

The added value of FM – updates from the RNG group

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DTU says yes to operational friendly building but how should it be done in practice?

Helle Lohmann Rasmussen, Susanne Balslev Nielsen and Anders B. Møller

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INSIGHT

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SWITZERLAND



Practical guide to FM-supported building design and construction

By René Sigg, Board Member IFMA Switzerland

IFMA Switzerland (Swiss international facility management association) has collaborated with 26 other project partners to develop a practical guide to FM-supported building design and construction (pbFM). The guide shows how it is possible to achieve close coordination between FM and the operation and management of a building as early as in the design and construction phases. Early involvement of FM results in optimal planning of the building management and operation activities within the design and construction process.

Buildings are usually designed to last for a long time and the operational phase of its existence has a significant impact on resource and energy consumption, as well as on costs. Facility management (FM) is a holistic, strategic approach aimed

at making buildings, workplaces and spaces continuously available and keeping them in working order while adapting them to today's changing needs. The responsibility of the facility manager is thus to manage the property throughout its lifecycle

and to control a large part of the costs incurred during that time. In order for a building to be easy to manage and to allow for a seamless transition from the construction to the operational phase, close coordination between FM and the building operation and management must be achieved early on in the design and construction phases.

This need has also been identified by the Swiss Association of Engineers and Architects (SIA). The FM planner's role in the construction process was first defined in the Swiss recommendation SIA 113 "FM-oriented building design and construction" published in 2010. The SIA 113 describes the involvement of facility management during the design and construction phases (pbFM) in accordance with SIA 112 "service model". The early involvement of FM results in optimal planning of the building management and operation activities within the design and construction process.

FM-supported building design and construction

FM support during the building design and construction phases is most effective when it is integrated into the design at an early stage.

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Comment

Scott Newland
Chief Operating Officer, ECS



Over the past two years I have been fortunate enough to attend and participate in a number of European & Global Facility Management and Procurement exhibitions

and congresses and have begun to hear the 'trendy' marketing Gurus start to use this new word – 'GLocal' but what does it mean?

We all know that at around the time of the Millennium, procurement changed dramatically by moving away from local buyers sourcing their services locally to having Global Corporate organisations trying to centralise these activities - firstly with a view to try to buy globally and after realising this was not possible to then try

to source regionally i.e. Americas, EMEA, APAC etc. In the end this was not possible at first so they bundled countries.

It is true that when done well and by adopting a transparent, professional collaborative approach and engaging with all stakeholders throughout the process that this can and should deliver efficiencies and process improvements and a by-product of which is normally savings.

Perhaps though this might have been taken too far whereby a person sitting remotely from where the services are required, and where quite often these services are critical to supporting the core business, has no relationship or empathy to their Colleague locally and does not understand the pressure points. Their target to drive out cost and reduce the supply chain might just be starting to compromise the local need for good standards and the ability to work with

Service Partners for a long term strategy.

In my opinion it is vital that for the success of any service based product, especially Facilities Management, where people are the difference between success or failure that there is a true spirit of Partnership between the Client and their Service Partner who is the subject matter expert.

I hear far too often from Clients and Colleagues in the industry that they have suffered from an arrogant approach where the global company delivering to them has tried to dictate what the solution should be as cost was the only factor in the relationship and where they wrongly assume that 'one size fits all! If you do not win over the 'hearts and minds' of your customer at the building or the site where you deliver your product your relationship will fail. FM should be a collaboration where the Service Partner should integrate into the Client's team and work hand-in-hand to understand the function of the site and model its approach accordingly. Of course there is always the strategic element and the need

to understand the 'bigger picture' and this is where a regional layer of management is vital to understand, manage and effectively communicate this to all the parties delivering the services and to then feed quality management information to the Client.

In conclusion I believe that for 'GLocal' to be meaningful and deliver results that the delivery should be made by local in-country, 'best-in-class', privately owned facility management companies where the owner is still active in the daily business with a passion for their product. These organisations should then be part of a unique alliance who come together to share experiences and best practises and who as a Group, can be flexible and motivated to deliver excellence to their Clients through excellent people who are looking for long term and mutually beneficial relationships.



Practical guide to FM-supported building design and construction

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Especially during the early stages of the building design phase, the necessary measures related to building operation and management can be fully incorporated into the building. However, if the professionals responsible for operation and management are

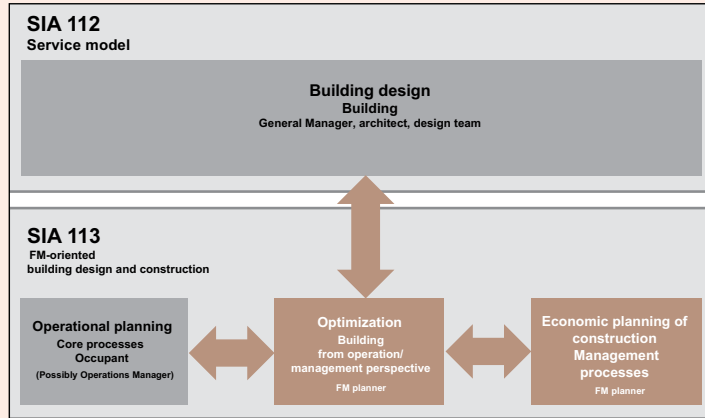


Fig. 1: Interaction between building design (SIA 112) and FM-oriented building design and construction (SIA 113).

SIA 113	Quality assurance	Review Methodology of FM-supported building design and construction (pbFM)		
	Owner perspective	Tasks related to finances/resources	Tasks related to building	Tasks related to organization
	Occupant/tenant perspective	Life cycle cost optimization Floor space efficiency	Building optimization from the management perspective	Planning of the building management
	Service provider perspective			
	Information and data management	Description Structuring	Filing	Exchange
Information and data management				

Fig. 2: Structure of the recommendation SIA 113 'FM-oriented building design and construction' with the relevant elements of FM-supported design and construction (pbFM).

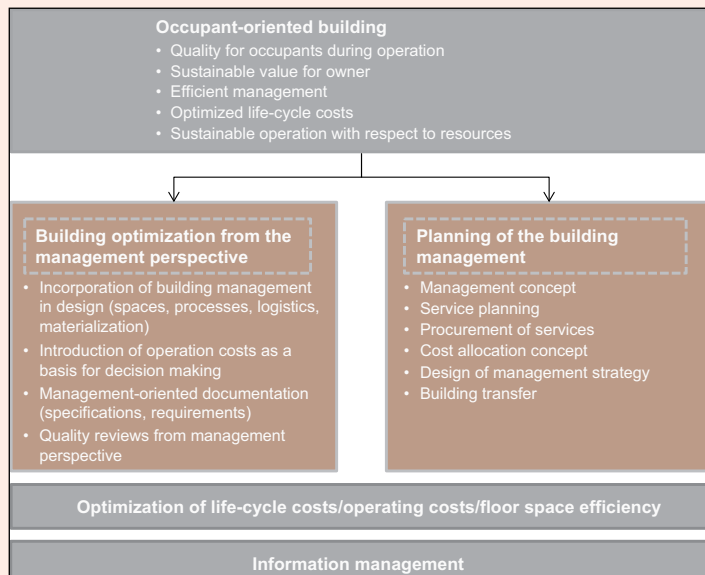


Fig. 3: Methodology of FM-supported building design and construction (pbFM).



involved too late in the design phase, unnecessary high rescheduling costs will arise.

In the early stages of the project, the priority for pbFM lies in the optimization of the building from a management perspective. As the project progresses, the focus shifts towards the planning of the building management. Building management professionals should be involved at an early stage, especially in those cases where operation and management take place within a complex organizational environment involving the various stakeholders. This concerns mainly buildings which are operated in a complex and costly manner.

Building optimization from the management perspective

Polyvalent properties with a stable value are characterized by a high degree of usability. They are adaptable, operationally eco-friendly and have low management costs. The involvement of FM in the building design and construction phases is more general early on and becomes increasingly detailed towards the end of each stage. This phased detailing ensures that sufficient attention is given to the different issues arising at each stage and that a reasonable amount of effort is invested in every one of them. The issues emerging from the building management concept are to be drawn up in parallel to the building design. The concept also provides the specifications and requirements for the optimization

of the building from a management perspective. Here, FM-oriented building design takes into account not only the demands of the owner but also the needs of the users.

Planning of the building management

In addition to the optimization of the building, planning the required management of the building is paramount. On the basis of the process and service model used in facility management (ProLeMo), the relevant processes and services exchanged between the parties involved (owners, managers and tenants/occupants) must be defined for the future management phase. Documentation of the results obtained from this planning process is carried out as part of the building management concept. The latter regulates the responsibilities between owners, managers and occupants, points out organizational requirements and interfaces, describes the necessary services in a process-oriented manner, and presents the expected resource and personnel requirements. On this basis, it is possible to develop the structural and procedural organization of the building management, contract out management and FM services, and compile the management documentation required at a later stage.

Optimizing the life-cycle costs

Within the framework of 'FM-supported building design and

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Practical guide to FM-supported building design and construction

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construction', investment decisions are always made with full knowledge of the life-cycle costs. The performance of a cost analysis during the life cycle of a property thus

replaces the one-sided optimization of investment costs. The life cycle costs can be most easily influenced in the early design stages of a construction project. The calculation tool 'Life-

cycle cost determination of real estate' created by IFMA Switzerland offers the possibility of calculating and optimizing the life-cycle costs incurred during the 'Strategic planning', 'Preliminary studies' and 'Design' phases. The methodological approach based on phased input parameters allows the obtaining of comparable results in the respective phases even when different levels of information are available.

Information and data management

Throughout the life cycle of a building, data are generated continuously from the design phase to the operational and renovation phases. Information and data management ensures that the information needs of all parties are met in all the stages. With an increasing IT support during both the building design and the management stages, information management,

which traditionally dealt with loosely structured documents containing text and images, now embraces object-oriented modeling of architecture, spaces and technical installations in the form of structured data. The model 'Building documentation in construction' by KBOB/IPB effectively supports the efforts for standardization of documentation in the Swiss construction and real estate sectors.

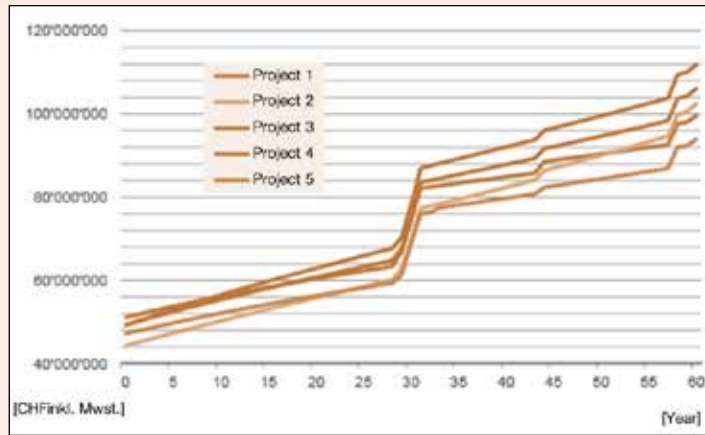
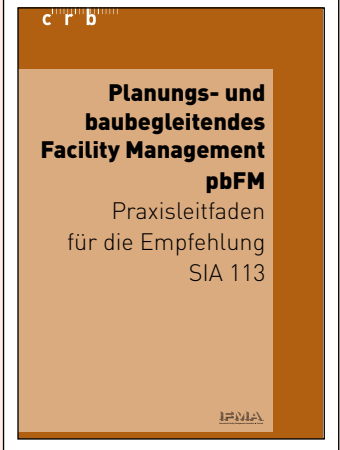


Fig. 4: Example of a life cycle costing for five different projects within the context of a competition over a period of 60 years.



