

FACILITY MANAGEMENT FORECAST 2002:
EXPLORING THE FACILITY MANAGER'S
FUTURE



UNDERSTANDING THE FUTURE OF FACILITY MANAGEMENT

One of the International Facility Management Association's four main goals is to lead the progress of the facility management profession by identifying facility management future trends, needs and outcomes. In March 2002 IFMA conducted its third annual forecasting workshop to examine emerging trends and issues that will drive facility management over the next five years.

ABOUT THE STUDY

A panel of 11 industry experts was selected by IFMA to represent the various industry sectors and constituencies of the facility management profession:

Bill Adams, Program Management
Matt Dawson, Ernst & Young
Linda DeMars, Johnson Controls
Kim Fowler, Pacific Northwest National Laboratory
Andy Fuhrman, CAFM Services
Shelly Goldstine, CFM, Eckland Consultants, Inc.
Stan Kaczmarczyk, General Services Administration
Elizabeth Kimmel, Alliant Energy
Fred Krishon, P.E. Law Engineering and Environmental Services
Mike Liddle, CFM, Business & Facility Solutions
Steve Lockwood, CFM, Foresight Associates

IFMA staff participants included:

Charles Claar, P.E., CFM, CFMJ
Laura Clark
Shari Epstein
Deb Hensel
Erica Oliver
Jennifer Uschold
Angelique Vesey

Peter Bishop, Ph.D., University of Houston Clear Lake and John B. Elmer, president of Houston-based Gelb Consulting Group, Inc., facilitated the session forecasting workshop for IFMA.

OBJECTIVES

The specific objectives of this exploratory session were to:

1. Provide insights to help IFMA establish a leadership position on the future of the profession.
2. Identify how IFMA can help prepare members for the future.
3. Understand the changes that facility managers will have to embrace in the future.
4. Assess what skill sets facility managers will need to stay competitive.
5. Recommend what facility managers should do to position themselves in light of coming changes over the next 5 years.

LIMITATIONS

The findings of this exploratory study are qualitative and should be viewed as directional in nature. The conclusions can be assessed and validated through both a trend analysis of published information and quantitative research among facility management professionals.

2002: INSIGHTS ON THE FUTURE OF FACILITY MANAGEMENT

A. Responding to the changing nature of the work

Distributed work: It is not just about real estate – it is about making sure that wherever the person is working, they have the tools and space to do their work.

The relationship between workers and the corporation will continue to fragment, with an increase in “free agents” -- the independent professional workforce.

Facilities themselves are going to change – the changing nature of work means that we need different buildings:

- 24/7 global business – need to be awake when other people are working around the world
- Flexibility, communal workspace, virtual work...physical facilities have an impact on the worker’s productivity and work quality
- New workers don’t believe in paper – paperless office is here – will be able to create greater density in the workplace.

B. Facility Management Role: Wiring the Organization

Facility managers can show leadership and create value by serving as the force that keeps the organization wired together. This strategy would require a convergence of corporate real estate, information technology, human resources and facility management infrastructure.

C. Emerging issues

Emerging issues that will occupy an increasing amount of attention for facility managers are:

- Energy management
- Move management
- Security
- Business continuity
- Recycling the workplace: Re-use of a facility because of improvements in technology

D. Facilities as a business opportunity

Changes in the workforce and economic globalization mean new opportunities for alternative facilities (for example: Kinko’s, airport clubs) that operate independently and perhaps serve many corporations on a contractual basis.

E. Financial impact of FM to the enterprise

As management continues to focus on bottom-line impact, facility managers can enhance their performance by identifying and investing in FM-specific technologies for knowledge management.

F. Developing the business case for sustainability

Sustainability is a growing issue – changing the paradigm from operating expense to total cost of ownership and maximizing ROI for facilities while satisfying workers and the community.

