



# UNIT-2

## Operations and Maintenance

### Learning Outcomes

By the end of this unit the learner will be able to:

## Unit 2

### Facility Operations

#### Human Resources Management

Perhaps more than any other manager, facility managers find themselves managing a mixed blue-collar-white-collar, and now green-collar workforce in a company environment that is often oriented toward white-collar professionals. This is only complicated by the fact that many of “our staff” are now contractors, under a variety of contract vehicles, or consultants. This can result in our organizational staff being under-appreciated in both grade-level and for promotion. One of the real challenges many facility managers face is getting the human resources department to understand the department’s employee needs and the management environment in which a facility manager works. The HR staff typically understands the core business skills, but may not be familiar with the facility management skill sets. You need to help the HR group understand the unique and diverse needs within facility management and provide resources to support them in properly setting grades and promotions for facility management functions. IFMA research, and this book, may be helpful for you in this task.

#### Communications

For all of those reasons, facility managers need to be much more conscious of public relations in general and marketing their services and department in particular.

The key to marketing is setting realistic objectives:

1. Increase the awareness of facility services.
2. Decrease the resistance to a particular service or set of policies and procedures.
3. Improve the image of the facility organization as a service provider.
4. Enhance customers’ knowledge about facility services.
5. Disclose specific qualifications about facility services.

The purpose of marketing is to increase service awareness, knowledge, and qualifications while decreasing resistance to the facility department’s policies and procedures.

Some tools can make public relations and marketing efforts more effective. We strongly suggest that facility managers develop an annual public relations plan. Keep it simple. Initially, it should define the target groups to reach in priority order (top management, visitors, specific employee departments whatever fits the company) and then design one or two simple actions to be implemented to achieve the marketing objectives. For instance, there might be a major effort to improve the department’s image

with visitors through better custodial maintenance of lobbies and better visitor reception training for the security staff.

Second, develop a customer profile for each of the department's client groups and its leader.

## Outsourcing of services or in-house staff?

### Reasons to outsource services

Outsourcing services can be a very emotive subject as you are dealing with the livelihoods of your staff. It must always be approached in a sensitive way and must be carried out under the scrutiny of your entire department. The choice to outsource a service or to use in-house staff must be made on the basis of sound rationale and should take into account the following issues.

- Does the service work; if it isn't broken, don't fix it!
- Does the service fit the requirements of the site?
- Is the service financially sound, or does it need a new financial model?
- Is there a sound reason for change?

Change for changes sake is a poor way to develop your working strategy for your team, although trying something new can be good in small steps; if you don't test something, you will never know if it works. You need to develop a strategy to deal with these minor tweaks rather than approaching them in a cavalier way.

Outsourcing versus using in-house staff is exactly the same in terms of how you should approach it. You should not source any service in-house without first having carried out some background work to determine the type of service you are likely to end up with and whether this service would be better for your department and your client. Be careful. Once you start down the road of outsourcing your service, you may find that, if this is successful, internal politics may create a desire to outsource all your operations. Change is not always bad, but it needs to be embraced by all your staff from the start.

## Does the service fit the requirements of the site?

Your goal must always be to provide the best possible service for the site. Only when you understand your site can you start to make decisions about whether the changes you are planning best suit the site. The hope is that through good, sound management practices your organisation will continue to grow. This is a natural desire of all businesses. With growth comes change, and this is likely to have a number of effects on your site and the service you provide. Things such as waste and recycling become much bigger issues that require managerial and strategic decisions to cope with and to keep within legislative requirements. You may have to start to add services which have never been needed before to ensure compliance, e.g. you may need a specific person to deal with waste or recycling. Or you may see a synergy between roles, combining roles to create a more streamlined service. Your site should come

first, not your desire to create an empire. Any assessment of a service provided must be based on facts and figures, not on aspirations.

