

# *The Facility Manager Architect*

## *The social responsibility as an added value*

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**Abstract**— From the very first steps to execute a building, it is essential to analyze its life cycle. Similarly, we should consider the life cycle when projecting an urban intervention. Professionals of the Facility Management take part in construction projects, developing and managing DBFMO projects (Design, Build, Finance, Maintenance & Operate). Whatever the nature of the promoter is – private or public – promoters are leaders in projects of responsible management of spaces, whether these are work spaces, leisure spaces or residential spaces. They know and identify with the company and its performance, its values and its needs. These professionals give sustainable solutions in the life cycle of buildings (offices and housing), new ways to work and initiatives of innovations linked to current social changes: technology, social networks, and new habits.

Concepts where innovation is essential should consider responsible values. Social, economic and sustainable aspects have to associate with the management performed by a Facilities Manager when considering the three groups of stakeholders with which it is linked: economic (shareholders), contractual (users), non-contractual (neighborhoods, organizations, etc.).

Marcus Vitruvius Pollio, at the beginning of his book "The Ten Books on Architecture" describes and argues how the distribution in buildings must always adapt to their inhabitants. Let us build cities and buildings with responsible criteria, bearing in mind all its users and the needs of each one of them. Not to mention the need to adapt to future requirements with minimum cost and maximum profitability. These needs, under responsible management, are competencies developed by a Facilities Manager in his day to day. He cares and takes over the entire life cycle of buildings and their surroundings.

This work is part of the PhD project whose main aim is to study the added value to the architectural profession when social responsibility criteria are applied in his/her role as Facility Manager .

**Keywords:** *architect; facility management; social responsibility.*

### I. INTRODUCTION

All those tasks in which architecture was related to maintenance have been allotted to other technical profiles that were associated with the life of a building. This is so for two reasons: first, there was neither the need nor the knowledge of

maintenance management, secondly, real estate assets were not considered as a value in themselves within the company.

The Spanish Language Dictionary of the "Real Academia de la Lengua" (*Royal Spanish Academy*) defines maintenance as "the set of activities and cares undertaken to keep facilities, buildings, industries, etc., operating properly". Maintenance will allow to upkeep the activity for which the installation, building, industry, etc. was created and consequently to prolong their life cycle.

This maintenance should be performed by skilled staff in each one of the activities that takes part in the maintenance of a building. During the last decades, it has been understood that with the mere compliance of current regulations the effect was more than enough to keep a facility. The regulatory framework is advancing and is becoming more oriented to prolong the life of the facility in question, although the legislation does not move forward with the speed one would wish.

The maintenance concept has also progressed and now includes not only what is legal from a technical perspective. If an owner wants his property asset is attractive, either by its activity income, or because it is representative of his company, he will make all possible improvements to get it.

Speaking of maintenance, we refer to maintenance of the property as a whole. Maintenance is dealing not only with machinery, technical and legal reviews, but also with taking care of the facilities, people, procedures, criteria, etc, and enables a fully functioning of a property with the desired performance in terms of occupation. That is, the owner is responsible and cares. It is an unrewarding activity and yet, the end user of the property - whoever he is - can do his job without any incidence from the beginning, during the staying up to the end of his working hours, visit, residential use, leisure use, etc.

The activity about property management and support services, known as Facility Management, is defined as "the integration of processes within an organization to maintain and develop those agreed services which support and enhance the effectiveness of the main activities of the organization" [1]. This profession has only been recognized as such relatively recent, and it is beginning to be important in market leading organizations.

The discipline now known as Facility Management was born in USA and came to Europe through England, Norway and Northern Europe to reach Asia and Africa.

Marcus Vitruvius Pollio, at the beginning of his work "The Ten Books on Architecture" already describes and argues the knowledge of an architect, and concludes: "it will seem a marvel that human nature can comprehend such a great number of sciences and keep them in the memory ... Still, the observation that all sciences have a common bond of union and intercourse with one another, will lead to the belief that this can easily be realized"[2]. He describes the three supports on which Architecture was based: Beauty (Venustas), Firmness (Firmitas) and Utility (Utilitas) and how the distribution in buildings should always adapt to its residents. He finishes with his Book X which he addresses to innovation: the machines.

