8.5 Quality in facilities management

Your designs need to respond not just to the needs at move-in, but to the likely changes in use, taking into account even the eventual disposal of the facility.

Françoise Szigeti and Gerald Davis

Key Resources Françoise Szigeti and Gerald Davis have prepared a definitive paper on this chapter's topic, which can be accessed in full from www.mqia.com. This chapter is a summary of their paper.

Quality in facilities management by Françoise Szigeti and Gerald Davis

Françoise Szigeti and Gerald Davis are, respectively, Vice President and President of the International Centre for Facilities (IFC), Canada

Quality in facilities management (FM) relates to how architecture and interior design work in practice, since FM is responsible for the Whole Life Cycle Management (WLCM) of the facility. The value of architecture to an enterprise relates to the capability of a facility to meet the stated and implied requirements at the time of delivery and over the period of use, at an affordable cost that the client is willing to pay.

How does this get done? By ensuring that all the requirements for the project are well documented, include on-going costs and performance-in-use, not just first costs and move-in requirements, and are presented in such a way that the design team can validate and verify that the design and the facility respond to these requirements. This is the core of the QM process for project delivery and for 'quality' in FM.

The FM group looks after the assets during use. It is the group that takes delivery of the facility from the design and construction team. The FM group deals day-to-day with the user groups. It is in the front line. It gets the complaints. It is asked to cut on-going costs, energy consumption, and the use of other resources. It has to provide more with less. It deals with code-compliance and environmental matters. It knows what works and what does not work because of its hands-on experience.

FM is described by the International Facility Management Association (IFMA) as ... *a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.*

Core FM competencies include: Communication, Finance, Human and environmental factors, Leadership and management, Operations and maintenance, Planning and project management, Quality assessment and innovation, Real Estate, and Technology.

Even so, the FM group is seldom asked for its advice at the front end of projects. The Operations and Maintenance day-to-day problems and costs are often forgotten when first costs and designs are reviewed. Therefore, architects who want to pursue a quality management approach should get interested in FM and make sure that those stakeholders are in the loop.

Describing requirements as ends and results, rather than specifying solutions, is called a Performance Based Building approach (PBB). It should be an essential part of an FM quality process. A PBB approach presupposes that the client understands quality concepts, and is in line with ISO 9001.

The core of PBB is the dialog between the client group and the supplier, in this case, the design and construction project team. (Figure 8.5.1)

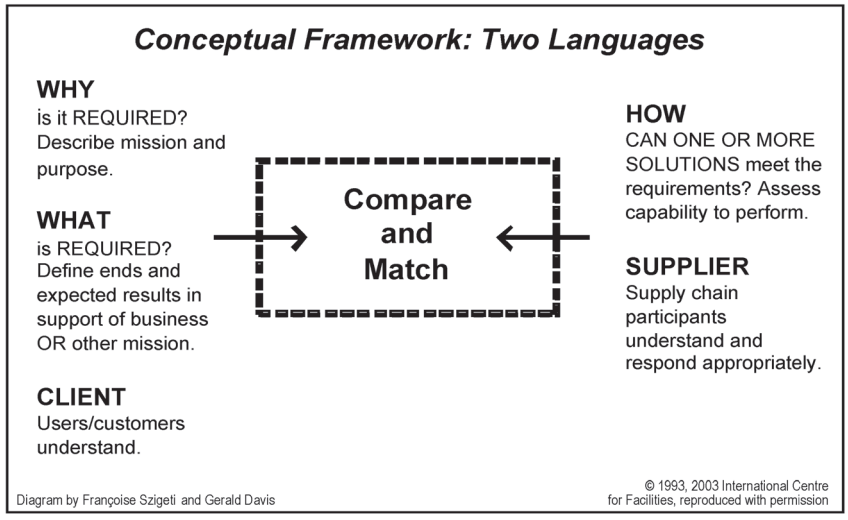

Figure 8.5.1 *Two Languages: 'client/user' and 'supplier/provider'*

CRE vs. FM

The CRE group is transaction-oriented. It sets the corporate strategy for portfolio and asset management, negotiates the financing and usually acts as the buyer or renter on behalf of the enterprise.

Some large organizations have both a Corporate Real Estate (CRE) group and an FM group. On most major projects, the CRE and/or the FM functions are the architects' client on behalf of the enterprise. In many large organizations, they work independently of each other. This can cause problems for all service providers, and for architects in particular, because the CRE and FM groups often have conflicting views of what is needed.