Publication

IFMA Switzerland has collaborated with 26 other project partners to develop a practical guide to the recommendation SIA 113 "FM-oriented building design and construction". The guide takes the guidelines of SIA 113 and provides specific instructions on the implementation of the recommendation in practice. The aim of this practical guide is to promote the dissemination and implementation of the recommendation SIA 113 as well as assisting building owners in commissioning facility management services for the design and construction phases. On the other hand, service providers can obtain instructions, tools and best practice examples from this guide.



Project partners

Allpura, Siegfried Braun; Amstein + Walthert AG, Oliver Brückner and Robert Schneider; Ar-masuisse Immobilien, Max Marti; Axpo AG, Reto Bühler; Baudirektion Kt. Zürich, Hans-Peter Huber; Cofely AG, Hanspeter Hafner; CRB, Karl Liechti; Emch + Berger AG Gesamtplanung Hochbau, Ueli Grindat; ETH Immobilien, Walter Iten; Halter Immobilien, Andres Stierli; Hochbauamt Kanton St. Gallen, Fabienne Mäder; ICFM AG, Michael Ulli; Immobilien Aargau, Claudia Schneider; Implenä AG, Thomas Hess, Andreas Pfeiffer and Rolf Wagenbach; Infra Post AG, Michael Bürki; Intep - Integrale Planung GmbH, Irène Meierhofer and René Sigg; ISS Facility Services AG, Peter Lettenbauer; Logistikbasis der Armee, Peter Bachmann; MIBAG, Silvio Wullschleger; pom+ Consulting AG, Simon Caspar; Priora Facility Management AG, Barbara Muther and David Lunze; PSP Group Services AG, Thomas Kraft; reflecta ag, Christian Ingold; Roche Diagnostics AG, Nathalie Gammeter and Felix Schleuniger; Syngenta Crop Protection AG, Rainer Kühlmeyer; Swisscom, Jöri Engel.



Multifunctional office and learning environment for new ways of working and learning

By Pauliina Nurkka

Introduction

During the last decades the ways of learning and teaching have changed from traditional teacher-led teaching towards student-centred learning. Teachers are more facilitators of the learning process than traditional information suppliers, while students are active actors and learners. A pedagogical model called Learning by Developing has been created to support an integrated learning, research and regional development process at Laurea University of Applied Sciences in Finland (later Laurea UAS). Through Learning by Developing (later LbD, LbD model) model new practices, competence and collaboration between different stakeholders are produced. In an LbD process, there is always an authentic need for every project. In addition to authenticity, other essential elements in the model are partnership, creativity, experiential learning and research.

The new ways of working and studying have set new needs for working and learning environments as well. LbD model requires flexible, multifunctional environment – both for students and lecturers. There is a need for open interaction with students, lecturers and management, for cooperation with colleagues, students and other partners, for a group work and for individual intensive work. The facilities should support all the forms of interaction. Open communication channels are essential.

A few space design projects have been carried out successfully at Laurea UAS to support the new ways of learning and working according to the pedagogical model. The outcome of these projects is introduced in this article.

Multifunctional offices

During the year 2013 the pilot space design project was carried out successfully. About 185 m² traditional

office room was renovated to be a modern multifunctional working space. A project was originated from a need to get more space for students at the university premises. At the same time the new ways of working had been adopted among the personnel of Laurea UAS. There was no need for individual office tables during the most of a day, neither need for several cabinets for individual belongings, books, papers etc.

Facility management students were involved in the design process. A group of 2nd year students did literature review in the themes new ways of working, effective work environment, workplace design and ergonomics. Further on, the students surveyed the occupation rates of the offices by systematic observations. Through this method, the students also got an insight of the conditions and the challenges of the current work spaces. Next, the students continued the research with a questionnaire about the usage of the work stations and attitudes towards

the new ways of working. According to the result, the lecturers did not seem enthusiastic about implementing rational changes in the work environment and most of the respondents emphasised the importance of having a private workstation. Yet, the students concluded that the staff should be working in a comfortable and productive environment with ergonomic and adjustable furniture. The students draw various blueprints to illustrate the possible layouts of a new multifunctional office. They also suggested furniture acquisitions and calculated the cost for the suggested furniture.

Though the personnel was quite satisfied with the current working conditions and the attitude towards a new multifunctional office with free seating was expected to be a challenge, the need to use the office space more efficiently was still existing. Furthermore, the project was decided to be implemented.

With the help of outsourced interior designers and renovation service the alteration work was carried out during the summer break. The user experiences were gathered four months after the move through an email survey. The experiences resulted in terms of atmosphere and well-being, communication and functionality. Most of the answers were very positive, like: “Bright, open space, gathers people together also from other rooms”, “The design of the room is aesthetic and it inspires me in my work”, “I love the fact that there is always someone with whom I can talk if I need help or opinion”, “I get new ideas how to do effective way my work”, “I feel like I am aware what is happening as communication is very open in our office room”, “Different types of working stations” and “no extra papers when there are not own tables where to collect them”. According to the answers there were also some things to be developed: “because of interruptions several times during a day, concentrating is sometimes difficult”, “separate phone box could be needed” and “I think there has been some confusion, at least in the beginning, about the purpose of these arrangements.”

After the new office has been in use for about 14 months, one can evaluate that in the new office people choose their working stations according to their current needs. The personnel in the room seem to be satisfied with their working conditions. A phone box has been acquired. The perceived problems still concern mainly the interruptions in concentration. The quantity and the quality of the positive experiences have provided a solid foundation for further facility development projects. Same kinds of offices have been renovated at other Laurea UAS campuses as well.

Multifunctional learning environments

Based on good results in building up multifunctional office environment, two classrooms have been renovated to meet the needs of modern students as well. The learning space should naturally support the needs of the



Multifunctional learning environment

pedagogical process. When the students are doing projects for or with working life representatives and teachers are facilitating the learning process, the traditional classrooms are not valid any more. In new learning surroundings there are variable and movable furniture, which can be organized according to the different learning events. The colours support motivation and atmosphere. The design also supports the activity of the students.

The occupation rate of these new rooms has been almost 100% during the day time. The feedback of these rooms is very positive both from the students and lecturers. The student union also wants to use these learning environments for their own meetings on Saturdays. Let the pictures of the learning environment speak for themselves!

Summary

As explained, the new ways of working and studying have set new needs for working and learning environments. LbD model requires flexible, multifunctional workspace for students and lecturers. After the introduced space design projects, there are now modern spaces to support the work and learning at the university premises. There is space for open interaction with students, lecturers and management, for cooperation with colleagues, students and other partners, for a group work, and for individual work. The facilities support many forms of interaction.

These last investments in space have been just the beginning to re-organize the learning and working environments at Laurea University of Applied Sciences. In the future most of the space will be renovated alike to support even better learning and more happiness.

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Multifunctional office



Safe and sound

By David Thorp

For companies operating in the competitive world of FM services, high standards of security are vital for business continuity, says David Thorp, of The Security Institute.

Security and risk management are important considerations for all modern enterprises and any organisation that fails to minimise the potential for attack treads a precarious path.

For companies providing FM services, not only can poor security jeopardise business continuity, the knock-on effects of any interruption to their operation is likely to have repercussions for their customers and clients.

A dedicated security and risk management department should be one of the cornerstones of an organisation's infrastructure. And the key to having a secure operational structure is the configuration and implementation of security and risk management strategy.

This security strategy must also be able to react to multiple operational and even geographical factors to ensure ongoing consistency of service.

This is something that Simon Pears, global security director at Sodexo, a member of The Security Institute and a 'chartered security professional' (CSyP) is well aware of. As well as being part of the team responsible for Sodexo's security, he also manages the security services provided for clients. "We have to make sure that our personnel are trained to the same high standards," says Pears, "so that they can identify and respond to all types of potential threats, both physical and IT-related."

Don't write it down

Security provision has developed into so much more than the putting into place of security guards, CCTV and access control systems. Says Pears: "Cyber threats are now the most effective way to attack an organisation and the fact is that those with malicious intent are finding ever more sophisticated ways of using IT. Employees must be aware of the dangers associated with activities such as writing down or sharing pass codes and lending electronic devices such as laptops." Also, with ever more sophisticated threats and opportunistic theft, "they also need to be given guidance about reporting suspicious behaviour."

While it is tempting to assume that security threats only come from outside an organisation, they are just as likely to come from within. An insider threat can be posed by permanent employees, contractors, temporary staff, or even

business partners. Top of the list for reducing potential vulnerability, is the need for a comprehensive personnel security regime; pre-employment and after-employment screening; and the creation of a 'secure culture'.

However, Pears believes that too many FM service providers fail to adopt a "joined up" approach to physical and online security. "This often arises as a result of an outdated silo-based corporate structure that leaves an organisation highly vulnerable to loss of data and continuity of service," says Pears, "and that's something that could be prevented by adopting a convergence-based approach."

Converging teams

A converged approach to security highlights vulnerabilities within the three areas of physical, people and process risks that are possible across infrastructure, operations and specific events. It relies on the physical security and IT teams to better understand their respective roles and how they are reliant on each other to keep business operations safe. To collaborate in combating sophisticated threats both functions must dovetail their capabilities to identify vulnerabilities. Once this issue has been addressed, a plan that combines manned guarding, technology, processes, safeguards, management and systems into a single integrated security risk framework can be developed.

For facilities service providers, the knowledge and abilities of their employees are fundamental to their ability to operate to the highest standards and meet their customers' expectations. This is as relevant in the context of security as any other aspect of business. So adequate training is necessary to make all employees security-conscious, and this should be considered a priority for building effective prevention, detection and response. It's also important that this also extends to the top of the corporate hierarchy, as management of the converged approach must be led from the highest level to guarantee effective integration, oversight and budget allocation.

Implementation of a company-wide security and risk management strategy is a complex task requiring skill, knowledge, attention to detail and the application of best practice. Pears says:



"The challenges FM service providers face today are more complex and demanding than ever before. However, the good news is that there is a growing number of security professionals who can meet these challenges head-on."

Respected discipline

One of the misconceptions the security industry has countered over recent years is that it is not as important and relevant as established, recognised and respected disciplines such as law, education, medicine, accountancy and engineering. The security industry boasts a number of highly trained and experienced individuals who fully deserve a professional status that represents the vital role they play in keeping people and property safe. Given how important this role is, it is difficult to think of another profession with a greater level of responsibility.

