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Facilities Management: An Introduction to a New Profession

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Facilities Management: An Introduction to a New Profession

Organizations, like homeowners, have been caring for their buildings, furnishings, equipment and grounds for years. This is probably true of all types of facilities, such as college and university campuses, industrial and manufacturing plants, research and computer facilities, stadia and auditoria, prisons, military camps, hotels and, of course, offices. This caring for includes selecting and obtaining, maintaining and repairing, furnishing and renovating facilities and their parts, and ensuring that needed functions, such as safety and security, lighting and heating, and the like, are provided.

Many of those with responsibility for organizations' facilities are now being called facilities or facility managers. Nevertheless, the expressions — treated here as synonyms — are used in three different senses, from a very general one to a very specific one. The most general use refers to those who are responsible for any organization's facilities. It also is used more specifically to describe those who, more often than not, have responsibility for organizations' office space and, depending on the organization, their manufacturing, laboratory, warehouse and other types of facilities as well. Here, we will focus on this usage and these facilities managers. Last, it is also used as a title for a specific job (i.e., facility manager) or a department (e.g., facilities management department). Even if the title is not used, facilities management may well be practiced.

Because "facilities management" or "facility management" is appearing with increasing frequency in the print media, particularly in discussions of business practices, productivity enhancement, and cost savings, and because Grand Valley State College (GVSC) has a vested interest in this new profession, we will introduce the reader to: why the field has emerged in recent years, what these new professionals do, and Grand Valley State College's relationship to facilities management.

The emergence of facilities management

The ascent of the facilities manager has its roots in the economic conditions facing American business people in the past 15 to 20 years.

First, there was a continuing shift in the nature of the United States work force. From a society of predominantly white collar, manual laborers, to a society of white collar, computer and service workers. It has been estimated that the number of white collar workers increased 25% from the early 1960s to the early 1980s.

Second, the increasing size and complexity of businesses and organizations required more control and efficiency in their operations. This resulted in the need for better and more effective facilities management. The rapid growth of facilities management as a profession is reflected in the number of books and articles written on the subject.

In response to these changes, facilities management has become an important and growing field. Researchers have found that the benefits of effective facilities management can be significant, including cost savings, improved productivity, and increased employee satisfaction.

From a societal perspective, facilities management has become increasingly important as it relates to issues such as productivity, efficiency, and employee well-being.

In conclusion, facilities management is an essential component of modern business operations. As organizations continue to evolve and adapt to changing market conditions, the role of facilities managers will become even more critical in ensuring the success and sustainability of these organizations.
From a society which was originally agricultural and then industrial, it is today primarily white collar, with an estimated 70% of the United States work force in white collar jobs. We have become the producers of knowledge and services, in contrast to manufacturers of products. As a consequence, the office, as a work setting, has become increasingly important.

Second, the last decade introduced a shift in factory and office technology, in the direction of computer-based systems. In offices, for example, non-computer-based communications devices, copier machines, and typewriters began to give way to computer-based office systems, exemplified by the increased use of the personal computer and word processor. However, these advanced office systems have not yet fulfilled their promise of significantly boosting white-collar productivity. By contrast, the video display terminal (VDT) has exacerbated certain existing problems, such as the discomforts caused by often older furniture that could not adapt to the physical differences, working styles, working conditions, and job activities of office workers. Moreover, the VDT introduced some new problems, such as glare off VDT screens because existing lighting systems were designed for working with paper in the horizontal plane (that is, on a desk top) and not for working in a vertical plane on a screen that reflects the light it captures into the eyes of VDT operators. VDT’s, for a time, also raised the specter of being a health risk because of the radiation they emitted.

All of this is coupled with a third issue, an increasingly vocal concern about American businesses maintaining a competitive posture, particularly in international markets. In addition to the impact of computers, the 1970s and 1980s confronted business with tighter facilities budgets and rising costs for constructing and operating facilities. The sources of these increased costs included inflation, the energy crisis, more stringent governmental health and safety standards, stricter building codes, and organizational changes and churn (relocating of employees from one workspace to another) in response to competitive pressures.

In response to these conditions, the 1970s became the occasion for a number of large-scale studies on the impact of the office work environment on productivity. Researchers were reporting that a well-designed and maintained office work environment could enhance and support job performance and quality of work life. Moreover, some of these studies persuasively argued for a connection between physical work environment and the organizational "bottom-line," potential cost savings.

These results presented executives with an argument for the benefits of systematic, technically sound, business wise management of their physical facilities. The argument, simply put, was that if a properly selected, designed, and maintained work environment had the potential to increase employee performance and job satisfac-
tion, which were positive ends in their own right, and if these potential increases also could provide other potential financial savings, then facilities management could make an important contribution to an organization's competitiveness, effectiveness, and success.