Looking back at the 2000 IFMA Forecast: INSIGHTS ON THE FUTURE OF FACILITY MANAGEMENT

1. Increasingly, facility managers will be evaluated on their financial performance and on their strategic contributions to performance improvement for the entire enterprise.
2. Technology will continue to drive change in facility management practices. Facility managers must be prepared to work as change agents when introducing new strategic and tactical initiatives within their organizations.
3. The increasingly global business environment will challenge facility managers to find new ways to support their organizations’ employees, partners, suppliers and customers. Being competitive requires companies to integrate customers, partners, suppliers, and the workforce to serve increasingly fragmented markets.
4. Long-term success means using knowledge management systems to help people share and use information to improve organizational performance.
5. IFMA can help individual facility managers prepare for the future. Because of the changing business environment, facility managers must adapt and improve their skill sets and competencies. Performance-based job evaluations and the growing value-added emphasis of management suggest that IFMA should focus on equipping facility managers to succeed in a rigorous, asset-oriented future.



G. Communicating the value of Facility management

To show value, facility management must be tied into the performance measures of the organization. Facility managers should approach senior management on high level issues – how to deliver products and services out to the market faster, be more creative and innovative, attract and retain better and brighter people – all things that have performance indicators associated with them.

H. Outsourcing becomes mature

Management increasingly sees outsourcing as a commodity service. Additionally, more services are becoming “brokered” by packagers and resellers (e.g. utilities).

I. Energy Management

Time- and load-dependent energy prices are a significant issue. Fixed prices are rapidly fading. Insurance companies will begin selling coverage for extraordinary power costs. Expert systems, intelligent networks with rules for making price and purchase decisions, will increasingly manage energy costs in a deregulated environment.

ANTICIPATED DEVELOPMENTS IN FACILITY MANAGEMENT

- A. "Going to work" has a new meaning. Work will be done in many locations. While there will be lots of telecommuters, work will be more fully integrated into life and will be done wherever the worker is located.
- B. Buildings will be headquarters and shared services. Secure technologies and bandwidth will be needed for these facilities to function as meeting places. But the individual spaces may be less important.
- C. There may be more cooperative work centers – like the airline clubs, preferred guest suites, Kinko's, Starbucks.
- D. The facility manager could be the executive on site who provides all services to the organization.
- E. Outsourcing may create the situation in which a facility manager works for multiple companies.
- F. Some urban planners visualize a super-community center where people go to work, get day care, health care, recreation, etc., all in neighborhoods. People would share these facilities and won't necessarily have to build home offices.

How facility management has been seen in the <i>past</i>	How facility management will be seen in the <i>future</i>
Managers come from varied backgrounds – most people backed into the job	More formal training for facility management, bringing more technical expertise into a management role
Facility management is very diverse, with a generic approach to infrastructure	A specialized approach to infrastructure, with more cohesiveness. New position of CIO (Chief Infrastructure Officer) – FM will rise up to take a position equal to COO or CEO – who understands the core business
Facility management is an expense	Facility management is an investment in improving the true performance of the organization, based on new systems for measuring performance, linking facilities to core business issues
Facility management is in the background, out of the loop, not represented in the boardroom	FM in the foreground, adequately staffed, in the boardroom with an investment portfolio
People need a physical space to work and interact, and one entity is in charge of this space	People do not need a physical space; no one entity in charge of this interaction. Job is not to distribute space; it is to facilitate interaction within the enterprise
FM work is focused on technical function of managing space	FM work goes beyond technical – FM is the "orchestra leader" directing the integrated activities of a large group of people
FM is a support function	FM is a strategic function – facilities should be seen as an asset for attracting talent
Not enough time to get the FM job done	FM has plenty of time to get his/her job done – the job is more strategic; FM is an investment

Not every FM is up to the task in terms of background and training	FMs have formal training programs, academic education, recognition of the importance of FM within the organization
Not enough information for the FM to maximize performance and value	Sufficient information – FM is able to share and request data inside the company
FM not influential in the organization	FM is influential and strategic

