## THE VALUE OF FACILITY MANAGEMENT (FM)

IE Business School Working Paper

DF8-128-I

12-03-2008

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#### **Abstract**

Numerous studies show a positive correlation between investment in Facility Management (FM) and the productivity level reached by the business this activity supports. Nevertheless, in most countries FM has traditionally been disregarded. Can managers still afford to ignore the impact in earnings that could result from elevating the profile of FM to that of the financial or human resources function?

# WHAT IS FACILITY MANAGEMENT?

Facility management (FM) is the management of productive working environments. Its main purpose is to provide the infrastructure and logistics required to enable private and public economic activities in all sectors. The integrated implementation of FM connects the administration of physical assets and the financial, technological, and human resources dedicated to these, with the strategic axis of the organization.

DF8-128-I

It is important to realize that the property and facilities of an organization can inhibit the work and impact negatively the results or contribute to the organization's overall productivity and the well-being of the employees. Consequently, facilities need to be planned, designed, and managed in a strategic way. Since the FM function may consume fundamental resources or contribute to the overall success of the organization, managing FM correctly is critical to business profitability.

In the business world, the main goals of the strategic FM manager are to create an environment where talent can be developed and retained and to ensure corporate activities and operations function in an efficient and effective manner. To help the company accomplish its goals, the FM manager detects opportunities to facilitate success and prevent problems that could result in failure.

## WHICH RESOURCES DOES FM MANAGE?

Each of the resources managed by FM: financial, human, fixed assets, and information, share the objective of providing strategic and operative support to the activities carried out by the company as well as countless common challenges. Nevertheless, they have different priorities and compete for corporate resources.

## FINANCIAL RESOURCES

In the past, the financial area's strategies related to the investment and administration of properties were typically focused on the short-term, with an emphasis on cost reduction measures such as: consolidation of properties, downsizing, disinvestments, and liquidation, which could be immediately shown on the financial statements.

Today the FM manager considers the infrastructure and operational value of the facilities as key to the business activities. Under the new approach management focuses on the longer term comprehensive efficiency of the asset, rather than the cost of the service life of the asset alone, and replaces the idea of asset value by that of use value of the asset.

Since FM strategy is part of the overall corporate strategy, under this new vision production and service requirements help clarify support requirements, execution of operations, and the adequate property management strategy.

#### **HUMAN RESOURCES**

FM is also forward looking in the human resources field. The FM of the human resources has to understand the central strategy of the company, and consider the facilities, and the support services required to dynamice the company in the long run, rather than cut expenditures in the short-term.

In this area, the availability of new technologies has presented opportunities for growth as well as situations that hinder performance. One such challenge is the birth of the "flexible work" notion, which alters traditional needs and requires an agile strategy in the acquisition and positioning of the human resources.

Flexible work implies greater flexibility of schedules, jobs, and locations where the tasks are developed. An observable consequence is the disappearance of dedicated work spaces, and their replacement by a rank of possible locations where the labour activities are developed. Therefore, the FM of human resources will have to be based on people, instead of properties, and environments, instead of fixed spaces. The main challenge will be to construct a corporate culture that preserves the productivity, motivation, and loyalty of the employee, in spite of the barriers imposed by the dispersion of workforces in multiple places, spaces, and times.

#### **FACILITIES**

When we speak of "facilities" or "facility management", in addition to the buildings, the present concept of the word includes maintenance services and information technology. For that reason, when we talk of fixed assets we include items related to the investments in property and assets value, as well as facilities, reforms, and the costs of maintenance and operation of the buildings.

The FM manager is starting to consider "property" more like a service than a financial asset. For that reason, except for companies dedicated to real estate investment, the value of market of the building is a secondary issue since the importance of the building itself steams from the value it adds to the operative efficiency of the organization.

In order to adapt the facilities to future market demands, the purpose, shape and characteristics of the buildings and facilities will need to be reconsidered. The question the FM manager needs to answer is what types of buildings, designs, and administration will be adequate to support the future social and business needs of their organizations.