Architects need to avoid getting caught between the two groups, yet since it is the responsibility of the design team to *confirm* their understanding to the client, to ensure that the requirements of all stakeholders have been taken into account. To make explicit the implied requirements, you'd better be sensitive to the power plays among these two groups and the rest of management!

Quality in FM is the *appropriate* level of service

The QM people in the FM group of a large organization called us once and asked that we explain what 'quality' is to their outsourced operations and maintenance service provider. So we met with the senior manager responsible for providing the services.

He said that 'he knew' what an *excellent* technical performance and level of service was – so why had he been asked to talk to us? We told him that his client did *not* necessarily want *excellent* services across all their facilities, but *appropriate* services, tailored to each situation.

For instance, we said, it was part of his job to find out which facilities were obsolete, or housing a unit that would soon be shut down, or expected to be vacated for any reason. If owned, the facility might be renovated, sold or disposed of. If rented, the lease might be coming up for renewal and the time would be right to decide whether to renew or move. In such cases, the level of service for that facility might be to do just enough to keep it maintained 'to code' until the organization was ready to act.

As part of his primary job, he knew the condition of the facilities and the needs for physical repairs and maintenance. By getting an understanding of functionality and what the users needed, he would be able to advise the FM group more comprehensively, and by being more responsive, he would provide added value. We also told him that there were a number of tools that could be used to gather information for all the facilities, so that he could help the in-house FM group assemble a WLCM plan for each facility. This is the focus of forward-thinking FM groups.

Did we get what asked and paid for?

Clients often say 'How can I verify that what I get is what I asked for and paid for?' Qualitative and quantitative metrics are key. Then, the client and the design team can measure whether the resulting facility meets those requirements.

Quality needs to be *measurable* in a coherent, structured, transparent, objective, auditable way, so that the appropriateness of the results can be measured, validated, verified, and compared to the stated requirements. This can be done at many points during the life cycle of a facility; starting during planning, design, construction, at commissioning, periodically when the facility is in use, and before disposition. Taking an evaluative stance, FM gathers the *actual* quality and performance of the facilities and services that support occupants, their mission and their enterprise.

There are many different ways to accomplish this. One way is to use calibrated scales that allow direct, objective comparison between requirements of the users (demand) and the capability of the design or facility (supply) to respond. Then, the fit between requirements and capability can be measured, and the gaps, in any, can be presented to senior management in support of requests for decision and funding. (Figure 8.5.2)

Design can make or break it for FM

Quality is part of a management process that also involves continuous improvement, lessons learned and feed-forward, throughout the WLCM of facilities. Design has a major influence on the entire life cycle of facilities.

Quality and Value, as applied to architectural products and services, can be affected by:

- more precise definitions of what these are at the stages of portfolio and asset management, planning and design;
- more accurate tools to measure them; and
- an FM process that takes these concepts into account.

Conversely, decisions made during design affect the constructability, accessibility, adaptability, maintainability, serviceability, energy effectiveness, waste management, use of resources, costs-in-use, etc., of the facility.

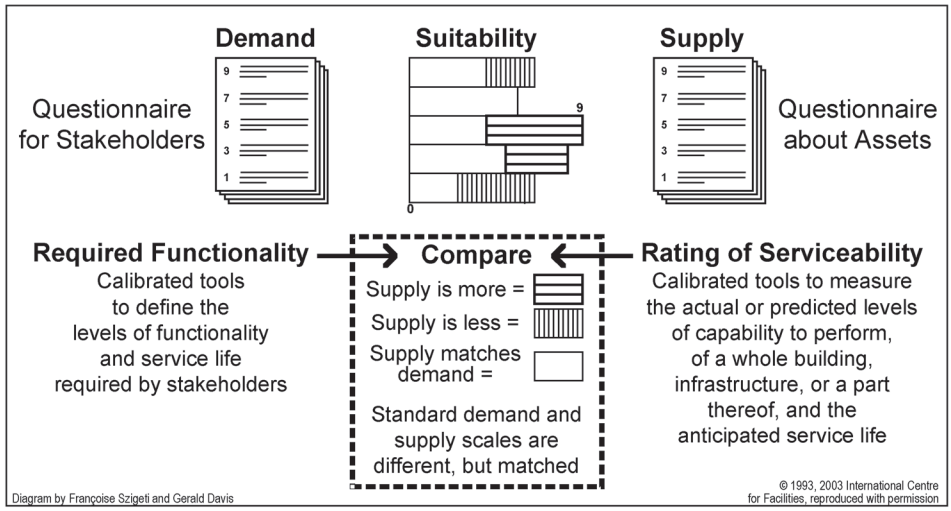

Figure 8.5.2 *Matching demand and supply to prepare gap analysis*

To keep track of all these aspects of a project, a good information base is essential. It goes a long way to ensure good communications. On this front, help is on the way. Interoperability of data bases, comprehensive building information models, and other electronic devices, will make it possible for all stakeholders to use a single pool of digitized information at each stage throughout the WLCM of facilities. (Figure 8.5.3)