RECOMMENDATIONS TO HELP FACILITY MANAGERS PREPARE FOR THE FUTURE

1. The future of the profession lies in creating growth and training opportunities to develop facilities executives who can lead the development of a technological infrastructure for the enterprise, and who can work with the leadership team to get it accomplished.
2. Facility managers will need excellent communications skills to make the case to senior management about facility management as a strategic function. In particular, FMs will need a thorough understanding of corporate finance to succeed in this arena.
3. Impact of the changing energy markets – managers will have to learn to deal with continuously changing costs, perhaps that they don't even know that they have.
4. Facility managers will have to deal with the increased emphasis on quantitative measures of their performance. This means that the information systems will have to be in place to collect the necessary data on how facility management improves organizational effectiveness.
5. Management vision continues to focus on the short term. Competition for funding will remain intense. Facility managers will have to work hard to make the case for resources. Proposals for action must make a clear economic case, must be quick to implement and have fast payback.
6. Facility managers should take a broader view of facility – one that expands beyond the traditional view of facilities. The changing nature of work (24/7, global, transportable) means that work will be done wherever the worker is located at a given time. Facilities must respond with innovative solutions to maximize productivity in this environment. Buildings will become more dynamic and adaptable, depending on the type of organization. The key is developing a knowledge base and vision for allowing these activities to take place

EXPERT PANEL PRESENTATIONS

Matt Dawson, Ernst & Young

Demographic & cultural issues

Scarcity of talent, and people are the most important asset

Generation Y will be the leaders – they are the Internet kids who have integrated work with play; the old rules don't apply

Social and economic disparities of the future – the illiterate are the people who cannot unlearn, relearn and adopt change. It is all about education and adaptability, not demographics

How we measure our value – more of a balanced scorecard approach (the next evolution of a strategic plan), which is to get in alignment with the goals of the organization

Education and lifelong learning is key – prepare yourself to adapt the new technologies

Networks and interpersonal relationships in a virtual world – necessary for guiding and managing a distributed workforce from remote locations

Technology

Enhanced Internet structure is coming

There will be common global standards for data and technology

Passive and active devices will be integrated

Legal, political and economic

Intellectual property and the knowledge worker are increasing critical assets

Globalization of the economy, to tap the talent where it exists (not necessarily in the 48 states)

World trade agreements will have a significant impact in increasing commerce, especially between EU and the U.S.

More competitive markets will open

Spanish will become the second language of business

Environmental

Social consciousness of the environment is increasing, and businesses will react

Nature of work and the workplace

Focus is on people and worker productivity. Public education system is not likely to improve, creating a scarcity of qualified workers and higher wages.

Employers will seek out lowest cost operating structures, which will lead to a revitalization of small towns.

Internet influence means that organization will have workers located and products made around the world. Workday will be defined by job responsibilities.

Knowledge and service workers will increasingly become contractors, selling their expertise to a variety of companies – this will be driven by cost.

Knowledge workers will largely work virtually, hired directly as contractors.

Facilities

Commercial office space will change – owners, managers and clients will be different – into “touchdown space.” Increasing amount of home office space. Facilities will be 24x7 due to globalization. Demand for amenities will increase to retain the best workers. Convenience will be crucial. Facility managers will expand to Administrative Services, providing all services to workers (e.g. car repair).

Technology Services


Allocation of secured technology will be increasingly important to protect intellectual property. Allocation will be based on long term leasing and/or hoteling concept.

Facility manager

Management will continue to flatten management structures, increasing outsourcing.

Virtual environment

Traditional corporate model with the full breadth of office and administrative services is going to have competition: Shared services, virtual model based on outsourcing, FM entrepreneurs who start “HQs” for



contract (FM as contractor for project management, organization and engineering services and management consulting).

Trends:

Businesses will only maintain core functions -- the rest is outsourced.

HQ business operations (could be managed by FMs) will increasingly provide strategic, financial and technology support to field operations around the globe.

Operations becoming more global – requires a virtual workplace.

People are first – performance management, personnel development, training are key.

Market will be awash in space and RE/IT workers.