In Spain there is still truly scarce training offer in this area - Facility Management - the professional - Facility Manager -has sometimes difficulty in establishing uniform criteria among colleagues in many of the tasks they perform. The publication of the UNE EN 15221 sets homogeneous concepts related to the management of property and enumerates some performances a Facilities Manager has to carry out. Nonetheless, we should highlight the voluntary character that many of those rules have.

Due to the current economic situation and since cost savings is a priority for any company, the FM worker has to optimize even more the services he manages. If we talked about the private sector, one of the constant aims in the profession is the economic bettering plus the final satisfaction of the client. If talking about the public sector, and because of the crisis, the aim to outline is, once the need has been aroused, to know what they have available, how, etc.

Once that situation is reached, the Spanish Civil Code must be followed. According to that code, every one of us has to behave in our daily lives with the so-called "diligence of a good family father". It should be understood that the Civil Code requires a demanding diligence, superior than the simple average diligence.

With the same voluntary basis, it was issued the Spanish ISO 26000 rule on *Social Responsibility*.

It is interesting to see how many of these values were already highlighted in antiquity as previously discussed when trying "Ten Books on Architecture" by Vitruvius. Or for example, the familiar term "La machine à habiter" of Le Corbusier. However, today, we ask us again "why architecture magazines' photography is uninhabited?" And we return to do proposals such as "let's learn to live again, let's recover our concern for the environment and turn our gaze to places and the conditions they have to offer, to meet again with the architecture and let's start building the house of the man of the XXIst century "[3].

Marcus Tullius Cicero, in his defense of the poet Aulus Licinius Archias, comments: "... in fact, all the arts which belong to humanity, have some common bond and are somehow linked with each other" [4]. This defense is considered among the most important pieces of literature and

the first text intending to draw attention to the personal and social importance.

## II. FACILITY MANAGEMENT

The origin of this discipline arises from a new need in the working spaces in the seventies due to an innovation: the emergence of personal computers and their connection to the company network via their workstation. New, more specialized and more dynamic ways to manage spaces appeared.

In 1978, the Herman Miller furniture company held a conference in Ann Arbor, Michigan, under the title "Facility Influence on Productivity". It was during this conference that the three founders of the National Facility Management Association (NFMA): George Graves of Texas Eastern Transmission Corp., Charles Hitch of Manufacturer's Bank in Detroit and David Armstrong of Michigan State University stated the need for an organization of professional installations. In May 1980 George Graves hosted a meeting in Houston to establish a Facility Management Association: the National Facility Management Association NFMA. In 1981 the NFMA replaced the term "national" for "international" becoming then the International Facility Management Association (IFMA) [5].

In 1982 David Armstrong, founder among others of the "Facility Management Institute", wrote his famous article describing the principal value of the Facility Management: "The integration of people, processes and spaces." In 1984 with the "IFMA Report # 1" the model became well known. The scheme was simple, it explained the connection between these three factors (people, processes and spaces) and how the common element among them was the figure of the Facilities Manager. It could be said that under the Facilities Manager's responsibility, his proposal covers from the parking activity to the buildings outdoor spaces, building systems and services, furniture, decoration of the workspace of people, etc.



In 1984 the British architect Sir Frank Duffy began to use in Europe the discipline Facility Manager in the design office. ORBIT I and II are the famous studies that helped develop the Facility Management. In 1985, he founded the Association of Facility Management in England, AFM. Since then, and still today, this discipline development in Europe has been extremely diverse. The different structures, cultures, legislation, market, even the language, have influenced in the direction and how to operate and manage.

In 2002, the national representatives of facilities management from 15 countries decided to develop a European definition of Facility Management. In 2006, 29 European countries agreed to use the following official definition for

facility management, "Integration of the processes within the organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities." The field of Facility Management was being grouped into two categories representing "People, place and process": Space & Infrastructure and people & Organization [6].

Space and Infrastructure include client demand in the workplace through services such as distribution/space planning, workplace itself, its design, construction, leasing, occupancy in the management of buildings, maintenance, furniture, equipment, technical facilities, cleaning, etc.