This argument was put quite succinctly by Roger B. Smith, Chairman of the Board for General Motors. "The name of the game in tomorrow's competition," he said, "is the effective integration of people and technology." This statement applies to the factory floor and the white-collar worker in his or her office. Selecting the right technology and teaching people to accept it and use it correctly and effectively is one part of the "game." Another part, and an important concern of the facilities manager, is to ensure that the people and equipment are in work settings that support them.

Let us be clear about this point. Organizations have always cared for their facilities. However, these responsibilities were often distributed piecemeal; they did not always take full advantage of technical advances in architecture, behavioral science, and engineering; they were not always conducted with the financial costs and benefits of activities clearly in mind; they were not always undertaken comprehensively and systematically and as part of both day-to-day and strategic planning modes; and they were not always as sensitive to employee needs and to technical problems in tuning environmental conditions to employee needs as they might have been. It is these sorts of considerations which are at the heart of facilities management.

What is facilities management?

Facilities management was defined, for the Library of Congress Cataloging in Publication division, as "the practice of coordinating the physical workplace with the people and work of the organization. It integrates the principles of business administration, architecture, and the behavioral and engineering sciences." Whether or not this is the "official definition," it surely is a useful one. It points clearly to the multidisciplinary scope of the field and its focus, the workplace. What the definition does not tell you is that although facilities management is a firmly established field, it is a profession that is developing rather than developed.

There are several ways to characterize facilities management.

1) It is an idea — that the facility can be managed successfully, systematically, comprehensively, and in a technically sound and integrated fashion.

2) It is a set of values — a commitment to short- and long-term planning and to sound business practices, a desire to generate informed decisions at the highest level of the organization, a can-do attitude, a strong desire to serve the organization's employees, and an effective and not for-profit organization.

3) It is a body of ideas in the jobs learned, an organization to address business needs in architecture and building. But debate on the definition of facilities management.

4) In the future, it will pay off in savings. It is the assumption that merely by concentrating on the investments to enhance the workplace are an investment in the organization. At times this will be possible expenditure, as one of an organization's percent to the organization. It is the job of the facilities management budget to enhance employees' productivity.

While this was the case in U.S. business, it is certainly not fully developed. Functionally organized, have not necessarily successfully managed tools and not increased, as they properly tailored, especially when decisions, then it is not.

There are various (lexical) definitions...
ential increases in effectiveness, employees, a sense of what environmental excellence means, a strong desire to be proactive and not reactive, and a commitment to the idea of facilities management.

3) It is a mix of skills and procedures — these draw on formal education and on-the-job learning. There is growing consensus that these skills and procedures should address business, management, and facilities-related technical material from architecture and building science; engineering; the behavioral sciences; and computer science. But debate continues about the balance of information from these areas in the education of future facilities managers.

4) In the final analysis, facilities management is a promissory note — and that note will pay off if the supposition on which facilities management rests is proven correct. It is the assumption that properly managed facilities are not cost centers to be "managed" merely by cost reduction strategies but are tools to be organizationally manipulated to enhance employee performance and quality of work life. Put differently, facilities are an investment to be optimized by getting the most leverage for supporting the organizational mission and strategies from each dollar spent on the facility. Sometimes this will mean cost reductions; other times it will mean significant and justifiable expenditures. As one study has pointed out, over a 10-year period, 93 percent of an organization's cost in achieving their mission goes to salaries and only seven percent to the facility (the cost of constructing, furnishing, and maintaining the facility). The facility dollar, then, exercises considerable leverage over people costs. The job of the facility manager, under these conditions, is to spend the facility management budget wisely by concentrating on those environmental features that most affect employees' performance and satisfaction.6

While this message may sound rousing, and is clearly consistent with the need of U.S. business to stay competitive by spending wisely and well, its technical base is not fully developed. Moreover, facilities managers and others with a commitment to functionally correct work settings, such as the furniture manufacturers of western Michigan, have not successfully changed corporate attitudes about the possibility of successfully managing facilities, or convinced executives that facilities are a manipulable tools and not merely cost centers. However, as competitive pressures on businesses increase, as facility costs mount, as the possibility rises of improving productivity by properly tailoring work conditions and managerial practices to employee work, and especially white-collar work, and as facilities managers prove themselves in their missions, then it is likely that more space will come under facilities management control.