## Is the service financially sound?

No Facilities Manager is lucky enough to have an open chequebook for the provision of services. Your service delivery must be based on sound financial judgements and projections of likely outcomes. Although quality and service are important, if they are not financially sound in their application they will not be successful. However, sometimes services need to be provided that do not have a sound financial basis. These services are those that contribute to an organisation's image. These services need to be clearly understood as areas that benefit an organisation, such as window cleaning, plant displays or litter-picking. The image of an organisation should never be undervalued,

Facility operations includes these areas:

- Plant operations
- Energy management
- Hazardous waste management
- Recycling
- Inventory management
- Communications and wire management
- Alterations management
- Relocation and move management
- Furniture installation
- Disaster recovery
- Maintenance and repair
- Security
- Fire and life safety

## Plant Operations

There is no absolute definition of plant, but for the purpose of this course, consider the plant to be made up of the following systems:

1. Heating, ventilation, and air-conditioning (HVAC)
2. Mechanical and electrical vertical and horizontal transportation
3. Major electrical
4. Emergency power
5. Plumbing

## General administrative services

### Energy Management

Energy management is not a separate function but rather an activity that spans every facility system. Modern energy management had its genesis in the oil crisis of the early 1970s. Two results came from that crisis: remarkably more efficient (and smaller) energy-consuming equipment and an understanding that energy is a major cost element and needs to be contained. The sudden appreciation for energy undoubtedly was a factor in the rise of facility management as a profession. The person who paid the light bill suddenly became an important corporate player.

There are many techniques and devices for energy management that have proved effective. The following are elements of a good energy management program:

1. The organization of the program is based on responsible committees to set policy and sell the program.
  - Appoint an energy manager responsible to the facility manager.
  - Have two levels of committees: a steering committee chaired by a senior manager with membership of the budget director, the facility manager, and two or three line managers, and a technical committee chaired by the facility manager.
  - Appoint the senior administrative person in each department responsible for user-dependent energy management matters (for example, turning off the lights) in that department.
1. All policy is developed by the technical committee, approved by the steering committee, and signed by the CEO. To be effective, energy management must be perceived as a management program, not a facilities program.
2. A detailed energy consumption baseline is established for each utility. Consumption against this baseline should be calculated at least annually to track progress. Utility companies will assist in these analyses.
3. A hierarchy of energy management measures is implemented:
  - Capital intensive (payback less than seven years suggested).
  - Moderate cost (can be budgeted in annual budgets with no significant effect).
  - Low cost or no cost.
4. Energy management is incorporated into all designs, and all new designs are reviewed from an energy management perspective.

## Hazardous Waste Management

This topic includes a variety of management challenges, from abating asbestos to disposing of contaminated medical waste.

The following are trademarks of a good asbestos abatement program:

1. Appointment of an abatement operations and maintenance manager. Training of an in-house abatement crew or hiring of a reputable contractor.
2. Securing the services of an environmental hygiene firm to do independent testing.
3. Establishment of abatement files as follows:
  - Historical record of all abatement efforts.
  - Air quality reports following each abatement effort provided by the hygienist hired by the contractor to do testing.
  - Record of procedures on each abatement site.
  - Disposal record from the disposal contractor.
4. Enactment of an internal relations program for staff that is both general and site specific

## Recycling

Recycling remains one of the functions most affecting facility management and is expected to have a high priority in the future.

Most recycling consists of segregation and either resale or disposal of the segregated products. Commonly, waste is segregated as follows:

1. Paper (newspaper, white paper, all other)
2. Aluminum cans
3. Glass bottles and jars (clear, green, brown)
4. Scrap metal
5. Styrofoam
6. Computers and electronic equipment
7. Paint cartridges
8. Clothin
9. Waste oil
10. All other

## Indoor Air Quality

In order to reduce operating costs, the amount of fresh air (and humidity) brought into the building with each change of air has been severely limited. Often ducts are filled with fungi, dirt, and dust (which is

stirred up each time the ductwork is modified), and filters are often ineffective for the type of dust and pollen to which employees are allergic.