According to the new concept of "property", the objectives are to liberate capital, to reduce costs, and to increase the quality of the support provided to the organization. At the present time, greater flexibility and an emphasis in the intensive use of the facilities, for example, to facilitate different employee work shifts is expected. This process is being harnessed by the increase in the use of outsourcing.

#### **INFORMATION**

It has already been mentioned that FM manages information and knowledge. A challenge in this area is the huge amount of data available that cannot be transformed into knowledge. Therefore, it will be a priority of the FM Department to connect the property with the business, human resources and logistics, the operations and the support services, management and design. Only when the data is transformed into knowledge we can ensure that the objectives of the organization are supported by the facilities, and that the organizational objectives are aligned with the necessities of the end users. Good FM management of technologies and information systems will developed this task efficiently.

## VALUE OF FM MANAGEMENT IS QUANTIFIABLE

In a recent study, Roger Bootle of the United Kingdom - pioneering country in FM management -, has published the following conclusions: 1) the unsuitable use of the real estate assets results in annual costs to the companies of about £25,000 million. Better management could increase the gross margin up to 13%; 2) a reduction of 10% of the FM costs would result in annual savings of £1,800 million; and 3) the management of buildings occupied by their owners is less efficient than the one of facilities in rent regime, with losses considered to amount up to £15,000 million per year.

It has been estimated that the annual average maintenance cost of office buildings comes to represent 15% of the total budget of the company, and each component of FM 5% of sales. Nevertheless, in spite of occupying the second place after salaries in the structural costs of organizations, the management of the real estate assets and FM rarely appear among the strategic objectives of corporations.

Given the relevance of the mentioned figures, a common temptation is to introduce expenditure cuts to reduce these costs. Nevertheless, unless the cuts can be done without interfering with the normal development of the commercial activities, the usual effect is to impact results negatively. The reason is that in order to determine if our investments are adequate, we need to evaluate the amount of resources these activities consume as well as the value they generate.

In addition to understanding that an increase in expenditures can improve the effectiveness and efficiency of the business (i.e. with a more efficient use of the energies) it is also necessary to value the importance that the limitation of damages has in reducing losses. A usual problem is that an increase in these savings is difficult to quantify and express as a ROI. Nevertheless, the additional expenditures incurred to attain a different service level are easy to spot.

In order to obtain the necessary resources, one of the ideas the FM manager will have to properly convey is the need to differentiate between the difficulty of justifying enhancements in an accounting manner, and the fact that these improvements impact positively the corporate cash flows. The key is to understand the benefits that can be derived from the intelligent investment in FM, and the different ways in which these benefits can be quantified.

To determine a service level that is acceptable, the FM manager has to consider a risk policy that is tolerable. When the risk endured by the organization is unbearable, the FM manager must be able to evaluate the cost of establishing a different service level and obtain the additional resources required to attain it. To obtain good results in the core business of any firm, it is critical to guarantee the optimal use of corporate assets and to have absolute trust in the availability of its properties and all the activities of support to the business.

# THE BENEFITS OF INVESTING IN FM: ADDED VALUE AND DAMAGE CONTROL

In reference to the benefits of investing in FM, there are two main concepts. The first one is related to the added value obtained from increased business effectiveness and efficiency; whereas the second is related to the gains from savings derived from the limitation of damages as a result of failure control. Even though both are difficult to quantify in accounting terms, they result in returns from investment.

The influence that the increase in expenditures has in the effectiveness (i.e.: greater productivity), efficiency (i.e.: greater efficiency), and the savings from limitation of damages, can be expressed in terms of returns on investment in FM as additional productivity and/or savings in costs. For example, other things equal, it is likely that by providing adequate air conditioning in a building during hot summer months the productivity of the labor force increases if compared to the time before the A/C was available. In the second case, even though the investments cannot be justified in terms of greater productivity, they can be justified to limit losses. Objectively, the savings from not incurring in these losses can be expressed as returns on the investment. Therefore, these investments also create an opportunity for wealth generation.

The contribution of the facilities to each aspect of the operations is defined as the "contribution done by the building to the functional needs of the occupants and the associated physical behavior of the factory, services, and finishes through time". The physical behavior relates to the way in which the facilities have been built, and how they are maintained and operated (including both capital investments and associated maintenance costs). The functional behavior relates to the yield of the building in terms of its contribution the efficiency of the organization.