Steve Lockwood, CFM – Foresight Associates

Demographics

Baby boomers are retiring at a fast pace. Many still working as experts
More global workforce

Environmental

More awareness of the environment, not more action
Cost is still a major issue in becoming more environmental
Resources becoming more valuable
More alternative resources

Technological

The more we change the more things stay the same
Wireless still a big dream for the mainstream
Faster and smaller
Costs still prohibits technology being driven in most cases
Quick access to information and knowledge is the best benefit of technology
More creative innovations will result from technology

Economic

Consolidations are continuing
More global economic system
More evening out of the wage scale – not so many jobs moving overseas
Less worry about trade imbalances

Political

Friends and enemies
Economic drive motives
Wars will continue

Cultural

Values, beliefs, practices, history norms all being challenged and adjusted
More understanding sensitive, involved, less barriers, more common ground, more interest from executive management

The nature of work

Do more with less
Faster
Better quality
More technology thrown at problems
Pay for knowledge and skills
More fluid work
Performance based outcomes
More creative / innovative workforce
More outsourcing
More team and group work
Component parts – making it easier to customize products and services
Easier information access

The Facilities

Agile, flexible, fast – how quickly can we make change happen?

Non-obstructive – not interfering with the work that is going on

Supportive of key business initiatives – If FMs want to transition to a strategic role, need to get tied into key business initiatives. Look at the performance indicators

Cost effective and efficient

Many different types of solutions

Financially driven – FMs are evaluated on how much cost is taken out of a building. Where is the point of no return? Where do you start negatively impacting the organization?

The FM and IFMA member:

Need to be more business driven

Supportive of key business issues

Will interact with management on MBA issues, must approach the job like and MBA with a technical background

Performance driven– buildings impact business in an interesting way – they can be an expense or an investment. Identify how the facilities can impact key business initiatives and the metrics associated with them, FMs can then show results to the organization.

Position the FM role as a key resource for executive management

Trends

Global competition

New competitors

Better quality, faster cheaper

New product innovations

Product obsolescence

Measures and metrics

Available resources

Stan Kaczmarczyk, GSA

Workplace concept has emerged from the convergence of 3 disciplines

- Facility management
- Information technology
- Human resources

Reflects two trends in the work world:

- Rise of the knowledge worker
- Growing recognition of importance of human capital

The Knowledge Worker of Tomorrow:

- Does he/she have to “know” everything in the explosion of information?
- Or does something new happen, like automation of knowledge worker functions to liberate workers to add greater value?

Human Capital issues:

- Demographics
- Graying of the Government
- Recruitment and Retention
- More onsite amenities
- Work/life balance

Future Workplace

- Virtual work will grow, will become more seamless, but will not eliminate the need for offices
- Demographics and work/life issues will be a bigger threat to office demand
- Office buildings will become communities of collaboration, enrichment and services (but work/life distinctions will blur)

Assumptions:

Don't assume that:

- Office buildings are right for knowledge workers
- Making the building high-tech is the answer
- People will just process more and more information ad infinitum
- Adding on works, like building out another conference room or carving out a child care center
- Everyone who can retire actually will retire

The future facility:

Where we come together to be together
Where we come to learn
Jobs become more strategic
Information hasn't gone away
Seamless connection to the virtual workforce
No full time anything
A community of services
Work at home live at work
Open spaces, office available when needed
Flexible space, fully wired
Still too hot or too cold
Seat of corporate identity, heart of culture
Home court

The Internet

Can make FM staff job easier and more efficient
Can connect us to our customers (but more for transactions)
But will not eliminate the need to have a direct relationship to provide customer service

Elizabeth Kimmel, Alliant Energy Integrated Services

Chaotic Energy Marketplace – persistent and rapid change will continue in the energy industry

- Complexity driven by regulation and deregulation
- Volatility in energy commodity prices
- Constraints and reliability concerns in supply, transmission and distribution
- Linkage of energy and environmental issues
- Drivers of change: Trends, Events and Choices

Issues:

- Is deregulation dead? No, it is alive and well and growing fast
- The world is changing in the aftermath of California and Enron
- Correlating real-time energy costs with real-time prices
- Maintaining safety, environmental and reliability objectives
- Purchasing, procurement, partnering, sourcing
- Centralized versus distributed generation: What will drive market share?
- Using real-time cost curves to deploy assets and meet real-time prices curves
- Environmental issues versus national energy policy versus alternative power from fuel cells, energy storage, renewable, etc.

