (EPA) and instead approaching the E.U. first. The chemical brominate, a flame retardant used in clothing, has been a chemical that American environmental groups have wanted the U.S. government to ban. But data showing increased cancer risk for children exposed to the chemical have had no impact on American regulators. After no success in the U.S., a group called Healthcare Without Harm decided to skip Washington and take their data directly to the E.U. Brominate has now been banned in the E.U. A similar story exists with the weed killing chemical atrazine, which is now banned in the E.U. but still allowed in the U.S. Currently, issues of chemical exposure to synthetic materials are beginning to sweep much of the world.

As is often the case on environmental issues, California is surfacing as a bellwether. Recently in California a bill was passed (SB1168) which creates a permanent statewide biomonitoring program to detect and identify harmful chemicals that result from exposure to environmental toxins. There are currently over 85,000 synthetic chemicals registered for use in the Unites States. Fewer than 10% of these have been tested for their effect on human health. Once fully implemented, the California legislation will help medical professionals and decision-makers to better understand the effects of environmental contaminants on human health. If this becomes a permanent shift in how humans view their exposure to multiple chemicals the ramifications for facility managers could be profound.

## Organizational and Workplace Trends

The workplace is a productivity tool that affects workers' performance, satisfaction, retention, and the long-term success of the business. There have been multiple research studies in the past 20 years that have proved this. Facility design and operations should respond to business goals by supporting employees work behaviors to improve productivity and satisfaction. One currently disturbing trend is to ask employees and business operations to adapt to facilities changes that aren't based on supporting the employee's needs.

A study by BOSTI from 2001 shows that facilities costs and operations together account for only 8% of business costs, compared to people costs of 82%. This means that facility changes that first and foremost target people's performance directly stand the best chance of making a contribution to the organization.

Because cost reduction is quick and easy to measure, cost reduction has historically been the number one strategic driver for the actions facility managers undertake. It is more difficult to measure the impact of appropriate facility design upon performance, but is worth doing.

A lack of space, not enough privacy, technology problems, poor location relative to coworkers, etc. are a few examples. Layoffs, business restructuring, and feelings of powerlessness have resigned people to take what they're given (or come in early, stay late, work at home). Research shows that even when people say they're satisfied, a poor work environment (e.g., distracting noise) can produce physical stress that they might not even notice. This stress has been shown to affect task performance in laboratory studies (G. Evans, Cornell University study on effects of common office noise levels, 2000).

One result of these environmental stresses in the workplace should be to ask the question: "Are poor facilities driving people to work elsewhere?" and "Are we shirking our responsibilities to provide good facilities?" Good facility management is multi-dimensional. It knits together facility design, furniture, operations, technology in the context of organizational culture, work activities, workforce issues, urban context, political and technology changes. All this is part of a good "workplace ecology."

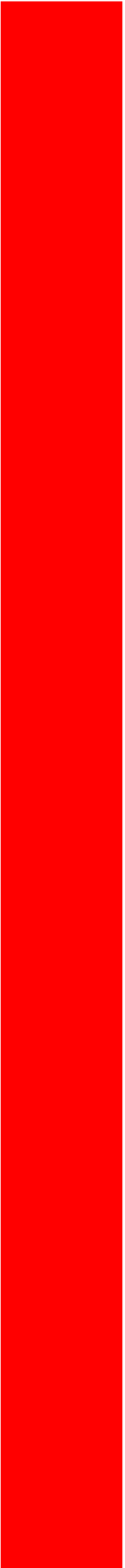
The organizational trend to run "lean and mean" and the focus on cost containment that first surfaced after the tech bubble burst along with the events of September 11th has continued unabated. There are frequent continuous improvement initiatives and frequent changes throughout the business and organization. These dramatically impact facilities and daily operations.

Another strong organizational trend has been a tension between giving organizational units autonomy for innovation and the ability to implement local solutions as contrasted with the drive towards more centralized control in order to achieve efficiencies of scale.

Virtual work is becoming more common as standard practices between locations are becoming more common. This has been driven primarily by technology but enforced by the events of September 11th.

### Outsourcing

One result of rising complexity of task and workplace roles is that in "some organizations, the facility management department is only a contract management organization, managing multiple vendors and partners. The implementation or tactical role is contracted to vendors or service providers who specialize in each area of competency. Therefore negotiation skills, financial and interpersonal, are highly valued skills needed in the facility management



field of the future” (Source: Facility Management 2010 & Beyond, Kathy Roper, CFM, CFMJ, MCR, LEED AP, Georgia Institute of Technology).