One development helping to recognise this level of professionalism is the development in 2011 of the Register of Chartered Security Professionals, created by The Security Institute on behalf of The Worshipful Company of Security Professionals (WCoSP). Applicants for CSyP status must go through a rigorously staged assessment process.

Candidates have to prove they have reached a minimum competence level in each of five defined areas – knowledge, practice skills, leadership, communications and professional commitment. They must also be of undisputed integrity and, once admitted, they are permitted to use the CSyP post nominal.

Applicants for CSyP status have come from locations as diverse as the UK, Australia, US, Abu Dhabi, Tunisia, Dubai, the Czech Republic, and Spain. Of the 57 people having obtained CSyP status, security service providers

employ 11, 19 are security consultants, six operate within the public sector, and 21 are corporate heads of security. A further twenty people are currently working towards the designation.

Simon Pears became a CSyP last year. Given the robust application process, he believes it represents a benchmark for everyone to aspire to.

"Being a CSyP demonstrates to clients, employers, peers and the public an ability to perform to the highest standards," says Pears. "We are required to undertake continuing professional development (CPD) on an annual basis and are obliged to act with integrity according to a defined code of conduct."

Although CSyP is being promoted as the security industry's most prestigious designation, it is important to note that the sector is increasingly viewed as a viable career option with courses, qualifications and accreditations available for individuals at all levels. The Security Institute offers its Certificate in Security Management and a Diploma in Security Management, as well as degree courses offered by a number of universities.

Facilities service providers are now in a position where their security cannot be left to chance, as the level and type of threats they face are constantly evolving.

Simon Pears offers this advice: "Safety can only be achieved when processes are in place to keep it that way, so those that are serious about their own security need to ensure that the people they employ to carry out this important function have the ability to implement and maintain comprehensive security strategy that meets their organisation's unique requirements."

David Thorp is managing director of The Security Institute

Climate control in equipment rooms

Comfort versus precision air conditioning

By Markus Trautwein

Split systems are widely used in comfort air conditioning applications and they are often also installed in plant or equipment rooms as a supposedly cheaper alternative to precision air conditioners. However, these systems can hardly meet the special requirements imposed by equipment rooms.

An all too often heard customer complaint is that a comfort air conditioning system installed in the spring, which reliably controlled the ambient temperature in a server room even during the hot summer months, is no longer able to control the temperature by the winter. "The equipment room gets far too hot", complains the customer. The complaint due to a supposed technical defect described here typically has fundamental flaws on closer inspection. Comfort air conditioning systems are

generally not designed to accurately maintain a constant fixed temperature in equipment rooms. However, a precision air conditioner is different. It is specially designed to meet the requirements of equipment rooms and to adhere to close tolerances.

As the name suggests...

Precision air conditioning units and comfort air conditioning units are two completely different systems in concept and operation. They are designed and optimized for the use suggested by their respective names. The aim of



Image: Tran-Photography - Fotolia.com



comfort air conditioning technology is to create ambient conditions that people regard as pleasant in terms of temperature and humidity. The range of conditions in a room which is perceived as comfortable by the majority of people can be represented as a "comfort area" in a hx diagram. The comfort goals are also reflected in the reference data used to determine the catalogue ratings of the equipment: For human air conditioning, they lie at 27 °C and 48 percent relative humidity (according to ISO-T1). Because in the comfort ambient conditions it is assumed that the environment to be controlled is always warm and humid, i.e. ambient conditions with a relatively high enthalpy level, the dehumidification process has a particularly high priority in the distribution of the cooling capacity. Comfort air conditioning units use up to 40% of its energy on the "latent cooling load". This is the proportion of the total cooling capacity that goes into dehumidifying the air and does not lead to a reduction in temperature. The remaining proportion – the "sensible cooling load" – lowers the room temperature. This division makes sense, because at higher temperatures it is normally enough to dehumidify the ambient air in order to reach the comfort area. Working at high

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Climate control in equipment rooms

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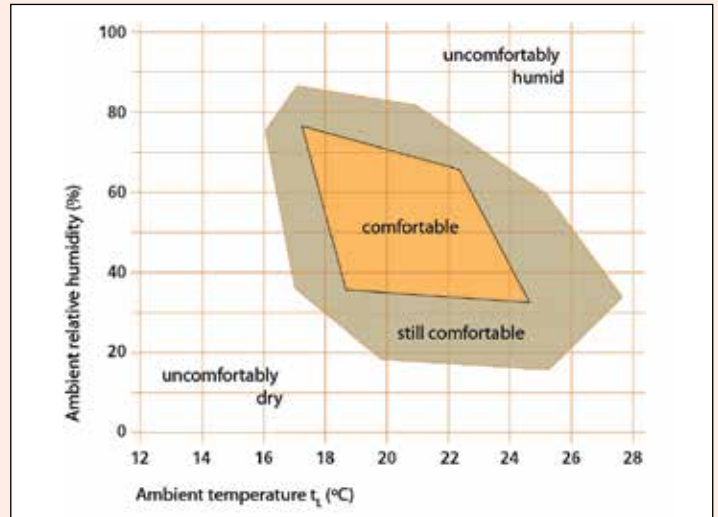
enthalpy levels, the control concept used by comfort air conditioners allows reaching the dew point much faster. The dehumidification taking place leads to the formation of a condensate on the heat exchanger surface. The increasing number of fine condensate droplets is accompanied by an increase in the surface area, which, in turn, increases the heat transfer. Thanks to the enlarged, wet surface, the heat exchanger ultimately gains about 25 percent in efficiency.

Divergent requirements

In the equipment room, the priority is to have reliable and efficient cooling, which is typically achieved by a precision air conditioner. A temperature of 24 °C and 50% relative humidity are desirable. As a result, precision air conditioning units use more than 90 percent of their available cooling capacity for sensitive cooling, i.e. purely for temperature reduction. The remaining cooling capacity can be used for additional dehumidification, when required. This has a positive impact on the operating costs.

The comfort air conditioner can end up using up to 40 percent of its cooling capacity for dehumidification in environments requiring precision air conditioning. This is counterproductive, especially if the air in equipment rooms may not even need to be dehumidified. In winter, the air can be very dry and

it is often necessary to humidify the rooms. The heat exchanger in the split indoor unit is optimized for 27 °C/48 % RH and does not operate optimally at 24°C/50% RH. It is not able to remove the heat as efficiently. The efficiency of the “dry” heat exchanger is 25 percent lower. Even more problematic is the fact that modern, ‘smart’ air conditioning units with inverter compressors temporarily reduce the power when the air in the room is too dry. In addition, the reduced efficiency of the “dry” heat exchanger results in lower heat transfer to the refrigerant. This situation continues until, finally, the control system inside the indoor unit temporarily switches off the unit due to too low evaporation temperatures. Internal control sequences thus help prevent inefficient operating conditions. But what is desirable in comfort air conditioning can be a costly nuisance in the context of “precision” air conditioning. Switching off the unit leads to temperature and humidity variations in equipment rooms and often to serious problems; excessive relative humidity leads to condensation and corrosion, while too low relative humidity can result in electrostatic charges or discharges and associated alteration of data or destruction of electronic components. Serious malfunctions or total failures are often the end result.



The aim of comfort air conditioning is to reach ambient conditions which are within the area of comfort.

Performance	Precision air conditioning system	Comfort air conditioning system
Rated cooling capacity	10 kW (at 24 °C / 50% RH)	10 kW (at 27 °C / 48% RH)
Cooling capacity at 24 °C / 50% RH	10 kW	7 kW
Latent cooling capacity (dehumidification)	0.5 kW (max.)	2.5 kW
Sensible cooling capacity (room temperature reduction)	9.5 kW	4.5 kW
Air volume	1,500 - 30,000 m ³ /h (300 m ³ /kW)	200 - 2000 m ³ /h
(100 m ³ /kW)		
Air discharge speed	2 - 3 m/s	0.15 - 0.5 m/s

Catalog data for a precision air conditioner and a comfort air conditioner at 24 °C / 50% RH



Precision and comfort air conditioners differ significantly in air flow rate and speed as well as in the control concepts.

Hot spots and associated risks

The problems related to low humidity described above are sometimes compensated by installing a humidifier which maintains the relative humidity at around 50 percent. Another alternative is to use oversized indoor units. These solutions may improve the described efficiency loss and the control system is “tricked” but a risk still remains: The strong, localized heat generation caused by the electrical equipment can cause dangerous hot spots. To avoid that, huge volumes of air need to be recirculated. Here too, the comfort air conditioner turns out to be completely unsuitable as it is designed to produce as little air movement as possible in order to avoid unpleasant draughts in areas occupied by people. The devices are therefore optimized for small air volumes (200 to 2,000 m³/h) and low air velocities (0.2 to max. 0.5 m/s). In contrast, precision air conditioners work with discharge velocities of up to 3 m/s to achieve the air agitation required in equipment rooms.

Markus Trautwein, Head of technology BU Climate control and humidification systems and Stefan Cruse, Sales Manager South BU Climate control and humidification systems, both at Stulz GmbH, Hamburg

Finding the Balance

Maximizing savings on labor and product costs

By Neal Duffy

It's common industry knowledge that maintenance costs are largely tied to labor. And, while labor is a large expense, many organizations continue to focus their attention on lowering costs within that small percentage of their budget dedicated to custodial products.

While it is important to shop the best price on the lowest total cost product choices, lower product pricing alone will not solve a facility's biggest challenge today: driving increased efficiency and productivity in the people charged with cleaning their facilities. With limited resources and reduced budgets to fund labor, facility managers need to explore strategies focusing on both sides of the cost equation — products and worker productivity.

Purchasing the cheapest products may offer short-term, seemingly immediate savings. But what is often misunderstood is that those decisions can directly impact facility maintenance processes (and create unwanted results) that may actually increase labor activity drains and decreased worker productivity. Often tied to cheaper products are increased costs in the extra time and attention those cut-rate products may require.

To maximize productivity with available labor in a facility, the focus should be on implementing the right products and processes to increase efficiency and productivity. It may seem challenging to visualize how to approach a total evaluation of a building's current operations, so here's a step-by-step process to walk you through reducing overall costs and improving appearance levels by optimizing facility cleaning operations.

Understand your space

Knowing how many hours it should take to clean and maintain a building can be tricky and often underestimated in importance. However, if you haven't taken the time to analyze true cleaning times, it's difficult to know what numbers of full-time equivalents (FTEs) are appropriate and where time and money are potentially being wasted.

To begin the process of truly identifying labor costs, it's important to conduct a comprehensive evaluation of a facility and cleaning program to get a clear, total picture of the required labor involved. The evaluation should include the following:

- Priority areas. There are many different areas within a facility. Some

areas encounter more traffic and soil than others, and some areas may have a different level of cleanliness expectation, so it's important to identify the requirements of each area and categorize accordingly. Entryways are usually not afforded the respect they should be given. Keeping soils out of the building is critical — it's important to stop the dirt at the door in order to keep it off your floors.

