RESEARCH

Challenges for FM in Portugal

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Facilities Management (FM) is a new field of expertise in Portugal. While businesses have been using FM for several years, the lack of competitiveness in the Portuguese economy has prevented Portugal from developing the professional management of its facilities to the extent of its European counterparts. In Portugal, there are several professionals who have been working in FM-related areas (for 20 years) but who are not recognised as Facility Managers. This situation is changing rapidly, however, leading to an improved recognition of this area of professional activity. In order to stay competitive, businesses and organisations are becoming increasingly savvy when it comes to managing their facilities and assets. Furthermore, buildings are becoming larger and more complex, they must be built in compliance with new requirements (e.g. sustainability and regulatory), and must meet increased performance and comfort demands, all of which calls for professional and integrated facility management.

When the Portuguese FM market situation is compared with the desired situation which reflects European trends (Table 1), it is clear that a number of important developments must take place. The main challenges that Portugal must overcome in order to benefit from FM are:

- i) improve the recognition of the FM market and FM profession;
- ii) increase the use of FM tools to lead to improvements in the corebusiness of organisations and increase the contribution of FMrelated departments;
- iii) implement educational training

Portuguese situation

programmes for professionals in order to increase skills in relevant areas of knowledge.

The more developments that take place in the FM profession, the greater the reason to invest in FM research. However, these developments depend on whether there is an appropriate support framework in place in the form of FM educational programmes. The topics of FM research and establishing a national FM education curriculum are therefore closely related.

Current research areas and future trends

A number of researchers, mostly from

Desired situation

the large public universities, and from a diverse range of backgrounds including management, architecture, civil, mechanical and electrical engineering as well as computer science, have been directing their research efforts towards FM-related areas. Furthermore, as researchers and groups become aware of each other, collaboration has also begun to take place. The national research efforts have mostly been concerned with:

- FM tools, performance measurement and indicators - through research focused on the advantages of applying FM tools, such as servicelevel agreement (SLA), and of using performance indicators to control service quality (Silva, 2011; Maurício, 2011). A recent field study on the hospitality industry led to the establishment of a three-step model which proposes a simplified SLA for the technical maintenance services for hotel buildings (Gomes, 2012);
- Service-level agreement definition aims to specify the requirements for services during the usage phase of the building (especially, maintenance services), applied to public-private partnership contracts (PPP) (Cabaço, 2011);
- Assessment of buildings in use and client satisfaction - research on post-occupancy assessment (POA) methodologies aiming at improving the knowledge of the buildings inuse and of their ability to fulfil user expectations. This research also aims at developing new methodologies and support tools to enable faster and continuous POA (Santos, 2008);
- Workplace management using structured occupation indexes - this line of research is still in its initial phases and aims to assess workplace performance, interaction between technology, environment and people, and also the approach to news ways of working (Santos, 2008);
- Service integration and building management systems - research concerned with the available

FM market and FM association Tactical level Strategic level National focus Internationalisation Small FM market (1.16% of European market size, in 19th Fast implementation and increase market size position, according to Teichmann (2009) ranking list for 41 countries) Low recognition/small group is aware of FM Recognition of FM One Portuguese association (APFM, 2012) More than one FM association per country with strong contributions to the FM market/research/large networks/education Uncertain future/unfavourable economic situation with high Stable economics inflation and high unemployment rate Organisation departments and FM implementation Different departments focused on hierarchy and authority/ FM department/good communication difficulties in internal communication Technical issues (environment and processes) and workplace Integrated structure between Space & Infrastructure and People & management (people) are separated/higher emphasis on Organisation (EN 15521) environment and process Narrow-minded view of departments within organisations Relations with other departments Resistance to change ways of working Flexibility to implement new ways of working No legislation and no implementation of EN 15521 Implementation of and practice according to the EN 15521 **Educational programme** Different educational backgrounds within FM related departments/ Several educational FM programmes with different degrees and levels no educational programmes specific to FM of knowledge Specialisation in other areas (technical or managerial knowledge) Broadly educated staff/increases skills

Table 1 – The Portuguese FM market vs. desired situation, adapted from Steenhuizen (2011) and Carvalho (2012)

technical and economic resources, improvement of building system performance, studies on usage costs and life cycle assessment of construction materials and building assemblies, eco-materials in building design, construction and maintenance, and compliance with sustainability requirements. This research also aims at enhancing interdisciplinary collaboration in FM:

- Provision of IT for facilities mostly concerned with finding low-cost and low-disruption IT solutions for 'smart buildings'. Several research efforts are included in this category:
 - interoperability and integration issues concerning digital building models and electronic product catalogues for use in Architecture/ Engineering/Construction (AEC) and in operations;
- ii) decision support software tools to assist investment decisions concerning control technologies for retrofitting buildings (Uninova, 2012);
- iii) Intelligent Building Systems and IT-supported Energy Efficient Buildings at the MIT Sustainable Portugal Energy Systems Group (MIT, 2012) iv) employment of advanced software engineering techniques for integrating heterogeneous building data and enabling the fast, low-cost development and commissioning of software for building (such as CAFM, CAMM and BEMS) at INESC-ID; v) spatial organisation constraint using processing and quantitative and qualitative knowledge representation (Regateiro et al, 2012), which may contribute to future developments in FM tools; vi) integration of sensor and actuator networks with FM tools for the monitoring and control of various aspects inside buildings in order to meet comfort, cost or sustainability requirements.

Future steps for an effective education programme

FM, both as a profession and as an educational field, has not yet reached maturity in Europe or at national level in Portugal. Despite the fact that FM-related subjects have been introduced to real estate, engineering, architecture, or management courses, there are no FM-specific educational programmes to date. This absence of an integrated studies programme represents a major obstacle to the promotion of FM and consequently, to the development of FM research.