People and Organization include client demand for catering services, event management, ICT, hospitality, security, human resource management, logistics, stationery supply, document management, accounting, marketing, etc.

Until then, September 2010, it hadn't been achieved a European agreement with common definitions such as Real Estate, depreciation, etc.. The proposed rules were formally voted in late 2010. In Spain, it was not until September 2012 that these terms could be translated into Spanish. In 2011 we developed a guide on "Performance Benchmarking" which currently is not published.

#### A. Facility management competencies

The word competency is defined as the skills, aptitude, suitability to do something or act in a particular case. Within this term will be included the attributes and demonstrated aptitude to apply knowledge and skills.

As argued above, the first occasion where reference was made to the competences a Facility Manager should have, was in 1982. It was David Armstrong, in his article: "The integration of people, processes and spaces." In this article, he differentiated 8 groups of activities: patrimony, long-term planning, space management, interior planning, interior installations, maintenance and operations, architectural and engineering services, and budgeting [6].

In 2009, the international IFMA describes a set of competencies as "The Core Competencies of Facility Management. A worldwide analysis of jobs (GJTA) defined 11 core competencies. The GJTA included the answers of many professionals from 62 countries. This is the most comprehensive survey up to date and the first one that truly can be considered a global survey-analysis. The competencies obtained were: communication, continuity plan, contingencies, emergencies, environmental management and sustainability, finance and business, human resources, leadership and strategy, operations and maintenance, project management, quality, real estate and property management, technology.

The competencies vary greatly depending on the scope to be developed. A special emphasis should be put on certain aspects that IFMA Spain has developed in relation to competition. Within its training courses, there is the so-called CPR module [7]: "Competencies and Practice Facility Management".

In this training, IFMA Spain arranges the roles of this discipline into 6 groups according to BIFM (British Institute of Facilities Management) and graphically associated them to

three levels of management: operational, tactical and strategic. These competencies add up to those "intangibles" with which a Facilities Manager performs his profession. Below, we list the six groups with their details: understanding the organization of the company, managing people, managing property, managing services, managing the work environment, manage resources.

#### B. The figure of facility manager

In 1933, an article was published in the "*Revista Occidente*" related to the essay by D. José Ortega y Gasset entitled "Scheme of the Crisis". Its first sentence is a true reflection of the status of the profession of Facility Manager in Spain: "We do not know what happens to us and that is precisely what happens to us" [8].

Is very likely that years ago, having inherited the English terminology "*Facility Manager*", there has been resistance to use the term either by the language difficulty or by not associating the term to a real need

When to the concept of patrimony manager, we associate terms like spaces, processes, people and technology, the figure of a Facility Manager is better bounded. If at the same time, we bear in mind that this profession manages the second largest cost that a company has, only preceded by the wage cost, we begin to see the breadth of the term.

The first difficulty a Facility Manager has to face, whether he provides his services in-house or externally, is precisely that his position is not valued within the hierarchical organization of the company. And this is due to the lack of specific information about this sector and the activities he is responsible for.

A Facility Manager is a key and strategic figure within the company and he should have particular technical and social skills. Many companies opt to the familiar "In medio, virtus" and structure their organization so that everything is outsourced except the more strategic role of this discipline. Thus, you get maximum savings and control is maintained through reporting systems previously agreed.

Depending on the organization, this delegated task can be unified into a single service provider or otherwise, and always according to the strategy set in the organization, diversified into two / three service providers. This latter is justified by the risk diversity, maximum specialization per service, etc.

The Facility Manager can also meet global processes with National, European, EMEA, Global, etc. scopes. In these cases, the strategy is marked also by the organization and both the guidelines and the provision of the service, have a high level of knowledge and control (also known by monitoring).

The possible drawback can arise in such cases by the own scale level in which the service occurs. That is, the provision of services, language barriers, culture, etc.. However, these aspects are often frequently solved from the start of the service by having clearly defined processes, benefit levels and control.