We have already mentioned that an inadequate level of investment in FM can hurt the efficiency of the business. In addition, a decrease in efficiency can result if the desired level of quality is not tied together to its costs and operative risks of the firm. Therefore, overall, when analyzing which investments in FM are needed, it is necessary to consider both operative quality and risks. We can provide some examples to illustrate this idea.

The departure point is to consider that the probability of failure has costs. This risk is the one we wish "to limit" with the strategy of risk control. This strategy will consider the potential loss, in addition of the hypothetical problem. The objective is to bind the strategy to the potential loss, to control this eventuality in terms of the "amount of the loss" and the "frequency of this event". A net present value of this proposal could be estimated by comparing the benefits from the implementation of this strategy with its costs.

We can go back to our A/C-heater example to illustrate the idea. If money is not spent in securing the correct temperature, employees might have a hard time working in 45° or 10° Celsius degree weather. Potential consequences would vary depending on the kind of failure (too hot or too cold and how much), and the effects could range from displeasure to repercussions in the health and security of the employees resulting in labor losses, fines, and loss of the corporative image.

The established level of maintenance will control the availability and variability in the temperature. If executed correctly, the occurrence of the potential failure will be contained at an acceptable level as far as importance and frequency of the problem, which will maintain the risk of injuries and consequent wrecks within the margin in which the maximum level of importance and frequency are tolerable.

The maintenance costs will vary between null if nothing is done and we secure failure, and those of the most expensive maintenance regime, if it were to be adopted. For example, if on the minimum level of control the cost of maintenance of the A/C-Heater system is &12,500 per year and, after the pertinent study, we determined the potential losses to range between &14,500 and &22,500 per year, we could then calculate the ROI of this control strategy investment:

## ROI of risk control policy:

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ROI minimum loss scenario 14,500 (14,500 - 12,500)/12,500 = 16\%
ROI maximum loss scenario 22,500 (22,500 - 12,500)/12,500 = 80\%
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The minimum maintenance cost for the A/C-heater system is  $\in$ 12,500 yearly, and the potential savings range between  $\in$ 14,500, and  $\in$ 22,000. This reports a ROI of 16% and 80% under each scenario. Since all the organizations use criteria to determine which

investments to undertake, if the criterion of our company were to carry out projects that offer a ROI of 16% more or, this project would be acceptable.

A debatable issue is how to estimate the level of savings. In general, the idea would be to review all generic risks to the core of the business. A partial list is presented below. The idea is to understand that these "savings" can be realized and entered as income.

Table 1

RISK OF FAILURES TO THE:	POTENTIAL LOSSES
External image	- Sales/margins
	- Costs of hiring
Internal image	- Morale/productivity
	- Employee turnover
	- Costs of re-hiring
Human resources	- Productivity of the group
	- Injuries/death
Assets	- Excessive repair costs
	- Early obsolescence

According to International Accounting Norms (NIC) 16, articles 24-27 stipulate that payments to the acquisition of the component elements of the immobilized material will only be only recognized as assets that can be depreciated when they improve the conditions of the good beyond the original evaluation. Three examples are mentioned:

- a) Modifications to extend the asset's productive life or to increase its productive capacity;
- b) Updates to obtain a substantial increase in the quality of products; and
- a) Adoption of new processes of production that allow a substantial reduction in the costs of operations.

On the other hand, these maintenance and inspection expenditures will be considered costs of the period if they replace, instead of increase, the yield originally considered for the asset in question. Therefore, the suitable treatment will depend on the specific case. Nevertheless, it is necessary to differentiate accounting treatment of the expenditure and the possibility of capitalizing and depreciating the investment, from the fact that certain investments affect our cash flows positively. Continuing with our prior example, if our company is located in an area where the annual average temperatures go up to around the 30 degrees Celsius, repeated failures in the air conditioned system are going to hit the productivity due to the loss of enthusiasm, incapacity to make the work, and so on. In addition, it can also be a contributing factor to personnel turnover. Therefore the financial losses will come from two sources: a) lost productivity in the period of abandonment of work and lost productivity during the curve of learning of the new

employee, and b) expenses associated to re-hiring, like payments to labor agencies and lost time of the directors who are to be used in the interviews.