This position receives anecdotal support in the form of a recommendation by research company Gartner to its clients to consider outsourcing all communications and computer technology that is not part of that group’s core competencies. This is one piece of many pieces that suggests a still accelerating trend in outsourcing, especially in the information technology group within organizations. The biggest challenge of the CIO up to present has been to use technology to support the core mission of the organization—a challenge that has been met with limited success. This is the same challenge the facility manager of the future will face.

A survey of recent literature in fact suggests that the U.S. is still only on the front edge of a major move toward outsourcing—and the fact that it is seen most strongly in Information Technology first may be significant. This is because if, as indicated by this workshop, facility managers drive intelligent buildings but pass the torch to Information technologists once implemented, they will likely be managing an outsourced expertise.

Most experts felt that outsourcing, although continuing into 2010, will begin seeing limitations and “diminishing returns.” A recent piece in Knight Ridder/Tribune Business News seems to support the workshop experts in this assessment: in a recent report on the job market for college grads, John A. Challenger, chief executive officer of the Chicago-based employment firm Challenger, Gray & Christmas Inc., said: “The practice of offshoring is sending many jobs overseas, but there is still a lot of job growth here as companies expand into new areas. Additionally, companies need a hands-on presence to manage projects and provide technical services that cannot be done from the other side of the globe.”

### **Workforce trends**

An important change in what is expected from the workforce is a focus on the product produced by individuals and teams rather than a focus on tasks. Focus on teamwork, as well as relationships drawn from multiple locations are quickly becoming the norm. Among workers there is a decrease in loyalty felt toward the organization and an increase in loyalty felt within the team or for the worker’s own career. This is leading to an increased need for the branding of a facility to give identity to groups that frequently work together but have little or nothing in common.

# **Strategic Implications**

## **Sustainability**

Sustainability, as discussed by the expert panelists, falls between energy and non-energy areas. The expert panel saw concerns related more strictly to energy as being most important for a facility manager functioning in the downside scenario. Sustainability as a general concept, on the other hand, received virtually no attention from the expert panelists as being of importance in the upside scenario.

Many experts feel it is extremely important to look at client needs before deciding on sustainability. Concepts such as “Life Cycle Cost Analysis” must be utilized *carefully* because as one expert said we must ask “...whose life cycle?”

## **Making technology of greater value**

In terms of “sustainability” what will make technology of greatest value will be a true understanding on the part of a facility manager of the cutting edge sustainability technologies and materials. This means understanding their real impact both in the quality of the facility and in the productivity and satisfaction of the people using the facility. In addition, the ability to effectively communicate and sell the importance of these sustainability solutions to the C-Suite is critical for expected success in implementation of the technologies.

In an upside scenario, where business is thriving and security and energy concerns are minimal technology as a tool for branding a facility would likely be at least as important as technology used for energy management. This means a focus on issues such as lighting for increased productivity, temperature settings, and individual levels of productivity related to those and other factors such as colors, textures, furniture, etc.

## **Management traits for the facility manager of the future**

The panel of experts felt that in the upside scenario strategic focus was one of the major areas of importance for a facility manager of the future. Experts stated that this strategic focus consisted of levels of added value, which means understanding the vision, mission, and markets of the facility manager’s end clients. Other areas that in general can be categorized as falling under the objective of strategic focus include:

- Leadership and human relations skills
- The importance of overcoming “information silos” that keep healthy idea “cross-pollination” from occurring between facility managers and other groups such as IT, and the corporate suite
- The ability of a facility manger to quantify his/her contribution to the productivity of the organization
- The ability of a facility manager to quantify the impact of various facility initiatives on the productivity of the employees and the organization
- Understanding the financial metrics of the organization

- Understanding the value chain of the end user of the facility
- Communicating the importance the facility can play as a tool to support the organizational vision strategically, and the facility manager's role in supporting the daily mission of the personnel within the organization
- Understanding the knowledge economy in terms of meeting the end users of the facilities needs
- Understanding the use of technology for adding value
- Understanding branding a facility for purposes of meeting the strategic needs of the end users of that facility

These are only of the few of the “managerial” topic areas seen as extremely important under the upside scenario that are related specifically to a more developed strategic focus. Many if not most of these areas received few or no votes as being important for a facility manager in the downside scenario.