- Evaluate cleanable square space. Cleanable square space is usually about 10 to 15 percent less than gross square footage. This rule of thumb should be used in accurately calculating and assigning FTEs.
- Create a scope of work. Create a list of cleaning tasks to be performed, as well as a target level of cleanliness for each area, while defining what constitutes an area as "clean."
- Frequency minimums. Develop a risk assessment of the areas needing to be cleaned. Some areas, such as an entryway, breakroom or restroom carry a high risk, whereas other areas, such as office cubicles, carry a lower risk and may allow for reduced frequency depending on the desired level of clean, or are available for cleaning during a time when there are fewer workers than allocated.
- Apply production rates. Industry production rate standards are available to establish acceptable cleaning rates for achieving a desired result, so use them to determine the necessary FTEs to effectively clean every area in your facility.

Improve procedures

There are ways to reduce the time cleaning tasks require with process and procedure improvements. By analyzing and altering a few common practices that many facilities currently implement, it is possible to dramatically reduce consumption and costs associated with everyday money wasters. While you may think that lower-cost product options are saving you money, it's important to consider the overall labor



costs associated with dealing with that particular product.

Here are a few examples of common issues facilities face that significantly impact the hours spent cleaning and maintaining a building, along with overall appearance and wellness, with products that may initially seem like money savers:

- Folded towels may seem less expensive than other towel systems, but "controlled" roll towel systems reduce outages and complaints, as well as refill times. More time spent on reacting to outage complaints and refills means added work and increased labor costs. With a controlled roll towel system, you can have more hand dries in an efficient dispenser with a stub roll transfer system, eliminating product waste and reducing complaints.
- Jumbo roll toilet tissue is often used in an effort to increase capacity, reduce outages and lower costs. However, these jumbo products are not user-friendly and result in tremendous waste and user dissatisfaction, which means more occupant complaints. The extra waste in the stalls created by the jumbo roll tissue requires more hours cleaning and replacing the rolls, and therefore higher labor costs. There are several coreless systems available that not only allow for a more user-friendly experience, but reduce mess and waste.
- Seemingly inexpensive, low-priced trash liners are often well below your staff's desired specifications and inappropriate for the application. The workers then compensate for poor performance by using a larger, more costly bag — or the dreaded double bagging approach. Both result in more consumption and waste.

Consolidate products

Did you know that most facilities

can be effectively cleaned daily with as few as two to four cleaning products? Consolidating your products reduces the need to acquire, manage, train, distribute and store duplicate cleaners and provides the opportunity to eliminate potentially unsafe, unsustainable and unnecessary products.

Replacing duplicates with more efficient, multi-purpose products can also reduce the amount of time spent training workers, costs associated with supplying required personal protective equipment, ordering and receiving shipments, and the need for multiple vendors.

Utilize innovative products and tools

With the cost of labor accounting for such a large part of an operation's budget, it's important to pay careful attention to areas that can lessen your staff's workload. As mentioned earlier, organizations that try to cut corners with lower-priced products can often end up seeing increased labor costs. In addition to cleaning products, this also means choosing the right equipment and cleaning tools.

For example, consider backpack vacuums — they can allow workers to effectively clean more than twice the area while minimizing the long-term negative health effects caused by often inefficient "cheap" uprights and the repetitive motions of traditional vacuums.

Other seemingly simple but effective innovations include quality microfiber cleaning tools, high-productivity stripping pads and bucketless mop systems that dramatically increase efficiencies and allow managers to accomplish more cleaning with fewer workers.

Implement training programs

Once you've decided to implement new processes, procedures and products, you need to educate your staff. An efficient and effective cleaning program cannot be achieved without a properly

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The added value of FM - updates from the RNG group

By Anker Jensen and Theo van der Voordt

Introduction

The research group on “The Added Value of FM” was established in 2009 on the initiative of Per Anker Jensen, Technical University of Denmark, who was chairman of EuroFM’s Research Network Group in 2007-2008. He also became chairman of the new group and now leads the group together with Theo van der Voordt, Delft University of Technology. The group from the beginning included researchers from Denmark, Finland, The Netherlands, Switzerland and UK. The general background for establishing this collaborative research group was that the perception and application of FM during the last decades gradually has shifted from primarily steering on cost reduction towards managing facilities as a strategic resource to add value to the organisation and its stakeholders and to contribute to its overall performance.

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trained workforce. A comprehensive training program helps a staff achieve their productivity potential.

Through one-on-one meetings, supervisor training, videos, manuals and wall charts, workers will better understand the products, tools, cleaning sequences and correct procedures resulting in improved quality of work and results. Training is an important and an ongoing process that will help improve the chances that workers don’t just revert to old ways of completing their tasks and wasting your budget.

We all know that keeping a facility clean, safe and healthy on an ever-decreasing budget is a difficult challenge to overcome, but it’s time to stop focusing on the wrong areas by wasting time and money on lower-quality products and inefficient cleaning procedures. By analyzing and improving current practices, organizations can achieve long-term savings above and beyond product price, while also helping to make a building cleaner and safer and enhancing productivity.

Focus on your biggest time consumers and find ways to better allocate those minutes and hours, as well as reallocate your labor to the tasks that will keep you facility operating more efficiently and make the best of the labor hours you have to work with. While it may seem like a daunting task, just break it down into a few easy steps and you’ll see that it is possible to effectively clean more with fewer people and find the balance between labor and product costs.



Neal Duffy, Senior Manager Technical Training for Staples Facility Solutions, is a 35-year-plus veteran of the janitorial and sanitary maintenance industry with a background in consulting with facility managers on development, training and implementation of custodial practices, including healthy, high-performance, sustainable and high-productivity cleaning.

Duffy has practiced as a registered environmental health specialist and sanitarian, as well as an ISSA certified expert in Cleaning Industry Management Standards – Green Buildings. He is an advisory member of the board of directors for the U.S. Green Building Council Upstate New York Chapter and has completed the Ashkin Group’s Green Cleaning University. Duffy’s team of Staples Facility Solutions trainers supports a national network of experienced specialists in their work to help meet customer goals of improving cleanliness while reducing operating costs.

The current group builds on earlier work in a NordicFM work group on the topic “Highlight the Added Values for Core Business Provided by FM”. The NordicFM group consisted of practitioners from Denmark, Norway and Sweden and was chaired by Ole Emil Malmström, who was board member of EuroFM and former chairman of the Danish Facilities Management Association and the NordicFM network. Per Anker Jensen participated as the only researcher in the group and worked alongside on a research project called “Facilities Management Best Practice in the Nordic Countries”. Based on the combination of these two activities he developed the conceptual framework FM Value Map (Jensen et al. 2008; Jensen, 2010), which was a basis for the new EuroFM research group. Ole Emil Malmström participated as a practitioner in this research group. The close interaction between research and practice has been an essential aspect of the development of knowledge on the added value of FM.

The research group started with a workshop in May 2009 and it has over the years met in a number of other workshops in different European countries. The first joint work in the group was to conduct a literature review on the added value of FM and related issues. This was done by combining research from three disciplines: FM, Corporate Real Estate Management (CREM) and Business to Business (B2B) Marketing. This resulted in the conference paper: “The Added Value of FM: Different Research Perspectives” (Jensen et al., 2010) for EFMC 2010 in Madrid, where the group presented the work at a plenary session followed by a panel debate with practitioners. The literature review was later developed into the journal paper: “In Search for the Added Value of FM: What we know and what we need to learn” (Jensen et al., 2012b) published in *Facilities*, where it achieved a Highly Commended Paper Award.

The first book

At a workshop with 18 participants during EFMC 2010 the research group decided to write a book together. This was accomplished within two years, and the book: “The Added Value of Facilities Management – Concepts, Findings and Perspectives” (Jensen et al., 2012a) was launched at EFMC 2012 in Copenhagen. The editors were Per Anker Jensen, Theo van der Voordt, and Christian Coenen, ZHAW - Zürich University of Applied Science. The book includes contributions by 18 authors and is divided in four parts. The first part, Introduction, includes a presentation of the three disciplines, FM, CREM and B2B marketing, as well as the making of the FM Value Map. The second part concerns theory and methodology. The third part includes empirical studies and the fourth part concludes with learning and perspectives. At EFMC 2012 the book was presented by the authors at a plenary session and reviewed by a panel with Leif Møllebjerg, LEGO, Geir Hansen, NTNU, Trondheim, and Peter Prischl, Reality Consult GmbH, Vienna. All participants in the conference were offered a free copy of the book.

The research group also established a sub-group in 2010 chaired by Christian Coenen, ZHAW with a particular focus on the value chain in FM. They created



a framework called FM Value Network focusing on stakeholder management and relationship value in FM. The framework was developed into a case study protocol, which was used in a case study of the Learning Café in the Library at the University of Glasgow (Alexander, 2011). The sub-group wrote a joint chapter in the added value book called “FM as a Value Network: Exploring Relationships amongst Key FM Stakeholders” and later on the journal article “Facility Management Value Dimensions from a Demand Perspective” (Coenen et al., 2013), published in *Journal of Facilities Management*.

Contributions to EFMC 2013-2014

During the European Facility Management Conference EFMC 2013 in Prague there were both a paper session at the research symposium and a workshop on the added value of FM. The topic of the workshop was: “How to manage and measure different value dimensions?”. It was chaired by the three editors of the book from 2012. The participants were asked at the beginning of the workshop to fill in a short questionnaire about their perception of the concept of “Added Value of FM”. The results confirmed that the concept of Added Value is interpreted in many ways and linked to a huge variety of different topics. Prioritization of different types of added value showed to be highly subjective and depends on the participant’s position, experience and personal beliefs. Most prioritized values included the contribution of FM and CREM to the quality of life, the productivity of the core business, user satisfaction and sustainability. The participants found it difficult to mention concrete measures how to add value, partly due to different interpretations of the term “measures” as “interventions” and “ways to measure”. The answers ranged from concrete measures such as evaluate happiness, satisfaction and work support, create energy savings in building retrofitting, and take care of shuttle busses and parking facilities for bikes, to abstract measures such as steering on economics, efficiency and effectiveness, or ‘good price & value for the client’.

This inspired us to investigate the perception and application of the added value of FM among practitioners further. Therefore, we conducted 10 interviews with experienced practitioners - 5 from Denmark and 5 from the Netherlands -

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Project Financing: the great forgotten solution

By Mariantonietta Lisena

Even at a time when public authorities have had to drastically reduce their financing of works, Project Financing remains a relatively unused tool in Italy compared to other countries. It would appear to be the perfect solution to a range of problems the country is facing: creating public works that serve the entire community and at the same time generating jobs and opportunities for companies.



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based on a common interview guide. The results were published in a conference paper for EFMC 2014 in Berlin (Van der Voordt and Jensen, 2014a) and presented during a paper session on the added value of FM at the research symposium. A shorter and more popular version of this article was published in an Australian FM Magazine (Van der Voordt and Jensen, 2014b).