There are a number of ways of defining something. We presented one, a "book" (lexical) definition for facilities management, above. A useful supplement, a "point-
ing at” (ostensive) definition, describes what facilities management departments do and, by implication, describes the kinds of problems which they address (see Table 1). For example, a facilities management consultant to a major corporation very closely examined the company’s telecommunications systems and records and found that the company had been relying exclusively on their vendors for determining their monthly telecommunications hardware costs and, as a result, had lost $21,000. He recovered this sum. He also put into place a system that allowed the company to monitor its telecommunications costs. This system resulted in substantial monthly savings. In another example, a facilities manager lost $300,000 in a real estate negotiation because he did not recognize an opportunity to save this sum. Too many current facilities managers lack formal business training and such incidents may reflect that deficit.

A last example: applying sound ergonomic principles and findings to both the selection of lighting systems, furniture, and VDTs for workstations and the proper integration of these workstation components with employees’ tasks and physical characteristics has the potential, according to research studies, for saving time, reducing error rates in document preparation, increasing keystroke rates, increasing the number of transactions per hour, increasing proofreading speed and accuracy, and the like.8

The following facts about facilities managers also may be of interest.

1. Facilities management is a growing profession... 47% of respondents (in 1982-3) reported that they were the first to hold their jobs at their organization.9

2. Current facilities managers were not trained as facilities managers. Most were educated in business, followed by engineering, architecture/construction/interior design, and the liberal arts. Their prior work experience was in architecture, business, administrative management and, less often, interior design and engineering. Most became facilities managers by having been assigned a facilities management job. Most entered the field since 1970.10

3. There are an estimated 30,000 people working in the facilities management area.11 They belong to such associations as the American Physical Plant Administrators of Colleges and Universities, the oldest of these associations; the American Institute of Plant Engineers, whose members are responsible for industrial and manufacturing facilities; and the International Facility Management Association (IFMA), the newest association, whose members are responsible for office space and, less often, other types of facilities as well. For those who practice facilities management, their personal and departmental job titles often vary. In white collar organizations, you will find them in Administrative Services, Facilities Management, Facilities Planning, Facilities Engineering/Plant Engineering, Facilities Maintenance, Facilities Services, and so on.12

**Facilities Management**

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Facilities Management at Grand Valley State College

The agenda for facilities management, according to one astute observer, includes as "the next order of business" the "creation of [facilities management] expertise". From this, this observer concludes that "the next era of facility management belongs to the practitioners." We would add that it also belongs to the teachers of future facilities managers. The small but growing number of academic institutions that offer such programs or courses includes Grand Valley State College (GVSC).

It was Fred Bell, then a Vice-President at Steelcase, with his vision of a "science of the office," who approached Dean Marvin De Vries, of GVSC's Seidman School of Business, to discuss a new program. An advisory council of senior line, staff and facilities managers was formed to closely examine the implications of developing such a program in a business school and to explore and make recommendations on the nature of the needed curriculum. One of us, Bob Vrancken, came from these ranks. For four years, Bob single-handedly created and nurtured the new program as its Director. In 1986, Steve Margulis joined the program as the Eugene Eppinger/BIFMA Professor of Facilities Management under a grant from BIFMA. BIFMA is the Business and Institutional Furniture Manufacturer's Association, the Grand Rapids-based trade association for the office furniture manufacturers of the U.S. In time, the staff will expand to five members.

The Seidman School is the right school in the right place for facilities management programs. It has established itself as an educational center for excellence in business education. Moreover, western Michigan is an area known for the design and manufacture of office furniture and furnishings. These manufacturers, individually and through their trade associations, BIFMA, have actively encouraged and supported the Seidman School's Facilities Management Program because they recognize that effective integration of and management within properly designed and furnished work environments is important for workers' productivity and satisfaction.

GVSC has the only business-based undergraduate program for training new facility managers, and is creating the first business-school-based master's program for experienced facilities managers. Since facilities management requires business acumen as much as technical expertise, GVSC's students have a competitive advantage.

Our undergraduate program is a specialized management major which encourages its students to learn the body of knowledge common to all business majors and the additional technical skills of the facilities manager. These technical skills come from engineering, architecture and design, and the behavioral sciences and organizational theory and research. This course work is supplemented by rigorous computer train-
ing, including computer-aided design (CAD), and extensive project experience, as teams of students, doing “hands-on” facilities-related projects for Michigan corporations and colleges (including GVSC) and for non-profit organizations. Our graduates have been very successful in getting responsible facilities positions in corporations. The aim of our training is to prepare our students for entry-level management positions in facilities-oriented organizations.

Our master’s program, now under development, is intended for individuals currently in facilities management positions. Its goals are to broaden the facilities managers’ view of their profession, and to ensure they have needed skills, particularly business and management skills, for advancement and effective performance.

