

# EVOLVING CORE COMPETENCIES

We can't discuss the evolution of FM without including an examination of our core competencies. One can argue that competencies are ever evolving to some degree, but this article will focus on a few standout items highlighted below:

Leadership and Strategy

Operations and Maintenance

Finance and Business

Sustainability

Project Management

Occupancy and Human Factors

Real Estate

Facility Information Management  
& Technology Management

Risk Management

Communication

Performance and Quality

Note that there are many areas of overlap between the competencies. This discussion will attempt to focus on the dominant evolution factors affecting a given competency.

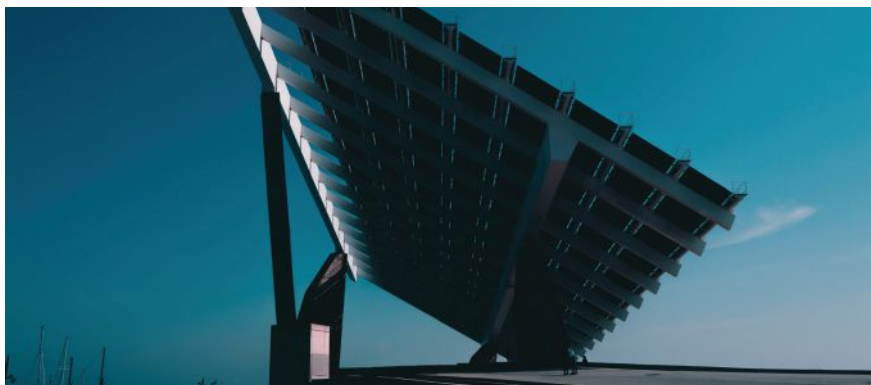
## FINANCE AND BUSINESS

FM has always been a finance and business function, nevertheless the explosion of smart building technologies (IoT<sup>1</sup>) is raising the bar for FMs in terms of data analytics skill requirements. FMs have been able to get along with beginner to intermediate skills in Microsoft Excel, but that will not suffice in the near future. Smart building technologies generate massive amounts of data that exceed the mere million-row limit in Excel. Fortunately, there are many new business intelligence (BI) tools out there not limited by the size of the data set to provide advanced mechanisms to analyze and visualize data — moving from data, to information, to insight.

As a matter of fact, there are more tools available than can be mentioned here. Gartner Group is a good source for objective analysis<sup>2</sup> of the BI tools market. However, before launching into an investigation of business intelligence tools, please check in with the IT team first. Chances are the company has already made a choice and investment in a specific business intelligence platform. An FM may only need to jump on board to start taking advantage of the BI platform's benefits.

Some FMs may need to expand their knowledge base by first learning the basics of business intelligence before diving into the depths of a specific business

intelligence platform. A simple search for “business intelligence tutorials” will yield a number of free website and YouTube sources for additional information. There may be a steep learning curve depending on an FM’s background and current knowledge level. However, the sooner you start, the better prepared you will be when the data analysis demands land in your lap. It’s not a matter of if — but when.



## SUSTAINABILITY

Some might be tempted to think that we have solved the sustainability thing — but that would not be correct. While there have been great strides in sustainable design, construction, materials and operations, we are still a long way from a truly net-zero built environment. So, what are the next big things FMs will face in the area of sustainability?

**Renewable Energy.** Renewable energy is not new, but most FMs have not had a requirement to evaluate renewable energy options and make recommendations suitable for their company and circumstances. Evaluating renewable energy alternatives involves a number of factors, including the company’s strategy, location (geography), building characteristics, stage of building systems life cycle, renewable technology options and renewable sources/service providers. There is still a bit of guesswork involved, as this is a long-term investment with considerable variability in key factors, including advancement of renewable technologies and the pace of energy rate increases. To learn more about the renewable energy evolution, a Google Scholar search<sup>3</sup> will yield a number of authoritative articles on the subject.

**Utility Deregulation.** Within the last forty years we have witnessed the deregulation of the airline and telephony industries. The next big industry deregulation event will likely be in public utilities. If history is any indicator, we know that government gets out of the regulation business badly. Generally, this means a period of industry chaos and price turbulence — with consumers often being the big losers.

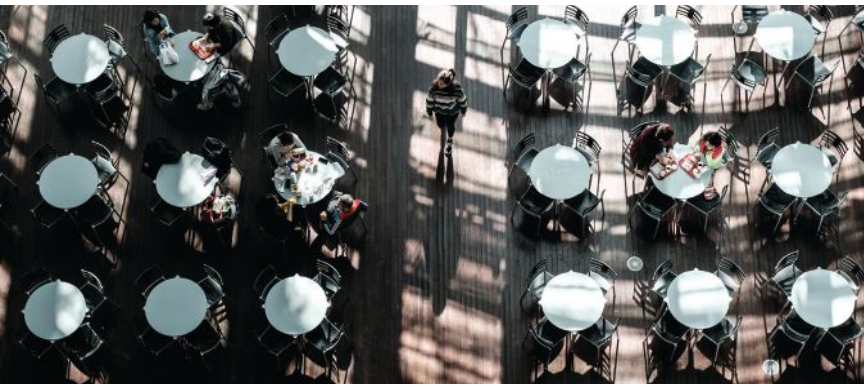
So, what does this mean for FMs? Historically, public utilities have been in the business of generation, transmission and distribution. The advent of large-scale renewable energy sources is cutting into the utility industry’s monopoly on energy generation. As indicated in Jeremy Rifkin’s 2017 World Workplace Keynote<sup>4</sup> address, the utility industry may be faced with over a trillion dollars in stranded assets (energy generating plants with unrealized depreciation value). This trend is also linked to decarbonization of the energy infrastructure. Articles by Deloitte and MIT<sup>5</sup> provide pointers to the utility industry’s future. Ultimately this means FMs will be shopping for their energy sources. This is a reality today for many locations in the U.S. and around the world. The Environmental Protection Agency (EPA) offers an overview for the U.S. Electricity Grid & Markets<sup>6</sup>.