Plans for new books

In the beginning of 2014 we decided to work towards publishing a second book on the added value of FM with a

more practical focus than the first book mentioned above. The plans for this new publication were presented at the session during EFMC 2014 and a meeting with interested conference participants and potential contributors were arranged after the session. The basic idea is to develop a simple and common model for the added value of FM and CREM and to demonstrate how a set of value parameters can be managed and measured. The working title of the book is "Facilities Management and Corporate Real Estate Management as Value Drivers: How to Manage and Measure Added Value". Over the summer we have invited a number of potential authors of chapters on specific value parameters. Most of them have now accepted the invitation. We have also made a proposal to the publisher Routledge for publishing the book. They

have asked three different - and to us anonymous - reviewers and they all have given very positive reviews of the book proposal.

Alongside we are working on a contribution about the Added Value work to another new book with the title "Evident-based Facilities Management". This book is edited by Keith Alexander and is planned to be published by Routledge as the first book in a series on Advancing Knowledge in FM. This book will be launched at EFMC 2015 in Glasgow. At the time of writing this article, our work on both of the two new books is in good progress. The new book on added value is planned to be published in 2016 - hopefully to be launched at EFMC 2016!

To understand what obstacles are standing in the way of a more widespread use of Project Financing in Italy, we turned to an expert on the matter, Fabio Amatucci, a professor at the University of Sannio and at CERGAS, Bocconi University.

In short, how does this tool work?

Firstly, the public authority announces a call for bids by issuing an invitation to tender for the concession and management of a particular public work. Participants will be a range of temporary joint ventures. The joint venture awarded the tender must design and build the facility at its own expense, partly using the venture capital of the companies that make it up and partly (around 70-75%) through bank financing. As compensation, it will manage the works for around 20-30 years. However, it's important to make a distinction here. In the case of works such as sports centers, swimming pools, museums, or even cemeteries, the private company directly manages the main activity and has direct contact with users. Indeed, it is the contributions from the latter that generate the profit margin.

In the case of works considered 'high use' in terms of public administration, such as health care facilities, it is only partially involved. The private company has nothing to do with the core business and is limited to managing the facility's commercial activities and all activities relating to services. It also receives a monthly "availability fee" for the use of the facilities.

Does the latter case relate to facilities that have a particular core business?

Primarily, it relates to works involving an activity that comes under the responsibility of the public authority. I've already used the example of healthcare facilities, but we're also talking about courts, prisons, barracks, etc. In all these cases, the public authority takes care of the core business. Hospitals are a perfect example: the private company

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has no involvement in caring for the patients and doesn't receive payment directly from the user. The latter pays its contributions to the local health authority, and the health authority in turn remunerates the private company by means of the fee for use.

In the case of Project Financing for a facility such as a sports center, therefore, the private company has more freedom.

Indeed, I suppose you could say it is almost master of its own fate. They have more scope for imagination and initiative. They don't have complete freedom, however. At the end of the day, we are still talking about public works, so everything has to be declared in the tender bid. As part of the tender process, every temporary joint venture must state what their plans are for the facility throughout the duration of the project and what rates, services and activities will be offered. The public authority will consider each of these offers and choose the one that guarantees the best conditions for the general public both in terms of cost and quality of service.

Let's look in more detail at who the key players are in Project Financing.

Firstly you have the client – the public authority – which is usually represented by a municipality or a province. Then you have the private company, which is a temporary joint venture that usually includes the developer, facility management companies and the service providers in addition to the individual who will be responsible for the management of the core business of the works (unless this is retained by the public authority). The temporary joint venture makes its bid, providing a highly detailed offer. The third player is the credit institution. They have a direct relationship with the temporary joint venture, not with the public authority, and, as already mentioned, will finance around 70-75% of the capital necessary to carry out the works.

The temporary joint venture that is awarded the tender becomes a Project Company, thereby becoming a legal entity and solely responsible for the project.

What does each of these three main players gain from Project Financing?

For the public authority it means that works that are beneficial to the general public can be carried out at times when it has neither the resources to make an investment, nor access to credit. Indeed, were it to have ample access to credit, it could invest directly by getting a loan and carrying out the works itself. Using a private company usually guarantees better design and better overall quality of the work, given that the private

Project Company will be made up of highly specialized businesses.

There are also cases in which the work to be carried out will be extremely profitable and in such a case, the temporary joint ventures that take part in the bid process may (or sometimes must) submit an offer that also includes a fee payable directly to the public authority. By law, the private company should receive fair remuneration from the management of services with respect to market conditions. If, for certain works, the remuneration seems particularly advantageous, thus allowing higher rates than those considered fair, the invitation to tender may also include a percentage that the private company must pay to the public authority. This is unusual, but it happens fairly frequently in the field of renewable energies, a field in which government incentives make operations very profitable.

What is the balance like in terms of private offers? In the United Kingdom, for example, Project Financing is used frequently. The main player is a facility management company that incorporates a developer and looks to the market for a company specializing in the management of the core business of the works to be carried out. Could this model be replicated in Italy?

On paper, certainly. It is permitted by law, just as other models are. It is possible for just the manager to take part in the bid. Then, having won, go on to find a developer and an FM company on the market.

In theory, therefore, the UK model could absolutely be replicated by us. The only real constraint for an FM company wishing to participate as the main player in a Project Financing is that they are obliged to select the developer by means of a tender. They cannot choose the developer directly, given that in practice you are replacing the public authority so they must abide by the same constraints relating to contracts that govern the activities of public bodies. But other than that, they wouldn't have any other limitations.

The reality is different, however, and the UK model is not being implemented here in Italy.

Exactly. This is because the Italian situation is somewhat different to that of other European countries. For us, in PF operations, the scales are tipped in favor of the banks. On balance, they have the most influence on the outcome of a Project Financing operation.

It should also be pointed out in this regard, that the law that currently regulates Project Financing in Italy dates back to 1998. It is an amendment to the Merloni Act and was heavily influenced by banks. The ten articles

of the legislation that directly affect Project Financing were drawn up by a 1995 committee presided over by the Italian Banking Association. Over the years, those provisions have been renewed and modified, but the fundamental sections that govern tender processes have remained the same.

Consider, for example, the requirement for the winning temporary joint venture to form a Project Company within a certain time limit; this rule serves to legally separate this consortium of companies from its individual components and constitutes a strong guarantee for the banks.

In what way?

Because it separates the project's players from the project itself. If one of the companies that make up the Project Company were to go bankrupt, the court could not bring an action against the work carried out and therefore the credit institution's ability to recover the capital would remain uncompromised.

But something in this mechanism would appear not to be functioning as it should.

Indeed, despite the guarantees, banks seem very reluctant to participate in this type of project. The main reason is that, at least in Italy, banks are accustomed to financing only on the basis of real guarantees, the certainty of recouping the capital or assets in the event that the project fails. In the case of Project Financing, this possibility doesn't exist. Financing is made against a work that does not yet exist. In addition, the bank has direct relationships only with the Project Company, which, however, does not have ownership of the works carried out, since ownership remains with the public authority that commissioned it. The bank therefore doesn't get the type of guarantees to which it is accustomed; so, it prefers to directly finance the public authority in a more traditional form of investment. It is a cultural issue therefore. Italian banks have little inclination towards entrepreneurship. So much so, that many Project Financing operations in Italy have been carried out with the help of foreign banks, who are more accustomed to carrying out assessments and financing projects considered valid even in the absence of real guarantees.

Our banks would prefer only to fund Project Financing involving a guarantee by the public authority, something that undermines the very essence of this project method. So much so that if these are the conditions required for obtaining Project Financing, the public authority may as well receive direct financing from the bank and carry out the project itself. The impact on the balance sheet is the same and the public authority might get a lower financing cost than a private company.

So what advice would you give then? What would you change in the laws governing PF in Italy?

I don't believe there are any issues with the law. From a legislative point of view, our model is very similar to that of other EU countries, such as France and Portugal, where Project Financing works well.

What I would change would be the culture.

In Portugal, for example, the average number of temporary joint ventures that take part in a bid to tender for Project Financing is 6.2. In Italy it's 1.2. There is therefore no real competition, nor is there a real possibility of negotiation. From this point of view, ours is a market geared towards benefiting the bidder and promotes collusion, especially in the construction industry. Very few players are inclined to share out the works without competing in a direct manner. Another big problem is the tender notice itself; feasibility plans drawn up by public authorities are often deficient. They often launch the Project Financing process without having explained what the real benefits are and what it really wants to get out of the work that it is commissioning. Many notices are therefore superficial or inaccurate.

In Italy, the Project Financing tool therefore encourages the wrong approach by the three players and poor institutional credibility. Public authorities' payment times really are too long. There is talk in some regions of 800 days. In some cases it even reaches double that. This clearly discourages many private companies, particularly because the bank still wants to be repaid under strict monthly deadlines.

The picture you paint is not very encouraging.

I realize that, but you cannot ignore data that show that 80% of Project Financing ends in failure. I'll say it again. It's a cultural problem. The tool itself is fully capable of generating the same good results that it is able to guarantee in other countries.

The issue of payment delays is really something on which action should be taken immediately, particularly since it is not due to the crisis. There were the same delays twenty years ago. Therefore, it's a structural problem. In order to work, PF needs certain conditions that are currently rarely seen in Italy across all sectors. It is a tool designed to carry out large projects, while in Italy, paradoxically, it works best with small projects: cemeteries, parks, sports centers, swimming pools, etc. In other countries it is entirely the opposite, particularly because they can rely on a more fluid market, especially in the context of construction. Once certain conditions have been tweaked, there is no reason why Project Financing could not become an extremely beneficial instrument in Italy too.



DTU says yes to operational friendly building but how should it be done in practice?

By Helle Lohmann Rasmussen, Susanne Balslev Nielsen and Anders B. Møller

Facilities managers often fight to be allowed to contribute their operational experiences to new building projects, but not at Campus Service of the Technical University of Denmark (DTU), where “ask the operations manager” has become a mantra for every building project in recent years, and there are currently 15 building projects under way. But how is this knowledge transfer organized in practice so that both the buildings department and the operations department maintain a good and effective relationship?



Helle Lohmann Rasmussen

Operational knowledge for building

Knowledge transfer from operations to new construction is a current topic in the building sector and is expected to contribute to increased quality in building. DTU has been a major builder in recent years and with its own operational organization has good prospects for transferring knowledge from operations to new construction. At DTU's FM organization, Campus Service (CAS), the potential in assimilating operational knowledge was seen a long time ago, and development in the area is rapid. For example, the CAS approach attracts



Reference card session with building management department

multi-builders such as municipalities, pension funds and others who have concentrated operations and new construction in one organization, or who are trying to achieve operational friendly construction and redevelopment.

This study, based on a long series of recommended approaches to ensure knowledge transfer from operations to construction, looks at how CAS specifically works on the topic and what barriers make the effort more challenging. The programming phase is considered by many to be the most significant phase to help operations and maintenance, and it is in this phase that the study was carried out.

CAS in development

There is considerable knowledge of operations in CAS and there is

great ambition to use this knowledge in new construction. However, it was apparent when new buildings were taken over in 2012 that the buildings were not as operational friendly as desired. This experience has led the staff and management to adopting a greater focus on developing a CAS approach which integrates operational knowledge into DTU's buildings. The challenges in integrating operational knowledge in construction projects include bringing in the right people, making decisions at the right management level, looking for the right knowledge, and delivering the knowledge required in the right form and often within deadlines that conflict with other pressing tasks.