## **Security Implications**

One area of discussion involved the question “what would the next day at my facility look like if a similar facility or company was attacked somewhere else?” A facility manager for a bank might face unique issues should a terrorist attack consist of another major bank facility. There would be a sudden feeling that “we could be next” that might not exist at the bank facility should an attack occur at a dissimilar facility, for example, a shipping port.

In considering such an incident an example of the questions the facility manager might wish to consider could consist of the following:

- In what ways are we vulnerable to an attack?
- How can I contribute to ensuring a constant flow of information under conditions of an attack?
- Would my people feel that it was safe to come to work the next day after such an attack at another similar facility? What would it take to make them feel safe again?
- What actions should I take now in preparation that might be impossible to take the day after the attack (i.e., if all banks are suddenly hiring new security guards, there may be a sudden shortage if the strategic understanding with the potential security company was not established prior to the event)?
- Are my managers considering scenario-based exercises relating to an attack on our facility? If not, how can I be a catalyst to help make my managers aware of the potential importance of such an exercise?

## **Increasing stakeholder value**

There was extensive discussion by the expert panelists of the importance of increasing shareholder value. But continued discussion revealed that, for the most part, this really meant increasing *stakeholder* value.

The difference between stakeholder and shareholder value should be clarified: shareholders are only one group of stakeholders defined narrowly as those who own shares of a publicly traded company. But not all stakeholders are shareholders. A stakeholder could be anyone associated with the facility, including all who work at the facility, and those who use the facility as a customer. In this regard, a facility manager employed by a publicly traded company, depending on the mentality of top management, might find this “stakeholders” to *only* include shareholders. In the current business climate this frequently means monetary return on shareholders equity in the short term.

It was fascinating that many experts saw increasing stakeholder value as being important in the downside scenario while virtually nobody saw it as important in the upside scenario. The expert panelists suggested that this failure to see opportunity to add stakeholder value in an upside scenario could signify something profoundly important in the mindset of a facility manager. That mindset, found even among these experts, is that a facility manager is a “protector” and “guardian” of physical building assets instead of an adder of value. In this sense he or she has his or her greatest opportunity to increase stakeholder value in their traditional role as provider of physical security for the facility and its inhabitants.

## **Educational institutions must provide training to prepare facility managers for new challenges**

An obvious result for IFMA in an environment which is most challenging from a security perspective (i.e., a downside scenario), is the need to focus limited resources on training in specific areas of security. Experts saw a broader range of needs in education during an upside scenario.

Most panelists agreed with the assessment that it is rare that all associations are truly on the cutting edge of training and educational needs for their professional. Strategic opportunities for alliances between various purely educational institutions, such as schools of business, and IFMA were discussed.

## **Facility managers participate in the end users association**

This was perceived by experts as being extremely critical under both the upside and downside scenarios, but for different reasons. Under the downside scenario it is reasonable to believe that the individual industry associations will be much more specifically in touch with the unique security challenges of their own industry than IFMA in general. Thus to most understand those security challenges unique to the industry, facility managers would likely wish to participate in the association most familiar with the security needs of the end user’s industry.

In an upside scenario, participation in the end user association would help with the tasks of adding value to the association by understanding internal client metrics and vision and mission more effectively.

The implication, in either case, is that there should be a push toward educating IFMA members on the importance of considering membership in the end user association of their internal client.

## **Dialogue early before there are initiatives by others**

One of the organizational trends discussed was called “Initiative Hell.” The drive for continual improvement and the need to always take performance to the next level through some new initiative which may or may not lead to the desired result—while frequently causing added stress among employees and other stakeholders.

The implication is that it is important for a facility manager to establish a dialogue early before there are initiatives by others that place him or her in a purely defensive posture.

Most expert panelists felt that facility managers are not in fact taking the actions they should to protect either the facility or the facility’s stakeholders in the event of a terrorist attack. By taking early action on such issues prior to the arrival of that need a facility manager will be in the position of having authority and leadership credibility at the moment such a security need becomes critical.

## **Branding environments**

In a more physically insecure situation, humans tend to become defensive and shortsighted, and there is significant scientific and anecdotal evidence that the threat of an unsafe physical environment, to state perhaps the obvious, has multiple downside impacts on the ability of employees to effectively do their job.

In such an environment a facility manager should be most concerned with making the environment feel safe. In fact, with the exception of very high profile facilities, it might be the best decision to place virtually all resources toward assuring the users of the facility *feel* safe.