Energy Management is moving to the boardroom – when will the FM be involved?

- Corporate boards are turning to energy service companies to update plants and equipment in addition to making wise energy purchases
- Some bundle energy purchases with energy management
- Some offer specialized services like lighting or HVAC retrofits
- Some upgrade projects are financed via savings / performance contracts
- Trends – Load management increasing due to more modern equipment
- Growing need for Validation, Estimation and Editing (VEE) of meter data
- Load monitoring is needed in near real time
- 5% reduction in load during peak periods has 20-50% effect on price during these periods

Changes at local utilities:

- Big decline in customer service
- No more guidance and free advice
- Deregulation is driving automated metering
- When price caps go away, you need access to wholesale pricing

Energy trends, events and choices

- FM role is change
- State by state deregulation is slowing
- Energy efficiency receive public funding
- A National Energy Policy is being created
- Natural gas prices will likely remain low
- Rapid changes mean that the FM needs new and better information to survive in the rapidly changing power market
- Industry consolidation is coming via mergers and acquisitions
- Information about energy will be as valuable as the commodity itself
- Wholesale markets will become competitive
- New laws are coming to change the energy industry
- Solutions are coming that will meet both energy and environmental needs
- Standards will be developed and deployed for data, metering, billing and internet protocols

Linda DeMars, Johnson Controls

“A workplace that is distributed and connected and that facilitates work anytime and anyplace in a face-to-face or virtual environment is a prerequisite of organizational success and survival.”

- From “*The Agile Workplace: Supporting People and their Work*” December 2001, Gartner Group

Trends and events driving change:

Free agency – the independent worker movement:

- Workers are seeking control
- 8 million independent contractors in 1999
- Independent contractors were more likely than traditional workers to hold managerial, professional specialty, sales and production jobs (Bureau of Labor Statistics)
- www.ework.com has facilitated over \$15.8 billion in independent commerce

Mature outsourcing:

- Almost 30% of facility management is outsourced in the U.S.
- Progressive companies are looking for a strategic partner with a services and information focus
- The pack is buying a commodity
 - o Increased use of consultants to help corporations buy outsourcing
 - o Free Markets phenomenon
- Outsourcing is becoming a commodity – consolidations will result.

Workplace as system:

- System thinking is emerging: “The agile workplace is a system – a bundle of interacting occupancy, connectivity and managerial services that interact with the particular work of the organization” (The Agile Workplace: Supporting People and their Work, Dec. 2001, Gartner)
- Workplace portfolio-as-network: Workers have a set workspaces/workplaces, some of which are not part of the real estate portfolio (home, Kinko’s etc.)
- Coming together of CRE, IT and HR – a workplace full of people doing work requires these three disciplines to be interdependent and connected

September 11th

- Unprecedented reconnecting of people, places and work
 - This required infrastructure flexibility and a real understanding of the work itself
 - Traditional views of the workplace as fixed were transcended
 - Traditional views of people as organization were also transcended
- Based on the response to Sept. 11th, executives will in the future expect it to be like this all the time – will push the envelope in terms of expectations of FM and outsourcing.

Enron Collapse

- We have come full circle
- Upcoming regulation and general skepticism may cause some companies to return to command and control behavior
- Companies will pull in the reins and employees will want to cut loose
- An opposing and balancing force to the free agency movement

What is corporate America doing that is so wrong that hundreds of thousands of Americans are deciding to go it alone?