Starting with Helle's own experiences as the project leader in the operations department followed by interviews with representatives for the building and operational organization and analysis of two specific building projects, a picture has taken shape of which researched approaches are used in DTU, which approaches are found to be effective and functioning well and which are not yet thought to be working well. The results can be seen in figure 2.

The study shows that CAS already uses many of the approaches recommended in FM literature and even approaches not described in the literature. Thus, CAS appears to have come a long way with the work and the buildings that are now being devised are integrating operational knowledge to a high degree. Approaches such as a detailed building plan, a plan for inclusion of operational knowledge of the individual projects and requirements for reduction of energy and use of resources are fully incorporated in the planning of the construction projects. Other approaches are being used but do not seem to have found the right form yet. However, obstacles are being encountered in the use of the methodologies and it is not clear

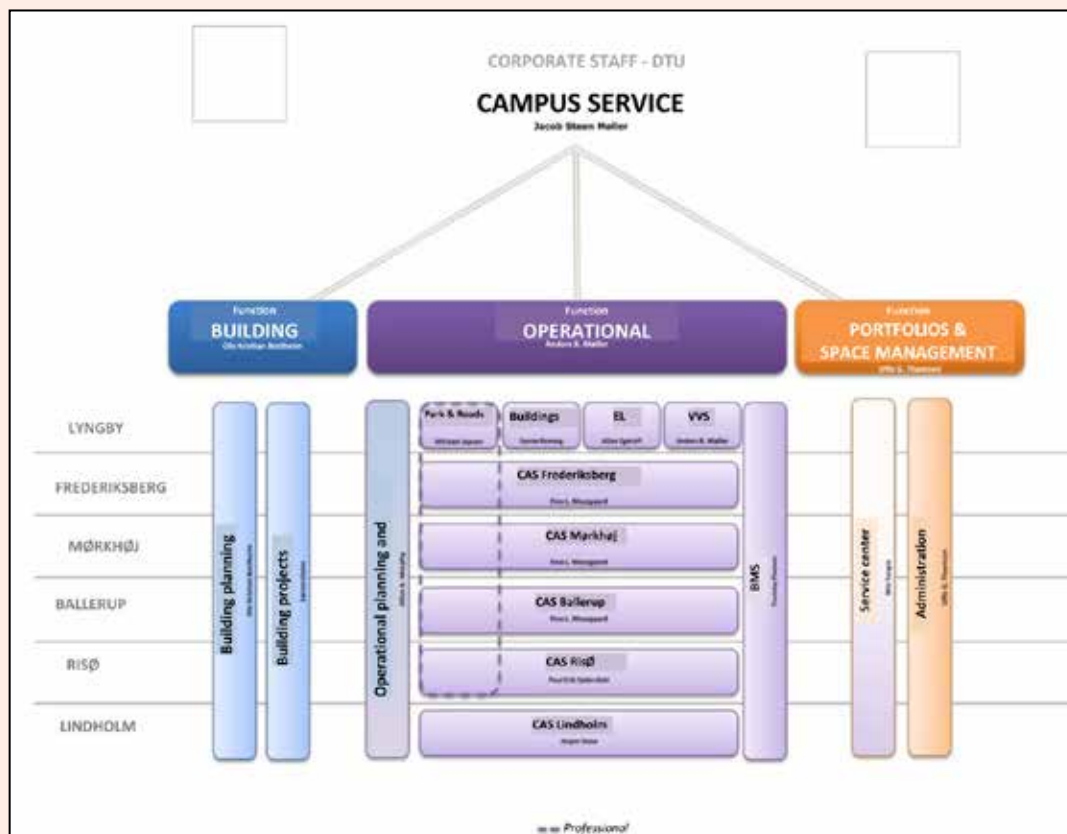


Figure 1: Organizational chart, DTU Campus Service

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Susanne Balslev Nielsen

how consistently they are used. There is potential for more operational friendly constructions in CAS by amending these approaches, and it appears that some of the approaches are unnecessarily resource-intensive in their current form.

Continued development

The study identifies three approaches that CAS is advised to implement first. They are:

1. FM commenting and scrutiny,
2. standards for DTU construction and
3. requirements for operational friendliness in the construction programs.

These are approaches that are already quite developed, but with adjustments they are expected to give a marked increase in transferred knowledge. The clear distribution of roles and responsibilities and clear prioritization of operational friendliness are hallmarks of the changes.

In addition to proposals to improve approaches at an operational level, the study also gives rise to considerations related to the nature of the leadership. Attention is drawn to maintaining a balance between the management paradigms: bureaucracy and relationships. A stepwise development with a high degree of involvement, supported by clear agreements and guidelines, can be a successful route. The study also indicates that the operational strategy for knowledge transfer to the construction projects is centered on the leaders of the operational sectors. It is important that this strategy is clear to the whole organization, and that the operational organization's role in the projects is delegated to the section managers.

The study also indicates that in both the operational and construction management departments a great effort is being made to transfer knowledge from operations to new construction, but that to a varying degree, and entirely in accordance with the findings in the literature, obstacles are encountered with the transfer.

From the perspective of the operational manager, a change in the FM role is taking place at DTU. Decisions are now made with a more long-term perspective and an ambition to find solutions that benefit DTU as a whole. Top management pays greater attention to the long-term operational costs and use of resources and they protect interests associated with long-term ownership. Therefore, it is greatly welcomed that the results are starting to show that new buildings are more operational friendly than those which CAS took over in 2012 and the sections are clearer about the expectations of their tasks

relating to the transfer of operational knowledge. The knowledge transfer is a work in progress. Although not yet concluded, there is a good deal to suggest that CAS is on the right track.

Conclusion

This article is written as a challenge to develop strategies and processes where relevant for a constructive and effective dialogue between the leadership, operational management organization and building management organization on operational considerations in the planning of buildings and reconstruction. It may be useful to distinguish between the organization skills that we want available and that of the specific construction projects and project-determined objectives and requirements for operational



Anders B. Møller

friendliness. As shown, CAS is well under way in improving in this and by sharing these experiences and we hope to inspire others to test and to develop their own processes and approaches.

Approaches that work well

The following lists the approaches which work well according to the study.

- Detailed building plan (B)
- Ongoing programming (B)
- Plan/agreement of operations involvement in every project (B)
- Requirement in the program on working environment (B)
- Requirement in the program on minimization of energy and use of resources (B)
- Requirement in the program on flexibility (B)
- Professional building management organization (Management)
- Operations represented in management group (Management)
- FM seen as strategic discipline at DTU (Management)
- Cross-cutting arrangements in CAS encouragement relationships (Management)

Approaches used but can be improved

- Clear prioritization of operational friendliness in CAS (Management)
- Clear strategy to include operations (Ops)
- Requirements that ought to be included in the building program to allow future operational friendliness (B)
- Standards for DTU building (Ops)
- Use of total economy in selection of solutions, including for changes (B)
- Internal comments (Ops)
- "Bridge-builder"/FM contact person (Ops)
- Requirements for O&M materials / plan for use of inputs (Ops)
- "Safety net" for poorly-timed comments in projects (B)
- Requirement in the program for delivery of O&M material (B)
- Relationship-building approach between the operational management and external advisers/entrepreneurs (B)

Approaches which CAS states are to be added

- Ongoing Commissioning (Ops)
- Requirement for operational budget and plan (Ops)
- Clear borders of responsibility (Ops)

Further relevant approaches not currently in use

- FM scrutiny (Ops)
- POE (B)
- Introduction to building design for operational staff (Ops)
- Use of guides to the area (B/Ops)
- Limits to expertise/further training, e.g. in FM scrutiny (Ops)
- Divided project leadership (B/Ops)

Figure 2: Overview of approaches for the transfer of operational knowledge to building projects and their use at DTU. It is noted in parenthesis who should hold responsibility, even if several parties should contribute. B = Building department; Ops = Operations department; Management = Management group/other management

Campus Service has the objective of operating, maintaining and developing DTU's buildings, areas and facilities, and ensuring that researchers, other staff and students have the best possible physical working conditions.

The aim of the work of Campus Services is that DTU's buildings, surroundings and facilities are seen as attractive by the staff and students, but also that other citizens, companies and society see DTU and its facilities as an active establishment that they are glad to use and work with.

DTU has institutes spread over 17 locations in Denmark and Greenland. Campus Services has permanent staff at 7 of these locations: Lyngby, Risø, Mørkhøj (Søborg), Frederiksberg, Ballerup, Lindholm Ø and Århus.

In addition, Campus Services supervises the building activity at all other DTU locations.

Facts about 2013:

FTE staff in the year: 189
Turnover: DKK 931 million (distributed between operations including salaries for the whole of CAS – DKK 672 million and operational expenses – DKK 259 million)

Links for more information:

1. DTU Campus Service
http://www.dtu.dk/Om-DTU/Organisation/Administration/Campus_Service
2. Value Creating Construction Process
<http://www.vaerdibyg.dk/>
Center for Facilities Management
<http://www.cfm.dtu.dk>

Facility management audit

By Zuzana Holubová

Although facility management is starting to be a well-established discipline here in the Czech Republic, areas remain that have yet to be defined, researched or developed. One of those areas is the comprehensive inspection of the level of performance of FM. Findings to date, however, indicate that company procedures used for inspection are not uniform in nature and vary from company to company.



These findings have been based on a literature review and market research performed via an e-mail survey. Research of foreign literature has revealed how little attention has been paid to this issue. FM audits were first mentioned around 1995, when Martha Whitaker's study was published, proposing how to perform facility management audits. Other articles published at that time referred to the need for FM audits, but in all cases the need for an audit or "technological FM audit" was merely noted. FM audits were not mentioned again until 2011. In their article "The Research of Facility Management Based on Organization Strategy Perspective", Xing Gao and Ji-Ming Cao from the School of Economics and Management at Shanghai's Tongji University in China defined FM audits as a tool that could help companies to

identify FM status and implementation, to detect weaknesses, and to set a future FM plan. There is no mention of FM audits in Czech literature and in practice it was only in 2010 that Hein Consulting s.r.o. presented FM audits at the Týden FM (or "FM Week") Conference.

Taking this situation as the starting point, a survey on comprehensive FM audits was conducted. Potential respondents, FM specialists from the Czech Republic, Slovakia and other countries, were contacted directly by e-mail, or in person and then by e-mail. They were mostly from the field of academia, but respondents from the public and commercial sectors were also contacted. Only 40 respondents took part in the survey. 77% of those who responded were from the Czech Republic or Slovakia, and 23% were from elsewhere. The respondents were asked the following question: "Have you ever encountered a "comprehensive FM audit" in practice?" It emerged that 80% of respondents had never encountered a comprehensive FM audit; 15% of the respondents had encountered a certain type of FM audit, but stated that it had not been comprehensive. Whereas, 5% of the respondents answered that they had encountered a [comprehensive] FM audit. The latter 5% was made up of respondents who provide FM audits as one of their products (Hein Consulting mentioned previously and one respondent from abroad).