Other topics that fall under the umbrella of Sustainability include wellness & well-being, discussed under Occupancy and Human Factors, and resilience, discussed under Risk Factors.

## OCCUPANCY AND HUMAN FACTORS

There is an increased interest in wellness and well-being related to workplace productivity, employee engagement and employee satisfaction. What started out to be

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well-intentioned (but often failed) corporate wellness programs has evolved into new well building rating systems. Two examples include WELL and Fitwel<sup>7</sup>. These rating systems go beyond the simplistic corporate exercise program to address humanistic aspects of workplace design, including air quality, access to natural light, ergonomics and healthy food choices.

For example, Harvard University published a study relating the impact of increased CO<sub>2</sub> levels on cognitive function<sup>8</sup>. The results of the study concluded that cognitive function scores were better in lower CO<sub>2</sub> conditions compared to the conventional building conditions across nine functional domains, including crisis response, strategy and focused activity level.

On average, cognitive scores were 61 percent higher in lower CO<sub>2</sub> conditions and 101 percent higher in enhanced green building conditions. CO<sub>2</sub>, VOCs and ventilation rate all had significant, independent impacts on cognitive function.

Well-being extends beyond the built environment to working conditions such as team interactions, supervisor and management relationships, work/life balance and overall job satisfaction. New publications on the subject of wellness and well-being identify correlations between an individual's general health and emotional well-being to the factors cited above<sup>9</sup>.

FMs have always played a role in workplace aesthetics and satisfaction with the work environment, but the well building certifications and well-being factors take this role to a new level. This facilities management discipline may be worthy of its own credential — something along the lines of a Workplace Environment Professional (WEP).

## FACILITY INFORMATION MANAGEMENT & TECHNOLOGY MANAGEMENT

Circling back to the discussion of IoT, the exponential growth of low-cost, wireless sensor technologies has fueled the advancement of smart building systems. No longer constrained to responding to simple changes in temperature or ambient light, buildings are now able to react and interact with their occupants. This is bringing about a whole new set of measures and expectations regarding the occupant experience.

FMs will need to acquire new skills around sensor technologies, smart building systems and artificial intelligence. Where can this knowledge be attained?

FMJ has published recent articles on IoT<sup>10</sup> and will offer more in the coming Nov/Dec FMJ sustainability issue.

Virtually every building systems vendor is investing in IoT and smart building technologies and are happy to educate their customers about their new products and capabilities.

The 2018 World Workplace educational program will offer a number of sessions dedicated to the technology track. FMs don't need to look very hard to find educational material on this topic. Needless to say, the evolution of this core competency is more in the "here and now" rather than a future requirement.

## RISK MANAGEMENT

Risk management may be a less obvious subject in the evolution of core competencies. However, consider the increased attention on resilience. While resilience has relationships to finance, business and sustainability; it is fundamentally a risk management strategy. Companies invest in resilience when the prospect of potential

lost revenue greatly exceeds the cost of implementing resilience measures.

Resilience is most often associated with recovering from some form of physical disaster. However, there are many events where resilience can play a role in business continuity — even when a natural disaster isn't involved. Consider a simple power outage, which may result from many non-disaster related events. Having a building generator and UPS system is a well-known form of resilience. Any business located in an area where the utility grid is historically not reliable probably has basic power generation alternatives in place. But what about larger metropolitan areas where the grid is generally more reliable? In 1977, the Northeast experienced a blackout affecting nearly 30 million people<sup>11</sup>. This drove efforts to improve the resilience of the utility grid, but can FMs be totally dependent on the resilience efforts of others?

Resilience has even found its way into dominate rating systems, such as USGBC's LEED certification. However, these efforts still only address resilience at the single-building scale. The next step in this discussion is how to achieve resilience at metropolitan scale. This will involve newer technologies such as micro-grids, large-scale energy storage and ubiquitous renewal energy sources.


Resilience will likely evolve to become a cornerstone of risk management. This timeline may be a bit further for most FMs, but it would be prudent to stay current with the topics and technologies mentioned above.

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### WHAT'S NEXT?

IFMA's core competencies must grow to keep pace with advances in technology, business practices and societal evolution. IFMA will no doubt update core competencies and credentials over time, but many career-affecting events are progressing at an increasingly rapid pace.

A mid-career FM professional today will witness monumental change in their role, responsibilities and profession over the next twenty years. FMs need to control their own destiny by being aware of the technological and cultural changes affecting their profession and take appropriate steps to remain relevant (i.e. employable).

In case you hadn't noticed, the future appears to have arrived .... yesterday. 



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