Last, GVSC has recently announced a non-degree continuing education program in facilities management. It can lead to a certificate, or the student can take a variety of seminars or short courses for continuing education credits or simply for exposure to needed information.

The educational programs and their curricula are developed and revised with the guidance of industry-based advisory committees of senior line, staff and facilities managers who share GVSC’s commitment to the success of facilities management as a field and as a profession.

GVSC’s Facilities Management Program also is establishing a wide-ranging research program on facilities-related issues, much of which awaits the opening of GVSC’s Grand Rapids Center. There are plans for an Institute for Office Productivity and an Office Simulation Laboratory. The Institute will work with academic and industry groups in establishing research priorities and conducting research. The Laboratory would allow the creation of actual office conditions in a controlled setting. For example, it would permit a systematic examination of the pressing problem of integrating work place design, furnishings, and advanced office technologies.

In Conclusion

The goals of the GVSC Facility Management Program are to train facilities managers, to contribute to the state of knowledge about facilities, and to make useful information about facilities available to facilities managers.

The school’s commitment to the education of facilities managers is based on its belief in the benefits that facilities management can achieve for American business. With organizations spending a sizeable portion of their resources on its facilities — estimated at between one in five to thirteen dollars spent — the critical question is whether the resources were spent creating a work environment that supports an organization’s mission and strategies and its employees’ performance and satisfaction, hence
The aim of facilities managers is to make a variety of program changes for exposure and facilities management research and development. For example, the IFMA report #1 provided an overview of the benefits which facilities management wishes to achieve. It follows that the emerging discipline of facilities management will be accepted and successful to the extent that its young professionals (from undergraduate facilities management programs) and its seasoned facilities managers (aided by master's degree and continuing education programs) realize this end.

1 The expressions “facility manager” and “facilities manager” are often used synonymously but sometimes as if their meanings were different. However, there is no agreement on the differences.


4 See, for example, Springer, 1986.

5 This definition was provided by Herman Miller's Facility Management Institute.


7 The IFMA report #2, op. cit., p. 35.


10 The IFMA report #2, op. cit., pp. 9-10.

11 D. G. Cotts. “Master”ing Facility Management. Unpublished ms., February 15, 1986. (David Cotts is the current President of IFMA.)

12 The IFMA report #2, op. cit., pp. 22-23.

### Table 1

**Responsibilities of Facilities Managers**

<table>
<thead>
<tr>
<th>Real Estate</th>
<th>Maintenance and Operations</th>
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<tbody>
<tr>
<td>Building acquisition—purchase</td>
<td>Exterior maintenance</td>
</tr>
<tr>
<td>Building acquisition—lease</td>
<td>Breakdown maintenance</td>
</tr>
<tr>
<td>Site selection</td>
<td>Preventive maintenance</td>
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<tr>
<td>Site acquisition</td>
<td>Maintenance of finishes</td>
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<tr>
<td>Property disposal</td>
<td>Landscape maintenance</td>
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<td>Out leasing</td>
<td>Housekeeping</td>
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<tr>
<th>Long-Range Planning</th>
<th>Furniture installation</th>
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<tbody>
<tr>
<td>Developing one to three year plans</td>
<td>Furniture moving</td>
</tr>
<tr>
<td>Developing three to ten year plans</td>
<td>Furniture maintenance</td>
</tr>
<tr>
<td>Developing ten-plus year plans</td>
<td>Furniture inventory</td>
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</tbody>
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<table>
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<tr>
<th>Interior Installation</th>
<th>Minor changes</th>
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</thead>
<tbody>
<tr>
<td>Developing one to three year plans</td>
<td>Design evaluation</td>
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<tr>
<td>Developing three to ten year plans</td>
<td>Employee satisfaction evaluation</td>
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<tr>
<th>Space Management</th>
<th>Architecture and Engineering Services</th>
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<tr>
<td>Space allocation</td>
<td>Architectural design</td>
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<tr>
<td>Space inventory</td>
<td>Systems design</td>
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<td>Space forecasting</td>
<td>Building programming</td>
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<tr>
<th>Interior Planning</th>
<th>Code compliance</th>
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<tr>
<td>Planning</td>
<td>Construction management</td>
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<tr>
<th>Replanning</th>
<th>Capital</th>
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<tbody>
<tr>
<td>Furniture specification</td>
<td>Operating</td>
</tr>
<tr>
<td>Major changes</td>
<td>Furniture</td>
</tr>
</tbody>
</table>

*These are better understood as responsibilities of facilities management departments. It is our understanding that current facilities managers are likely to be expert in only a fraction of these areas (about seven or so areas).*