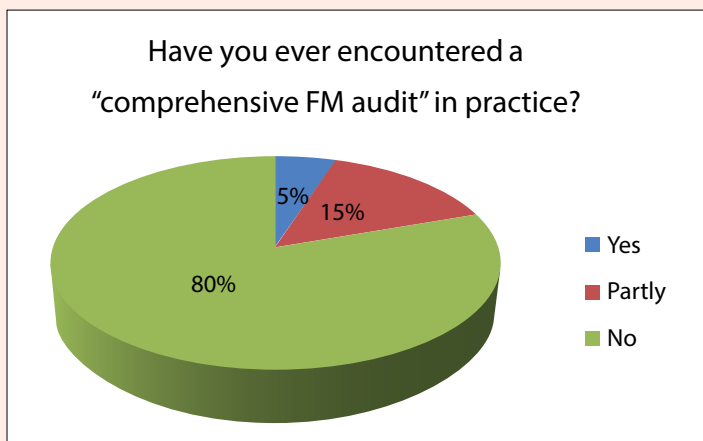


Fig. 1: Survey findings

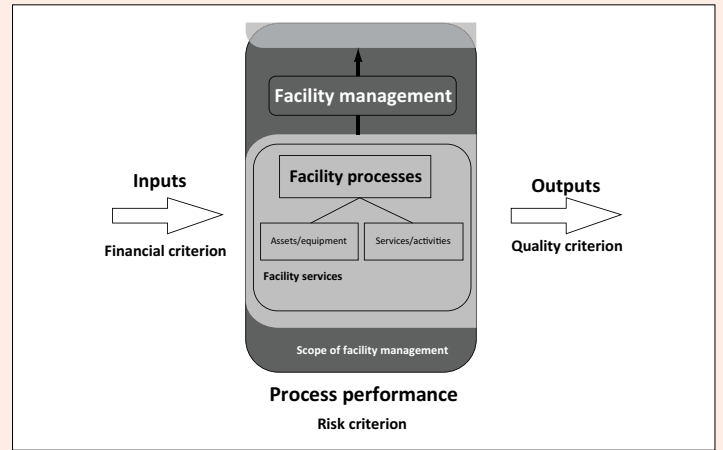


Fig. 2: FMA model criteria
Source: Adapted by the author, Czech national standard ČSN EN 15221:2006 Facility Management - Part 1: Terms and Definitions

In response to the second question about the usefulness and applicability of facility management audits, 97% of the respondents said that they considered FM audits to be useful and applicable in practice, however, 3% of respondents were unsure about the benefits.

Analysis has revealed that there is room on the market for a tool allowing comprehensive inspection of the level of performance of FM. An FMA (Facility Management Audit) pilot model has been created on that basis. The FMA pilot model is based on a map of processes, audited in terms of three criteria (finance, risk and quality). The methodology for performance of the audit has been taken from the International Standard on Auditing (ISA) and the model has been set up as a process model, represented via a flowchart.

The map of processes is taken from (Czech national standard) ČSN EN 15221:2006 Facility Management - Part 1: Terms and Definitions. These processes form a unified, integrated system of services, supporting the main activities. It is also possible to use the map of classified facility products specified in Czech national standard ČSN EN 15221:2012 Facility Management - Part 4: Facility Management Taxonomy - Classification and Structures in FM, or the corporate structure of the processes of the company audited, if the auditor deems this map of processes to be adequate and appropriate.

The criteria on the basis of which the individual processes are audited are based on the process inputs and outputs and the actual process performance.

Within the FM audit model, process inputs can be taken to include financial resources, human resources and assets, which are converted into finance or into costs and revenues generated in FM. Actual process performance, inadequate process performance or a complete lack of process performance may indicate identifiable risks. The FM process output is the service/activity that corresponds or does not correspond to the process requirements; consequently, it is measurable in terms of quality.

As already mentioned, audits for

FM purposes do not exist, neither is there any methodology for such audits. The methodology therefore had to be devised and defined. In principle there were two approaches for defining FM audit methodology. The methodology could either be devised or adapted from another type of audit. Since the actual FM audit model is innovative, a survey of the methodologies for performance of FM audits was conducted. The most suitable methodology for the purposes of FM audits was selected on the basis of these results. The methodology to be selected had to satisfy the following conditions:

- guarantee the independence of the auditor from the company audited;
- provide an independent opinion with regard to FM;
- provide an assessment of the reliability of FM;
- formulated with great care;
- be generally familiar, with a long history of use.

The first two conditions are satisfied best by the assurance engagement method used in financial audits. An assurance engagement is defined as an engagement in which an independent expert (auditor) expresses an independent opinion (conclusion) on the subject-matter of the engagement against set criteria. Assurance engagements offer an appropriate degree of confidence and satisfy the requirement for a comprehensive FM audit. The third condition is satisfied best by an external audit, which is one of the types of assurance engagement. An independent, qualified party ensures assessment and verifies reliability of FM areas. The last two conditions are satisfied best by ISA methodologies, which offer international application and have been in place for many years.

ISA methodologies were fully used when defining the formal aspect of the audit and the principles of performance of the actual audit were adopted in modified form. In particular, the weight applied to the elimination of processes for further auditing had to be defined differently for each criterion. The auditing guidelines for

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Flex space: office 2.0

By **Élisabeth Charles**

Work spaces Shared offices, collaboration spaces and modular design work stations: French telecommunications company Bouygues Telecom deployed these concepts of Flex space to redesign the boundaries of its office and revolutionize the way their employees work at their headquarters, called Technopole, in Meudon, France.

The personal desk where the photo of the youngest child sits is now leaving the building. The trend is now towards desk sharing. We are witnessing a space and management revolution in the working environment, which is a response to the changes in the modern world. Increasing nomadic work-styles and always being connected, employees are no longer attached to their work station as before. So, where is the relevance of the standard offices of yore? This questioning has led Bouygues Telecom's headquarters at Meudon to initiate the Flex space arrangement for its 3,500 employees at the facility since June 2013. "Our work stations were only occupied half of the day. Flex space is an arrangement that responds to the

company's and employees' new needs", Bruno de Lacoste, Facilities Management Director, explains. For the business, it increases the profitability of the space available while reducing structural expenses. A strong argument in favor considering the growing building costs nowadays.

Deskless

The individual desks are disappearing in favor of shared spaces and this is heralding the appearance of Flex space. This type of office layout is made possible thanks to the technology facets offered by the digital age. Wifi, laptop, telephone communication via the Link network: each employee possesses nomadic tools to allow them operate at any workstation. Another novelty touching the managerial aspect of

The FMA pilot model has been tested in a medium-sized engineering company. On the basis of this testing, the model has been adapted, in particular with respect to materiality, with new procedures set and new evaluation scales introduced for the individual processes in terms of their selection according to the risk and quality criteria. The new procedures and scales are now more uniform and are based on process evaluation by experts. The tested FMA model should be less sensitive to the level of FM implementation within the company.

The FMA model provides a summary of the overall level of performance of the client's FM and also offers in-depth evaluation of the individual processes, with respect to the three main criteria: finance, risk and quality. The criteria are not prioritized and it is therefore impossible to simply ignore or eliminate intentionally any of the criteria with the FMA model. This FMA model is an excellent, complex tool for gauging the level of performance of the client's FM.

¹ Whitaker M., *Conducting a facility management audit*, Facilities, volume 13, number 6, 1995, pp. 6-12, ISSN 0263-2772, 1995

² Gao X., Cao J., *The Research of Facility Management Based on Organization Strategy Perspective*, M. Zhou (Ed.): ISAEBD 2011, Part IV, CCIS 211, pp. 161-167, 2011

Facility management audit

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the individual areas of FM are also based on the ISA structure, but are completely different in terms of content.

The FMA model comprises 13 interdependent parts, which can be performed concurrently. Each part contains a general methodology, practical steps, a system of documentation, and general models of documents for the performance of audits. The FMA model is defined from the auditor's perspective, thereby ensuring that the same rules are adhered to for all companies audited. The FMA model also contains procedures that should be kept from the client, to prevent distortion of the data provided.

The FMA pilot model starts with an agreement on an FM audit, leading on to compilation of an audit strategy, a list of the client's processes, materiality, a final list of the audited processes according to each criterion, an audit plan, performance of the audit, and compilation of a final report on the overall audit according to all three criteria. The output of the FMA model is an independent, expert opinion on the level of performance of FM, in terms of finance, risk and quality. The statement includes a declaration as to whether FM is being administered, in all material respects, efficiently in terms of cost/revenue, free from significant risk, and to the required levels of quality.



The bubble box, a space dedicated to short, spontaneous meetings.

the change is the idea of a team's territory which takes on a primordial significance of anchoring the sense of belonging to the company in this new organization. Each team's territory has its geographical location in the arrangement, adjustable by any of the given team members. Under this organization, one hundred workstations can be available to 120 employees on any given territory.

Space freed for collaboration

Bouygues Telecom's HQ created 54 new team spaces while saving on area usage and optimizing management of work stations. Already three years as an open space layout, it has redefined team working spaces, more effective in aiding employees in different activities while emphasizing project development. Three new work spaces have emerged: the "cube", a zone of absolute silence where individuals can work tranquilly as if they were in a university library; the "bubble box", a cozy sound-proofed room that favors short spontaneous meetings; and the "lounge-café" that can hold informal meetings in a cool atmosphere. Each of these areas has its own careful design appropriate to its use. The cube has a minimalist decor with individual work surfaces and multimedia equipment. In the bubble box, colored benches and a round table are found to promote exchanges. Finally, the lounge-café possesses a collection of curved furniture to highlight the friendliness of the area. "Previously, the office was the company's uniform. Today, various work spaces, adapted to the activity of the worker, cohabit", notes Richard Drouin, FM manager at Bouygues Telecom.

Improving work conditions

More flexible, more amenable and readily available: ergonomic work stations must respond to the needs of employees while improving their work conditions. The Technopole complex, built in 2010, has placed the emphasis on exchanges by increasing the number of shared and friendly areas. The key is the well-being of the employees, which opens up necessary motivation. It is also an ace up the employer's sleeve because happy workers make for a happy company. "The type of layout

chosen by a company says a lot about their image and way of managing. By changing the ergonomics of the workplace, behaviors are changed, impelling a new method of working", Richard Drouin adds. Flex space, in sounding the death knell for traditional offices, not only transforms the work environment but also unleashes a management revolution...

Deployed over several stages

Information sessions, meetings with managers, pilot program evaluations, involvement of employees, establishment of communications (intranet, blog, FAQs, information signs, short info-films)... the Technopole has not skimped on methods to foment the support of its occupants for this new work environment. "Taking part in the change is one way to measure its success. The stakes of this space reform could not be underestimated", Bruno de Lacoste, FM manager of Technopole, explains. After an eight month internal communication plan, Flex space was deployed in June last year. A first round of feedback will provide an opportunity to adjust this new arrangement.