### **VALUE MANAGEMENT**

We have reviewed the management of the risk that administers the most negative aspects of the problems in facilities, now we paid attention to the value added by effective FM management.

The term Value Management, comes to represent a strategic approach of value engineering. Value management can be defined as the process by which all investments in facilities (including both capital and operational expenditures), are evaluated formally and continuously to ensure they are incurred in an effective and efficient manner from a cost point of view and from the beginning to the completion of the project. Value engineering can be defined as the process by which the products and services are provided to ensure the desired asset performance at the smallest possible cost.

The "effectiveness of costs" refers to the fact that the investment contributes to the productivity or provides a sufficient benefit for the organization, according to the criterion established for investments of similar nature. These benefits can be from improved internal efficiency or increased gains from sources outside the company. The "efficiency of costs" implies that these projects, in addition to being effective from a point of view of costs, are produced in a competitive form as far as the costs considered in the budget. The efficiency (the one that is cheap) without effectiveness (the one that produces the suitable yield) does not have value. Unfortunately, in many occasions FM is focused in the efficiency side of costs cost having left the most significant fact, but not so easily quantifiable, of effectiveness unattended.

Value engineering has been defined as the process by which products and services are provided to reach the desired performance at the smaller cost. This requires the elimination of redundant yields. The "redundant yield" is concerned with the excess of capacity of a good (for example, cups that are too large) or with the composition of the product (for example, that cups are made of plastic or paper). If the plastic and the paper cups have the same cost and both can perform the same service, that is, no specific quality is required, either purchase is fine. The same would apply if both, large and small cups have the same cost. Nevertheless, should the larger cups have a cost superior to the small and the additional capacity unnecessary, this would be considered a redundant yield that should be eliminated.

In reference to the facilities there is a concept of "quality management for life" that implies the investment in maintenance and repair of the buildings for the development of the activity of the company in an effective and efficient manner in the sense of costs described above.

Since the real estate property is not very flexible, the desired yield has to be specified clearly, including the reasons why certain levels of yield are required and the risks in which the business would incur should they not be maintaining these levels of service. In this way, given the evolution of the business and the building, it will be possible to identify the marginal cost of not maintaining the desired service levels through the cost of the failure. In this way the FM manager will be able to recognize when there is a need to establish a different level of services (and by consequently of costs) to continue maintaining the risk policy at an acceptable level, and how to value it in order to be able to obtain the additional resources required to cover these needs.

#### **CONCLUSION**

The implementation of FM in the strategic decisions of the company can affect corporate earnings by obtaining an increase of the return of the invested capitals thanks to a better management of fixed assets, reduction of the operative costs, improvements in the quality of life of the users, guarantees of non-interruptions of the business, clarity in the accounting, and release key management resources to focus on the core activities of the organization.

The Department of FM is a Cost Center which must be managed like a business. Regardless of whether some FM services are provided in-house or outsourced, FM is an indirect cost of great importance. For that reason, FM is under constant pressure to reduce its expenditures. Since the FM Department competes with other corporate departments for resources, improvements will not be made if the resources are destined to other necessities within the company. For that reason the FM managers must understand how FM expenditures fit within the structure of corporate expenditures and how FM services help the organization achieve their goals. In addition, FM managers will have to argue their requests in financial terms to make sure their objectives are understood and their needs taken care of.

Since the investments in facilities and FM are made to facilitate the organizational activities, the qualities of the investments have to match the business requirements, avoiding redundant yields which are one of the enemies of value management. In reference to effectiveness and efficiency in the costs, it is necessary to remember that to obtain the adequate services is cost effectiveness, whereas to pay just the right amount, results in cost efficiency. We have also mentioned that cost reduction is not the objective of FM management. The goal of FM is to provide the necessary level of services at the smaller possible cost. Although in this article we have not mentioned the role of the intelligent client, it is also necessary to consider the importance of adapting our services and investments to our customer's expectations.

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