A field study was carried out in Portugal as part of the International Facility Management study at the Hanze University of Applied Sciences (Steenhuizen, 2011) in collaboration with APFM and the Technical University of Lisbon (IST, 2012). One of the conclusions drawn from this study points to the difference between European and Portuguese employees currently in the role of a Facility Manager; while Portuguese employees come from either an engineering or



Yellow Pages shows its colours

by Maria Elisa Dalgrì, External Relations Manager, IFMA Italy

Giancarlo Beck, SEAT HR Services manager, tells us how the company's new Turin base came into being. It extends over 26,000 square metres with 300 offices, 50 meeting rooms, 1,230 workstations, 15 break areas, a restaurant and an auditorium. 'After listening to our internal customers, we have created a bright, transparent environment,' he says, 'and every employee has had the chance to leave their own creative imprint on their workplace'

areas?

For any company, an office move is always a critical time that is full of unknowns. Like any risky transition though, it also offers huge opportunities for growth and innovation. SEAT Pagine Gialle knows this very well. The telephone directory company has fully exploited all the transformational opportunities arising from the decision to bring together its various branches' 850+ employees in a single new complex in Turin, on the site once occupied by the Officine Savigliano engineering giant. Giancarlo Beck - the Manager of HR Services, Corporate University, Learning and Development at SEAT - tells us about the project and reveals how the employees' ideas and wishes have had a formative role.

How large is the new office?

It covers 26,400 m2 and comprises 300 offices, 50 meeting rooms and as many as 1,230 workstations. There is also a company restaurant seating 220 and an auditorium that can accommodate up to 99 people. The office is part of a complex that includes a shopping centre and a private staff car park to complement the ample public parking facilities.

Creating the new office has taken us about two years, from devising the concept to finding the location and completing construction work.

Tell us about your aims and the main stages of the work.

The company saw the need to consolidate its six premises near Turin into a single location. This idea evolved into a project to create a single facility that could achieve several aims:

- stronger outward focus
- a quest for innovation
- greater informality
- · decentralised decision-making
- better sharing and spreading of knowledge
- · enhanced quality of working life.

To achieve this, we surveyed our internal customers to identify what our employees needed. This analysis informed the decision made by top management as to which factors would drive the development of the new base. The two most important elements to emerge were brightness and transparency. These drivers were studied and taken dining room, measuring about 750 m2, was conceived with special emphasis being placed on colours and materials to make it a warm, welcoming environment; it also includes a recreation area.

Office-space reorganisations, especially radical ones, are often resisted by internal customers. How did you facilitate the transition to the new arrangements?

As discussed, company staff were directly engaged from the outset in the process of creating the new offices, through an internal survey. Then, during construction, we organised guided tours to show how the work was coming along and how it would continue. Employees also had the chance to follow project progress directly through a newsletter and a web TV channel. Some events planned in the run-up to the opening of the new offices - including a kids' Christmas party and the get-together to thank staff for their loyalty - were held at the new premises, even though the move was still in progress, thus enabling employees' families to see the new offices. Finally, when the work was finished, we held an official opening attended by civic dignitaries and all staff and their families.

Did you opt for personalised workstations decorated according to internal clients' wishes or a standardised approach with the same

arrangements for everyone?

We decided on a uniform approach to the furnishings, to ensure equal treatment for all staff. But employees could all express their creativity by choosing the colour of their seat and desk stationery, albeit from a set range. More generally, the choice of furnishings was also determined by the feedback from the staff survey, i.e. the desire for greater transparency and linearity. The colour set was then chosen to reflect those used in the corporate brand.

In recent years, the concept of work organisation is evolving, driven in part by major technological innovations. How did these technologies impact on the way you organised the space?

Our focus on technological innovation led us to create a high-tech internal computing centre with 10 multimedia rooms and video-conferencing systems available to all employees.

Do you think that reorganising space can help to cut costs?

Optimising your spaces certainly reduces waste in terms of electricity and air-conditioning. By choosing a single headquarters, for example, we reduced travel between office buildings. And by creating the open spaces, we provided more space for employees to communicate, with benefits for workplace wellbeing and hence productivity.

Facility Management Research in Portugal

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architectural background and lack formal training in Facility Management, professionals in the rest of Europe have benefited from specific training in FM. The APFM has identified this absence of FM training in the Portuguese education system and, with the support of a group of experts, is creating an institutional guide with requirements for an educational programme. It is hoped that, by defining requirements for FM education in Portugal, it will encourage

forward by an advisory board (including

architects and experts in corporate

culture), which translated these concepts

How much space did you dedicate,

in particular, to communal and rest

The office has 15 break areas, each with

vending machines and a small adjoining

rest area. The company restaurant spans

nearly 1,150 m2 and is designed for free-

flow service with island counters. The

into spaces and interior designs.

the sound development of FM as a field of education in Portuguese universities, thus providing support for FM practitioners and researchers in Portugal. **Conclusions**

The Portuguese FM market requires further development to reach the stage of maturity that other FM European countries are currently at. Despite being a fairly recent concept, FM appears to be making rapid progress. This is reflected in the fact that, while Portuguese research in FM was dispersed at the beginning, collaboration between universities, professionals and organisations, in some cases through the direct involvement of APFM, is developing at an increasing pace. FM education programmes in Portugal will be a reality in the near future, helping to establish FM as a profession and therefore increasing recognition of the benefits of the FM research being conducted by the Portuguese organisations and FM practitioners and experts.

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