Businesses in the area meet

This new conception of work space was presented on 22nd November at Bouygues Telecom's Technopole during a conference between companies based in western Paris. The meeting confronted the problem "How to reconcile space transformations, performance and well-being at work? Which practices, which support?" Around sixty people were in attendance, from Directors to HR and FM managers; they could exchange ideas on the application of Flex space. Experience sharing organized in collaboration with Arseg 78 (Michel Delagarde, BYES-FM operations manager and Philippe Blot, FM manager of the amalgamated community of Saint-Quentin-en-Yvelines).

Chairman's report Chairman's report after the EuroFM members' meeting in London with look forward to EuroFM members meeting in The Hague February 12 -13 2015 hosted by The Hague University of Applied Sciences

Prof. Ron van der Weerd
Chair EuroFM



As I stated before in FM Insight and will continue to state:

"EuroFM is at its roots a network organization where members are in charge and

where members by meeting each other in formal, informal and social ways arrive at new ideas, projects and new FM developments. It is a community of people who want to bring FM forward in the world and professionalize the field further. Building bridges is a central task for the EuroFM organization and board. We learned that in Prague with the historical Karl's bridge as a symbol for that. We learned

that again in Helsinki, home country of Nokia: "connecting people".

Once more, we saw it in Berlin: breaking down walls and then reconstructing and reintegrating. To round off the year, we experienced it in London. The world of real estate, the world of the built environment, the world of urban cities and the world of FM (the user, operator and maintenance) are bridging each other and need one another to be able to deal with the challenges arising in our ever urbanizing world.

Big Ben acts as a symbol to keep us on the right track and remind us of the fact that we need to be at the right place at the right time.

Therefore I believe that the members' meeting in London was a historical one.



Hosted perfectly by RICS, at a perfect venue (headquarters of RICS in Parliament square), real estate challenges, FM standards and further FM professionalization were discussed in an open way while knowing that we all face the challenges of an increasingly urbanized world. Many thanks to RICS and especially to Johnny Dunford!

At the same time we combined this members' meeting with an initiative of FMN (Netherlands) to organize an FM leaders' conference the day before we started our EuroFM members' meeting. It turned out to be a great initiative and we all wish to keep its positive energy flowing. EuroFM now needs to make a special effort to keep all these FM leaders together so that we can learn from one another and improve our meaning for our association members. A special task force (formed by the Practice Network Group) is working on that right now. We hope we can bring all of them together in The Hague in February 2015.

There was also another meeting on the EU FM coalition. A coalition set up and supported by IFMA and EuroFM with the aim of setting up a clear statement



of what FM is about and how FM can contribute to resolving issues on the EU agenda in Brussels. In that way we want to create greater awareness at the European Parliament and the European Commission of the FM industry and its importance for the wellbeing of hundreds of million people within the European Union.

Last but not least we welcomed some new board members: Goran Milanov (Bulgarian FM Association) as our new vice chair, Pekka Matvejev (FIFMA and Laurea University) as the new chair of the ENG group, Suzanne Balslev Nielsen as the new chair of the RNG and Mauro Rabolini as the new chair of the Corporate Association Network group.

So, we had, in many ways, a very good meeting in the heart of London, with Big Ben reminding us on what to do and where to be in the future. The place to be is The Hague on February 12-13 2015!

See you all there!

Ron van der Weerd, Chair of EuroFM



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Research Network Group

Keith Alexander, Chair



Preparation for the 14th EuroFM Research Symposium in Glasgow, with an overall theme of 'People make Facilities Management', is well advanced and the program for the three days is being finalized. It is hoped that the majority of the 100 active researchers in the EuroFM Research Network will participate. The first day will be held at the new Technology and Innovation Centre at Strathclyde University followed by the EFMC 2015 Glasgow.

Discussion of research findings and work in progress are vital elements in the development of the research network. To this end, the second issue of EuroFM Research Papers will be published in March 2015 to meet the need for the publication of scientific papers. The papers will be openly available online,

initially through the EuroFM website. All published papers will be presented at the Research Symposium in Glasgow.

Two new research projects are underway in the network: Service Excellence in FM and Campus Retrofitting. Both projects will hold sessions at the Research Symposium to share the results of exploratory work and to invite further contributions.

RNG will again bestow three EuroFM awards at the EFMC 2015 Glasgow - European Researcher of the Year, Masters Students Poster competition and a Best Paper Award.

RNG seeks to broaden the network of researchers and is planning two collaborative research workshops at the next meeting in The Hague in February. A joint workshop on Usability with CIB W111 will be hosted at The Hague University of Applied Sciences on Wednesday February 11 2015. ReNN, the Dutch network of FM researchers will host the RNG research workshops on Thursday February 12 2015. The meetings are organized to appeal to practitioners, educationalists and researchers from related disciplines.

Over the past 25 years, RNG has made a leading contribution to the mission of "advancing knowledge in FM". The Glasgow events provide an opportunity to reflect on this contribution and to celebrate the silver anniversary with those who have made it possible.

It might be good to start to look at our own "backyard", that is, how can we create added value amongst and for our members in the subgroups of EuroFM?

I am available to all EuroFM members for discussions, so feel free to contact me whenever you wish. Any new idea to enhance knowledge sharing and best practices amongst our members is greatly appreciated.

We are just about to launch the new Student Poster Competition (SPC) 2015 for undergraduates. I ask all our members to look for candidates to participate in the contest, which culminates in the Finals at the 2015 EFMC in Glasgow. More detailed instructions for participation in the SPC are published on the EuroFM website and will be sent to all member universities.

I look forward to meeting you in The Hague in February, 2015. The EuroFM Winter School will again be held at the same time when we have our members' meeting. We would be very happy if you could schedule your activities during The Hague meeting so that you could also have an opportunity to see our excellent Winter School students presenting their ideas on Corporate Social Responsibility on Friday, February 13, 2015.

In the meantime, I wish all of you a Merry Christmas and a Happy New Year!

pekka.matvejeff@laurea.fi

Practice Network Group

Karin Schaad, Chair



The last members' meeting was held in London just a little over a month ago. This time round, the meeting took place after the

European FM leaders' conference, which was chaired jointly by FMN and BIFM. An important aspect of this conference was to get to know members of other European FM associations in order to facilitate collaboration on topics such as the European FM Coalition and learn from each other for the benefit of the whole FM industry. With the help of moderators Gareth Tancred and Chris Moriarty, the current FM situation in each organization or chapter present was compared and expectations for the future development of FM and the involvement and services of EuroFM were voiced and discussed.

Findings from the first two workshops, which took place on Wednesday, October 29, were summarized and the conclusions brought forward for discussion during the first session of the Practice Network Group on Thursday afternoon. The lively discussion led to the decision to form several workgroups or task forces to work on subjects such as the EU Coalition, Communication within EuroFM and between members and the market data project. All PNG members who would like to make a difference and join any of the workforces can visit the EuroFM website for more details or contact me directly at *karin.schaad@eurofm.org*

During the second session of the PNG, new contributions were given on some of the recurring topics within that group. Simon Ashworth and Ondrej Strup presented an update about the research project investigating the "challenges and benefits of using the EN 15221 norm in practice", which they are working on. To find out whether the standards are being used, what benefits could be gained and what kind of challenges or barriers have to be overcome when implementing them, Simon and Ondrej have been conducting interviews in the Czech and Slovak Republics.

Olav Saeboe then gave a short update about the conversion of parts one and two of the European FM Norm EN 15221 into an ISO Standard, informing attendees about the challenges faced and results achieved. Whereas part two is ready to be reviewed, part one, which includes the definition of FM, still needs more work.

This was followed by Johnny Dunford giving a short presentation about the International Property Measurement Standards proposed by a coalition of organizations from all over the world. The standards that the coalition are working on "will ensure that property assets are measured in a consistent way, creating a more transparent marketplace, greater public trust, stronger investor confidence, and increased market stability" (<http://ipmsc.org>).

All PNG members who did not attend the meeting are very welcome to propose any other FM-related topics to be raised at the meeting or give suggestions about what should be further investigated. In order to allow for better coordination and to make sure there is time enough for everyone who wishes to present, please contact me in advance at *karin.schaad@eurofm.org*.

Education Network Group

Pekka Matvejeff, Chair



"EuroFM is a network organization where members are in charge" is an often heard statement, which sets path for our work of bringing

FM forward in the world. It is also a guideline for me in the post of Education Network Group Chair. I was appointed to this post at the EuroFM General Members' Meeting in October, 2014 in London. I appreciate very much the trust our members have placed in me and look forward to continuing the great job of my predecessor Aad Otto.

EuroFM has a very good track record and well-established links with various universities and companies in Europe. It is a well-operated international consortium that has run many practical development projects during its years of existence. However, there still remain lots of unused opportunities as we found out in the discussions in the FM Leaders' Forum in London. I will do my best as the Chair of ENG to fulfil those aspirations.



EuroFM Reports

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At the end of October RICS hosted the 3 day long EuroFM round of meetings and discussions

By Johnny Dunford, Global Commercial Property Director at RICS



round of meetings. The session started with the European FM Leaders' meeting getting underway with a discussion about how best to represent FM across Europe and in particular within the European Union institutions. The mood was that representation at EU level would definitely be advantageous and the concept should be considered, in particular, the message to be taken to Brussels and the body to make the representation. Some considerable effort went into the idea that a new group should be formed with the mission of taking the communication to Brussels. After some debate it became clear that the RICS office in Brussels is already well established and well placed to take on such a role. RICS would be happy, willing and able to take on this role on behalf of EuroFM and we look forward to seeing how this initiative develops.

It was a busy, lively and sociable affair with about 50 members from across the network turning up to get involved.

The highlights were many and varied and I will try to capture the main points as the days rolled by.

RICS hosted the event at their London based Global HQ in Parliament Square. RICS has been around for nearly 150 years and it was a pleasure for the RICS team to be hosting EuroFM for the first time especially for such an important

On Thursday, RICS CEO Sean Tompkins made a presentation to the entire group and gave an update on RICS activity, global initiatives and the extent to which RICS is active in India, Asia and Brazil. Moreover, he



drew attention to the RICS campaign to professionalize FM. Sean also briefed the audience on the new initiative of International Property Measurement Standards (IPMS) which provides a new and globally accepted way of measuring office space which has been developed in a coalition of over 45 not-for-profit industry bodies. IPMS is a great example of a global problem being solved by a common understanding, a willingness

to engage and a sense of "there must be a better way to do this." IPMS has the potential to make a big difference for the FM industry and, for once, a common system of measurement will signify that benchmarking and cost per unit of floor area is a true system of comparison.

Meetings and presentations followed throughout the day and the finale was a drinks party on the RICS roof terrace overlooking Parliament Square, Big Ben and the Houses of Parliament. Despite November 5th being just a few days away there was fortunately no need for alarm; Guy Fawkes was not going to make an explosive come-back and everyone was able to enjoy a peaceful evening taking in the sights and sounds of London at night. One further social event took place on the Tattersall Castle – not a castle but a boat floating on the River Thames – with great views along the river and onto the Millennium Eye on the south bank of the river. A good night was had by all and this allowed the final day of meetings to culminate at the members' meeting with a discussion on the EFMC plan for June 2015 in Glasgow. EFMC 2015 promises to be a great event and with a full and lively program it seems a great opportunity to fly the FM flag north of the border in Scotland.



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