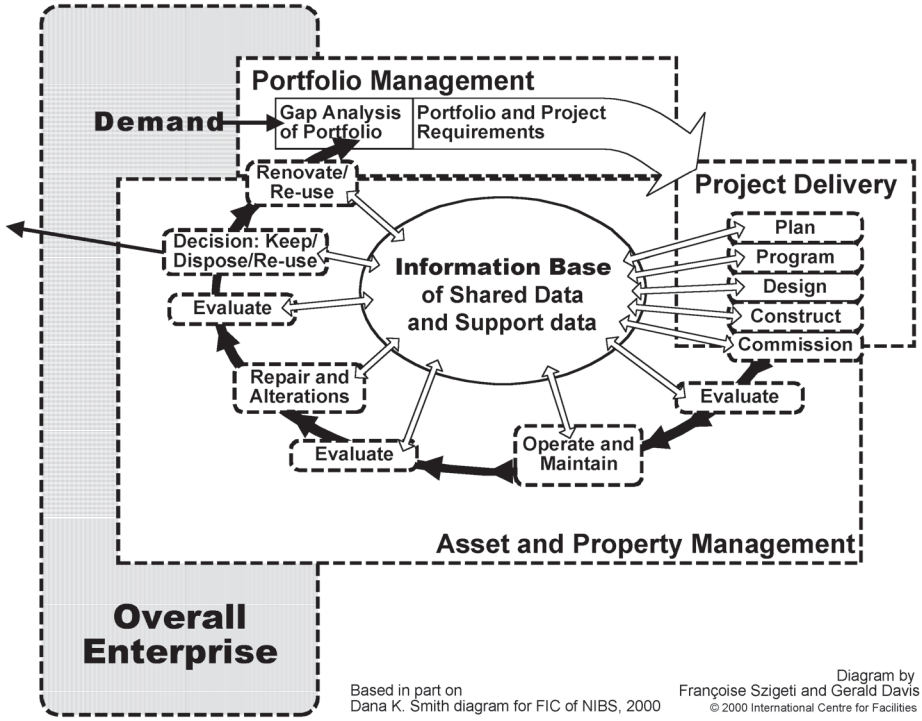

Figure 8.5.3 *Life cycle management of facilities and its information base*

Learning from project to project

FM groups striving to improve their QM have been paying attention to the lessons they can learn from each project, to best practices, to Key Performance Indicators (KPIs), and to benchmarking, whether using qualitative or quantitative metrics.

These terms are now part of the vocabulary of most, if not all, major FM groups, and are very much in evidence at FM conferences such as IFMA's World Work Place. Evaluations are becoming an on-going activity that is part of the budget cycle. Information from such activities feed forward to the next project and budget cycle. (Figure 8.5.4)

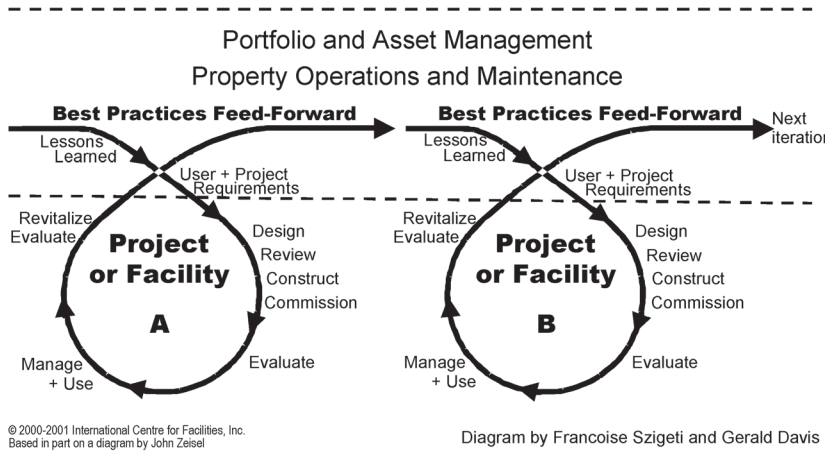

Figure 8.5.4 *Feed forward*