

4-1-1986

Facilities Management Begins Database Research Project

Follow this and additional works at: <http://scholarworks.gvsu.edu/ssmm>

Recommended Citation

(1985) "Facilities Management Begins Database Research Project," *Seidman School Management Memo*: Vol. 6: Iss. 2, Article 1.
Available at: <http://scholarworks.gvsu.edu/ssmm/vol6/iss2/1>

This Article is brought to you for free and open access by the Seidman College of Business at ScholarWorks@GVSU. It has been accepted for inclusion in Seidman School Management Memo by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

Facilities Management Begins Database Research Project

In 1982, the Seidman School of Business instituted the first comprehensive, business-based degree program in facilities management in the United States, combining educational and research activities. A current research effort with significant implications for facilities management professionals involves undertaking a project to create and implement a holistic information base for facilities managers. As facilities become more complex and the demands on them increase, facilities managers face a growing need for information to address facilities issues. To meet this challenge, Grand Valley State College, through its Facilities Management Program and in concert with industry experts, has begun a research project to create the needed database.

The aim of the project is to make available to facilities managers needed information, both symbolic information, in the form of words, numbers, and codes, and graphic information, such as floor plans and pictorial forms. The information crosses many disciplines and data sources that are relevant to facilities management decisions. Creating such a very large database, and combining in it both graphic and symbolic information, is unique.

The first phase of the project is nearing completion. The aim of this phase is to examine and determine the scope of the information database and the user interface issues. In terms of scope, the database will address the processes for which facilities managers are responsible, such as procurement, operations, design, construction, and maintenance, as well as the many management functions of facilities, such as planning and administering. The range of facility types will be all-inclusive (e.g., manufacturing, office, research, education facilities, etc.) The database will also address people and equipment issues and physical aspects of facilities, such as structural, mechanical, and electrical systems.

The conceptual approach to the information base is centered around a relational database with a hierarchical structure. A relational database will allow the system to provide answers to specific queries and also point the user to related data about which the manager may or may not have been aware. It will also allow the bridging of different sources and types (symbolic and graphic) of data. Because facilities managers draw on multiple sources of information (fields of study) which usually are not integrated, a relational database will allow the brid-

ing of those sources of information. A hierarchical system means that the system offers a path for the user to reach the desired information. The path is a tree-like structure with branches leading to nodes (decision points), which in turn lead to the desired information. The information itself will be in a standardized format. Key features of the entire system will be efficient access by users, user-friendly, providing just enough information, easy addition of new hierarchies (sources of information) to the database.

Moreover, the system will be designed to be compatible with different CAD (computer-aided design) systems and with different emerging analysis programs available to facilities managers. In sum, the system will present a very large database, with a relational and hierarchical structure, and with a query language that is user-friendly.

Through the combined efforts of Professor Robert Vrancken, Director of our Facilities Management Program; Professor Bill Bavinger, Director of Rice University's Architectural Research Laboratory; Dr. Phil Pratt, of GVSC's Computer Science Department; and Human Factors Consultant, Dr. T.J. Springer, Grand Valley State College has developed a prototype system.

In addition, the team has produced a videotape about the project. It is initially intended for presentation to key people in Michigan firms, soliciting their endorsements, comments, criticism, and suggestions for the database project. These, and other interested individuals, will be able to see the prototype system in action, as part of the videotape, and in person, if they wish.

Inside

Message from the Dean	2
New Seidman Faculty	2
What Do Our Readers Want?	3
Graduate Alumni Update	3
Grand Rapids Economic Index	4
It's a New Ball Game: The Economy Gets New Life	5
Seidman School Faculty Notes	7