It is therefore evident that depending on the size of the organization and especially its business philosophy, this profile can be sufficiently valued and supported to directly improve the overall results of the organization and, unfortunately,

insufficiently appreciated within the structure being in this case its only "task" to solve tactically the issues that arise on a daily base.

The general trends for the development of the Facility Management discipline are based on the profession's own experience and its origins:

- American Trend. It focuses on the most technical aspects of the profession. It is very result-oriented: it works / it does not work. Its purpose is the operation of the product being managed: installation, job, etc.
- European trend. It focuses on the fundamental aspects of the business. It also focuses on the company, its users, and so on. Its aim is to service and give support creating the best spaces with the best technology processes.

Special mention should be made of the trajectory of professionals in Australia, Nigeria, among others, who are doing a professional work and an excellent research in this field, for example in productivity.

It deserves special attention the Payback Productivity Model developed by U.S. General Services Administration (GSA). It is an analytical tool that measures increases in productivity resulting from changes in the workplace environment. Such changes can reach productivity increases superior to 20% if a new distribution of spaces, ergonomics, use of new technologies, etc. are considered.

The figure of the Facility Manager has in very few years grown exponentially and this has been due to several factors that have emerged almost simultaneously and in parallel:

- The economic crisis. Companies are trying to optimize their resources as much as possible. Saving is the main condition. Aspects such as energy efficiency, very well known years ago, are beginning to take hold in corporate cultures.
- The construction sector. Building has now nearly stopped altogether. Now, it arises the need to maintain what is already built in good condition, to maintain its value as an asset, to keep it renovated and updated.
- New trends in companies. The knowledge of real cases, the application of new technologies and the inclusion of new generations bring about changes that office spaces should reflect

These points can only be assumed by a general profile that has extensive knowledge in several fields: economic, technical, social, sustainability and more. This profile must include within its intangibles an inclusive and decisive attitude. This profile is the Facility Manager, the Manager of Patrimony.

### C. Facilities management in Spain

Up to the past January 2011, two associations concerned with Properties Management and Support Services coexisted in Spain: SEFM (created in 1999) with Jose Luis Garcia Cuartero as president of the association and IFMA (established in 2001) with Francisco Vazquez as president of the Association. As in 1978, these projects were led by people directly involved in the

management of workspaces. Twenty years have elapsed since then.

In 1997, the first Master on Facility Management was held in Spain. It took place at the *Fundación Antonio Camuñas* and later, new institutions showed their interest in this discipline: La Salle University, School of Architecture of Madrid, Association of Technical Architects, UEM, etc.

In addition, and in parallel, the two existing associations then, performed a great outreach through seminars, lectures, briefings, conferences, debates, etc., producing a great work to the disclosure of this profession. Currently, this profession has a great development.

In 2011, the Spanish Society of Facility Management (SEFM) and International Facility Management Association, Spanish Chapter (IFMA Spain), merged into the Spanish IFMA Facility Management Company [8] whose presidency was led from the beginning of 2013 by D. Salvador Torres Barroso.

This proves the interest in the profession and the efforts carried out to make this profession known. Today, it is still largely unknown in many sectors

The Facility Management discipline in Spain is installed in large companies that from their parent company have implemented standardized criteria for the management of their assets. This has helped other domestic enterprises and service providers to discuss these methods that seem so new.

### III. SOCIAL RESPONSIBILITY

As with the Facility Management discipline, Social Responsibility within business is poorly implemented. The reasons are pretty even: their voluntary nature, many definitions and criteria, apparent lack of need, etc. In many cases, Social Responsibility is considered a fashion requirement to gain competitive advantage.

Social Responsibility covers many areas related, directly or indirectly, with the company. There are both tangible and intangible factors within the three existing management levels in Facility Management: operational, tactical and strategic.

To know the origin of Social Responsibility we must go back to two existing movements in the nineteenth century. It can be highlighted the Quaker George Cadbury [9], cocoa businessman, who believed that if he protected his employees they would also protect his company much better. We can also highlight Robert Owen [10], utopian socialist and considered the creator of the cooperative, who introduced welfare measures, previously unknown. In Spain there are cases like the Colonia Güell in Santa Coloma de Cervello (Barcelona) or the entrepreneur Barreiros.