Andy Fuhrman, CAFM Services

Future Vision #1: Conception to Grave Building Model and Database

4D visualization

Design -> Permit -> Construction -> Operations ->Decommission

Intelligent Object Sweet Spot Modeling - Model conceptual site and structural designs in 3D –to optimize the design to meet budget, timeline and design intent

Smart Permitting - Reducing the time required to go through the building permit process by running the same model as above, submitting it electronically to building departments

Pre-populate Integrated FM and Financial Database – A deliverable with the building is a 3D model with a fully populated integrated database. Includes all building components and assemblies, equipment information. Cost data linked to ERP/financial system.

FMs need to be able to measure things to improve them. There is more to facility management than space utilization and churn. These are important, but there are other parts of facility management technology that are important. To make improvements, FMs needs to start with gathering information about the current state.

Future Vision #2: Cost of Business Interruption

- The more businesses rely on machinery, technology and electronic information, the less downtime they can afford
- Business interruption = lower profit

It will be ten years before today's maintenance management systems become standard operating procedure. Not many people are doing predictive maintenance at sites that need high reliability.

Computerized maintenance management system is required to be able to do predictive maintenance and reliability modeling.

IFMA has competitors that are pushing ahead in these areas:

Association of Facilities Engineering (AFE)

Association of Energy Engineers

Is IFMA targeting the FM only, or is it inclusive of all positions in the FM workforce? Today's CAD drafter, HVAC tech and Space Planner may be tomorrow's FM

Drivers of change:

Global competition

Do more with less

Technology will become more pervasive, allows work from anywhere

Security, contingency planning, business continuity now have increased focus

Single point organization that serves full range of facility management, M&O and corporate real estate

Kim Fowler, Pacific Northwest National Laboratory

Implications of Sustainability to Facility Management – the Lifecycle Impact of Design on the Facility Manager

“Sustainable Developing meets the needs of the present without compromising the ability of future generations to meet their own needs” – Brundtland Commission

People – Planet – Profit

- Across time and space: You can't just think about your own little world. For a for-profit entity, this may mean lower profit over the short run.

Example: Flat screens may be more expensive to buy than CRTs, but CRTs have lead in them and have an associated disposal cost. Need to look at the lifecycle cost.

Integrated design is the first issue in sustainable design. A non-sustainable component can destroy the overall sustainability of the system.

Sustainable Design

A new paradigm for design – Sustainable facilities are more than just “green.”

The old way	The green way	The sustainable way
Basic facilities	State of the Art functional and Green buildings	Sustainable campus – how does it relate to its community?
Cost of doing business, meets current needs, minimize capital outlay	Strategic mission asset, anticipates future needs, minimum life-cycle cost	Strategic organizational asset, merges people, planet and profit,
Focus on first cost	Focus on total cost over the life cycle	Maximizes return on investment

Issues in sustainable facilities design:

Resource management

- zero net discharge

Energy Systems

- net electricity generator

Pedestrian friendly campus

- Walking paths, environmentally sound transportation

IT Infrastructure and Controls systems

- Advanced diagnostics and controls, personalized microenvironments

Community & regional presence

- Community & occupants engaged in planning process
- Leverage investments for jointly funded facilities

Implications for facility manager

Energy generation

Xeriscaping

Selecting environmentally preferable materials

Learning how to communicate and interact effectively with the community

Energy & Water efficiency and conservation (closed loop system)

Advanced lighting systems

Eco-leasing: You don't own the carpet; you lease it from the manufacturer, when it needs to be replaced, the manufacturer takes it away, replaces it.

Bill Adams, Program Management

How and where will you work best tomorrow?

Workers	FTEs versus SEPs (self employed personnel): some companies have 25-30% of workforce that are self-employed
Automation	Integrated databases; Internet facilitates interaction between databases and people; and AI
Information	Growth in quantity and quality of information
Velocity	Increased number of decisions and transactions (and happening faster)
Location	Home; clubs/call centers; “branded” places that function as the headquarters – has the data center, people can touch down and work temporarily
Customer	Focus and new real estate providers
FM	The new FM needs to know the operations, as well as the portfolio of real estate and buildings

Professional organizations like IFMA are more important to self-employed than to FTEs because they don't have access to corporate resources.