The branding of physical environments was one area that received considerable attention in both the upside and downside scenario. Branding an environment means making many implicit characteristics explicit with design, proper furniture, lighting, etc. Understanding and implementation of the concept of branding the physical environment was seen as a vitally important part of any future for a facility manager.

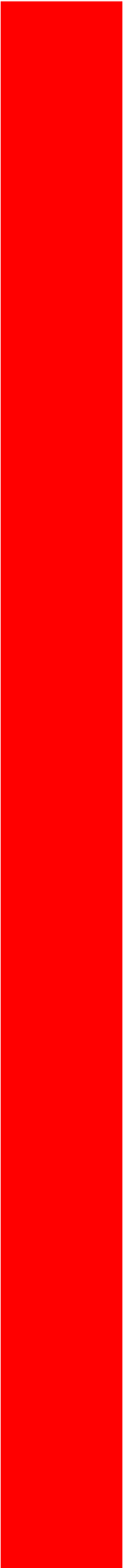
## **A network of locations (mix of locations and uses)**

Another area seen by the panel of experts to be of particular importance in a downside scenario is for organizations to have a network of locations, which are able to reliably and easily communicate with each other. Most efforts at security and counter terrorism among high profile facilities is toward redundant data retrieval as well as back up locations to continue operations should an attack occur.

## **Knowledge network/networked economy**

For most expert panelists, the creation of “knowledge networks” and the “networked economy” is becoming vitally important for all workers including facility managers. Because complexity of task and breadth of mission is expected to expand for virtually all workers the most successful facility manager will become primarily facilitators in a knowledge economy. It is an economy that depends for its efficient functioning on the rapid and accurate exchange of real time data.

A traditional facility manager might find him/herself fighting the old paradigm of “asset protector” as the C-Suite increasingly looks, as they often do during good economic times, to strategic contributions from all players and the expansion into



new markets in new and innovative ways. This would contrast from what could be expected to be a more “defensive” posture from the C-Suite in a downside scenario.

### **Healthcare, pharma, and biotechnology as a proving ground for facility manager innovation**

The panel of experts saw the industries of healthcare, pharma, and biotechnology as being highly important as a proving ground for innovation under either the downside or upside scenario.

Heavy innovation and extensive regulation creates the most demanding environments for a facility manager in these industries, leading to creative and resourceful innovation that can serve IFMA as a “learning laboratory.”

## **Appendix A: Resources Suggested by the Expert Panel**

Blink: The Power of Thinking Without Thinking, by Malcolm Gladwell Little Brown & Company, 2005

Center for Entrepreneurial Leadership found at <http://www.celcee.edu>

Corporate Lifecycles—How and why corporations grow and die and what to do about it, by Ichak Adizes, Prentice Hall, 1990.

The Ecology of Commerce, by Paul Hawken, Harper Business, 1993

Emerging Trends in Real Estate, Urban Land Institute, PricewaterhouseCoopers

Environmental Design Research Association (EDRA) found at [www.edra.org](http://www.edra.org)

Facility Management 2010 & Beyond, Kathy O. Roper, CFM, CFMJ, MCR, LEED AP, Georgia Institute of Technology, Atlanta, Georgia, United States of America

The Fiefdom Syndrome, by Robert J. Herbold, Currency Doubleday, 2004.

The Future of Work: The Promise of the New Digital Work Society by Charles Grantham, McGraw-Hill, New York, 2000.

Leadership and the New Science by Margaret Wheatley, Berrett-Koehler Publishers, San Francisco, 1999

Leading a Real Estate Company, by Christopher Lee, Institute of Real Estate Management

Mid Course Correction-Toward a Sustainable Enterprise: The Interface Model, by Ray C. Anderson, Chelsea /green Publishing Company, 1998

Research Design Connections found at [www.researchdesignconnections.com](http://www.researchdesignconnections.com)

Technology Roadmap for Intelligent Buildings Report available at [www.caba.com](http://www.caba.com)

The Tipping Point by Malcolm Gladwell, Little Brown, 2002

Total Productive Facilities Management, by Richard Sievert, R.S. Means Company 1998

Turn It Off: How to Unplug from the Anytime-Anywhere Office Without Disconnecting Your Career, by Gil Gordon

Work Naked, by Cynthia Froggatt, Three Rivers Press, 2001

Young Entrepreneurs Organization: [www.yeo.org](http://www.yeo.org)