The World Business Council for Sustainable Development (WBCSD), without trying to make an official definition, defines social responsibility as "the commitment of companies to contribute to a sustainable economic development, working with employees, their families, the local community and society as a whole, to improve their quality of life "[11].

Today, the attention paid to Social Responsibility is varied. Despite the existing globality in which we are, this discipline

often is only associated with environmental or human tasks. However, in addition, it must be considered that the interesting groups – stakeholders - occupy a very important position. And these groups, classified into three levels, are the ones the Facility Manager should consider when managing properties.

- Shareholders and business owners. Those who have a relationship / economic link.
- Internal and external users of these companies. Those with a relationship / bond contract.
- Neighbors, authorities, etc. Those with a relationship / non-contractual bond.

In contrast to the discipline of Facility Management, there are many rules that have been created from the various associations defending the values of Social Responsibility. We emphasize the ISO 26000 for its international character and others such as UNE 165010 EX, SSG 21, etc.. Also we highlight institutional initiatives such as Social Accountability 8000 (1996), Global Reporting Initiative 1997, United Nations World Pact (2000).

#### IV. VOLUNTARY NATURE

Both disciplines - Facility Management and Social Responsibility -, hold a voluntary basis to their implementation and development in companies. However, as different stages of each of them consolidate, new opportunities for improvement arise and as a result, new added value in management develops.

This voluntary basis may mean a cost increase at first sight. However, both disciplines have excellent advantages among which we can highlight:

- It increases among employees, levels of satisfaction, fidelity, commitment and loyalty.
- It reduces operating costs
- It places and distinguishes the brand name from the competition
- It retains their clients
- It attracts Investors
- It enhances relationship with the environment and increases the influence of business in society.

#### V. CONCLUSIONS

The current crisis makes the Facility Manager profession a worthwhile task. This is the only figure that can achieve savings in a company, maintaining the strategy of the company under responsible criteria.

The culture of Facility Management has to be enforced and shown to Businesses and clients. The need for this profession to demonstrate the added value produced in their companies. In recent years some sectors –marketing, technologies -, have adapted their businesses and their spaces to current needs with responsible criteria. However, there still are many other areas where concepts such as physical presence in the workplace, the permanence of space, among others remain.

The Facility Manager is habituated to manage change. However, there is great resistance in Spain to implement many of the concepts it provides: business strategy, added value, labor productivity improvement, flexible work spaces, etc. All this caused by the absence of experience and the belief of the loss of control of the business.

New technologies, which are example of innovation-, have provided many new solutions for companies, their users their and processes. The Facility Manager implements these new technologies adapting them to the real needs of each company obtaining perfectly measurable savings and improvements.

Spain boasts great professionals who with their daily work show their great professionalism. It is a very young profession that takes advantage of the concerns of future generations to evolve.

The Facility Management professionals also participate in construction projects, developing and managing projects of DBFMO (Design, Build, Finance, Maintenance & Operate). They are also the leaders in project management workspaces. They know the company, its values and its needs. They provide sustainable solutions in the building life cycle, new ways of working and innovation initiatives of business services.

The combination of demographic trends, the climate change and the advances in the technologies of the information society offers the opportunity and challenge to both the profession and the company.

The challenge the professional has to face occurs, almost before he has been able to establish his credentials as Facilities Manager and without having found a position of leadership within organizations.

The next target is set in Lisbon with "Europe 2020, strategy for smart, sustainable and inclusive growth" European Union Strategy, which should define the contribution of the Facility Management in three main areas: knowledge economy, the sustainable growth and employment, social and environmental objectives.

The next generation of Facility Managers should take a leadership role in transforming organizations and should contribute responsibly to the European knowledge economy.

Future Facility Managers will need support from researches developing the concepts above discussed with responsible criteria in their three levels of management (operative, tactic and strategic) and in their three areas (people, places and processes).

These researches should set their main objective in responsible innovation. The solution is not to make many mandatory rules. (Regulation does not ensure good management of a service). It is a correct management for each of the services that a Facility Manager develops through excellence what counts.

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