The speed of the collapse of Enron signifies the impact of the increased velocity of information, decisions and transactions.

As location of work gets redefined, facility managers are facilitating work – effective FMs have been trained in the hotel industry.

FMs have the highest status in organizations where the facility is strategic to the success of the business – like in manufacturing companies.

Automation is providing the ability to get more performance measurements.

Organizational flexibility is a growing need – alliance partners, outsourcing, temporary employees and part-time employees

Mike Liddle, Business & Facility Solutions

Key areas of change:

Facility management expanded focus: Real Estate, Information Technology, Human Resources and Finance

All other non-core activities outsourced

Globalization of the economy: It is reasonable to think about the world in three general regions – USA, EMEA, Far East

Amalgamate the associations to become more effective at promoting the strategic role of facility management

Coop-etition: Increased cooperation between competitors for turnkey solutions

Linguistic skills – Spanish is increasingly important

Flexibility – increased need to learn and adapt

FM role: Visibility at the board level will require MBA skills, business knowledge and experience.

Shelly Goldstine, Eckland Consultants, Inc.

Successful decisions on real estate (design, build and maintain) are dependent on better communication between executives and the organization's real estate managers. Improved communication will lead to increased productivity of the FM function and utilization of real estate assets.

Facility management must be recognized as a business function to achieve maximum effectiveness.

Fred Krishon, Law Engineering and Environmental Services

Management's expectations of facility managers' contribution to the enterprise are increasing.

FMs will increasingly be held accountable for bottom-line impact. They will be evaluated on financial performance, and will be expected to contribute to performance improvement for the entire enterprise. This will only increase in the future.

Harvard did a study that showed that 25-40% of an organization's value is in its facilities.

Current generation of FM information management systems:

- CAFM – Computer-Aided Facility management
- CMMS – Computerized Maintenance Management Systems
- CPS – Capital Planning Systems
- Also, GIS, ERP systems

Next generation FM IT tools: EMS – Engineering Management Systems

More than data management – able to make calculations to improve performance – makes decisions objective instead of subjective

- Decision support based on objective data collection
- Life cycle cost analysis
- Predicts remaining service life
- ROI analysis for MR&R decisions to reduce costs or increase returns
- Get more value out of facilities, reduce annual cost of ownership by extending asset life

Understanding the future: A continuous process

Peter Bishop, Ph.D, University of Houston Clear Lake

IFMA's forecasting workshop provided a diverse set of perspectives on future trends and issues, but it is not the same as structured research. The formal process of understanding the future is done in two steps--establishing the materials necessary to anticipate alternative futures and keeping those materials up-to-date in an environment of continuous change.

The first step is captured in a Framework Document, originally developed in the graduate program in Studies of the Future at the University of Houston-Clear Lake. A framework document consists of the various aspects of understanding the future. It defines a domain, such as facility management, and identifies the most useful sources of information about that domain. It then describes the current conditions and stakeholders in that domain in a snapshot fashion. The snapshot goes into motion with the identification of trends and the differences that they will produce in the future. Those differences are the baseline or expected future.

The future contains more than one expected outcome, however. Something may, and indeed will, happen instead. Alternative futures flow from the (sometimes) surprising events and issues that may appear on the horizon before the time period is over. The most important of these contingencies are captured in a short list of uncertainties, high impact possibilities that will shape the future of the domain, however they turn out. Those futures are rendered in scenarios, more or less elaborate stories about how the future may differ from the expected, baseline forecast.

The framework document contains our current understanding of the future in all its complexity. But that understanding does not last because change marches on. The second step is scanning, remaining alert to and documenting changes that could change the future and our understanding thereof. Most people are scanning when they read, talk to others, attend conferences, but rarely do they systematically assess the extent to which novel information, events or issues could change the future. Scanning provides material that updates the framework to be sure it is in step with the evolving future.

Professional and trade associations are perfect vehicles to develop frameworks and conduct scanning studies because their members look to them to maintain an awareness of the whole domain. IFMA might consider developing such materials as a service to its members.