## Inventory Management

An accurate inventory of facility property has two purposes. First, managers like to have an accurate count of what they manage. Second, for tax purposes it is necessary to know what furnishings and equipment of what vintage are on the books so that they can be depreciated properly.

In general, the rules for inventory management are not made in the facility department. Inventory management is much like purchasing or procurement— vitally important but dependent on policies and procedures most often set by others

## Communications and Wire Management

For years the communications function consisted of paying the telephone bill to the local phone company. Suddenly this function has become one of the most dynamic, largely owing to deregulation of the phone system, increasing computerization of business functions, and interconnections of computers through hardwiring or the telephone system.

Increasingly companies are going to wireless communications (WiFi). WiFi not only decreases the cost and intensive labor of wired communications, but it fits the working habits of our increasingly mobile employees, with no fixed office space, each equipped with a laptop computer. We are, in fact, in the midst of a communications revolution which will allow us to communicate most anywhere with multiple devices, none of which is hard-wired. Hard-wired applications are fast becoming the exception. WiFi brings with it a separate set of problems, particularly security and signal strength.

### Alterations Management

There is probably no other function so popular as altering space; 55 percent of facility managers say that they do it continually.<sup>8</sup> Everyone enjoys a renovated cafeteria, an upgraded workplace, or a facelift on the assembly line.

There are a number of standards that allow alterations to be managed well and to the advantage of the organization:

1. Space, so you don't move walls six inches to suit someone's ego.
2. Materials, so you don't use mahogany paneling where drywall will do.
3. Construction practice, so that you don't build in bookshelves where a free-standing bookshelf will suffice.
4. Layout, so you're not reconfiguring an office because someone wants his back to the door.
5. Engineering, so that you are not providing eight electrical outlets in a room but are providing proper access to electrical and data outlets.

## Relocation and Move Management

Relocation management in facility operations is management of departmental staff relocations caused by adding or losing staff, loss or gain of leases, or movement to a more suitable space. In many organizations, these moves are funded from the same budget as building maintenance.

The controls and procedures for alteration management equally apply to relocation management.

Two interesting phenomena have arisen:

1. Relocations have become so prevalent that large international developers and real estate companies have developed relocation networks. Those networks promise to handle all aspects of personal and corporate relocations.
2. Moving companies in major metropolitan areas now often have specialty units to relocate libraries, computing facilities, medical facilities, etc.

## Organization

Almost all companies employ a moving company (some have staff movers) to move furniture, equipment, and supplies within their facilities. Often this function is managed by the facility manager; if not, it still has a major impact upon the facilities and their operation.

Move management entails the following:

1. Major inter- and intrabuilding move
2. Moves to support the alterations program
3. Moves to relocate facilities stock
4. Service-order moves
5. Delivery of supplies within the institution
6. Fixed moving commitments (e.g., two movers to the loading dock, one mover delivering copy paper)

The first four of these functions are directly controlled by the facilities staff; the last two tend to be managed by others, and they work relatively unsupervised.

## Procedures

Move management must always be mindful of three principles:

1. Security is at its weakest during the chaos of a move. Take extra security precautions.
2. People are under stress during a move. Try to plan and execute the move calmly and efficiently.

3. Always have an alternative plan for critical parts of the move, like another freight elevator, or a single moving truck, or a security system requiring special access.

Experienced movers, a well-informed staff, and plenty of supervision can ensure a smooth move.

## Furniture Installation

Once furniture is installed, treat it like all other building elements. Inspect and repair it under a preventive maintenance program. Respond to service orders and conduct cyclic maintenance, particularly refinishing and upholstery cleaning.

Finally, plan for replacement. It is best to have a minimal repair capability for jobs like spot cleaning and caster replacement during work hours, with heavy repair (reupholstery, refinishing, major cleaning) done on a scheduled or off-hours basis.

### Further Reading: