

OFFICE OF GENERAL SERVICES
"South Carolina INTERGRATED FACILITIES INFORMATION"
SYSTEM PROJECT

Governmental Technological Application
Executive Summary

The Budget and Control Board's Office of General Services (JOGS) set a goal in the mid-1990's to acquire a Computer Aided Facility management (CAFM) system that would enable the timely and accurate collection, manipulation and dissemination of information for the purpose of improving customer service and decision-making ability for the organization and the State. The years of discussion, research, process evaluation and teamwork paid off in the very successful implementation of Phase I in fiscal year 1999/2000. The following paragraphs discuss the history.

Statement of Problem

OGS had both automated and manual processes associated with all the functions of our building management: building maintenance, horticulture, space planning, leasing, appraisal, capital improvements, construction and planning, and energy management, fire and safety.

Throughout the years, the associated paper and electronic functions were devised by the different functional groups. The electronic processes were disparate systems composed of IDMS and COBOL on the mainframe; three different PC databases (FoxPro, Clipper*, MS Access), FASER, and energy management/fire and security proprietary computer-based monitoring systems. As a result of the many different electronic data systems, information retrieval was cumbersome and untimely and the situation inherently manifested a lack of standardized data. This complicated situation made space and capital asset planning, deferred maintenance, work request management., and efficient customer service evermore difficult.

Resolution

OGS realized the only way to overcome this complex situation was to form an internal matrix team to study the issues and define the problems and needs. The team met several times for this purpose as well as to define its mission and goals. They determined that a new system was needed that would:

- a. Provide standardized work management functions, operational processes, record keeping methods and information management throughout all departments.
- b. Increase coordination of work management and facility information among departments, agency customers and contractors.
- c. Enhance submission of work requests and implement quality control and coordination between teams and functions for each work request/work order issued.
- d. Enhance capture, analysis and reporting of daily work information for performance monitoring and accountability reporting.
- e. Provide standardized and enhanced Preventative Maintenance (PM) procedures so as to promote efficient operations and reduce downtime.
- f. Provide project management automation support, including scheduling, estimating, budget management and staff labor management for Construction and Planning

In addition to the purchase of an off-the-shelf software package suite, OGS contracted with a two-party team of vendors, one with expertise in space planning and the other in facilities maintenance. Some of the benefits we have currently derived from this undertaking are:

Enhanced team work	Timely data retrieval
Enhanced analysis of rate structures	More detailed & standardized performance data
Reliable data for business decisions	Improved ability to identify areas for improvement
Automated preventive maintenance	

As we add more features to this system, some of the additional benefits will be:

Facility condition assessment	Expanded asset management
Expanded lease management	Capital project management
Materials Handling	Web access for employees & customers

We believe the success of this project is due to the commitment of the organization as a whole. This commitment was not only limited to upper management and the matrix team, but included all levels of employees in every affected area. Early involvement's included needs assessment, brainstorming, focus group participation, analysis, specification development, planning and implementation and also in the development of standards and process changes.

The early momentum developed among the members of the matrix team has resulted in a series of integrated successes at each step of the implementation to date. As improvements to this system enhance productivity and confidence, the goal of providing for data standardization and manipulation, as well as timely and accurate collection of information, continues to improve customer service.

**SOUTH CAROLINA BUDGET & CONTROL BOARD
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Description of the Program

Organizational Background: A major program in the South Carolina Budget & Control Board's Office of General Services (OGS) is the planning, maintenance, administration and space management of over 265 state-owned buildings. This program encompasses a multitude of functions and sub-programs that include, but are not limited to: (1) building and grounds maintenance, (2) building renovation, (3) custodial services, (4) energy management, fire and security, (5) state and commercial leasing services, (6) construction and planning, (7) appraisal, (8) capital improvements and (9) space management for buildings located in the Columbia area and throughout the State.

Three service centers are involved in these activities: Facilities Management, State Building and Property Services, and Business Services. The three centers are involved in these activities: Facilities Management, State Building and Property Services, and Business Services. The three centers comprise fourteen teams totaling over 350 employees to provide these services and associated administrative support.

- a. Facilities Management delivers electrical, Mechanical, maintenance, energy management, fire protection, horticultural, custodial, technical, training, project management, safety and building renovation services for state owned buildings primarily in the capital city area using state employees and some contractual labor.
- b. The teams under the State Building and Property Services area perform several functions. The Statewide Building Services team, which contracts with state agencies for building services, is broken into five districts throughout the state with individual superintendents using significant numbers of commercial contracts for the same services that Facilities Management provides. The

Leasing team acts as the central broker for all South Carolina state agencies in the leasing of real property, both state-owned and commercial, and also markets state-owned properties available for lease. The Appraisal team maintains replacement cost and valuation data for buildings and improvements insured by the Insurance Reserve Fund. The Capital Improvements (CI) team has oversight responsibility for the State's permanent improvement projects program, involving the tracking of permanent improvement project requests and the maintaining of project budgets and expenditures. For the execution of those projects, the Construction and Planning team provides architectural and interior design and construction services, ensuring that procurement and building codes and American Disabilities Act regulations are met.

- c. Business Services provides administrative support for the personnel and vendor data contained in the major software application. Additionally, they provide financial planning, processing of purchases and payables, and accounting services.

Technology Application Initiative: Typical of many organizations, a multitude of individualized electronic and manual processes were developed by all of these groups over many years. This resulted in incompatible, disparate computer applications and cumbersome, sometimes unreliable communications between the many teams located in several buildings. OGS realized that this complicated situation made space and capital asset planning, deferred maintenance, preventive maintenance, work request management and efficient customer service evermore difficult in today's fast-paced and competitive world. Subsequently, OGS formed an internal matrix team to study the issues and define the problems and needs, with the goal toward resolving these situations. This matrix team, along with input from their respective service center teams, determined the project goal to be:

To develop a data management system that will provide for data standardization and manipulation, as well as timely and accurate collection and dissemination of information for the purpose of improving customer service.

The primary objectives of this system were:

- A. To streamline and improve work processes.
- b. To improve internal communications
- c. To improve accessibility and accuracy of management information.
- d. To provide systems that enable complete and comprehensive data that is current and correct.

- e. To provide accurate and timely information to support management decision-making.
- f. To maximize a "proactive" and minimize a "reactive" mode of management and/or operation.
- g. To increase productivity and quality management.

Shortly after the first stage of the project was begun, it was dubbed the "**South Carolina Integrated Facilities Information (SCIFI)**" Through researching software products and systems, and with the help of architectural and facilities management consultants, it became clear that the most beneficial long-term solution was a Computer Aided Facilities Management (CAFM) system. This would better serve to incorporate the large majority of nearly all of our activities associated with building management.

Relative Significance to the Improvement of Operations

A number of significant improvements have occurred even though Phase I of the system has been in place only since July 1, 1999. Many intangible benefits have occurred such as:

- a. Better front line accountability. This affords the team leaders and supervisors the ability to better plan budgets and operations.
- b. More extensive documentation of contract activity.
- c. More opportunity to work together on improving shared and/or similar processes and concerns. A SCIFI Users' Group has been formed to discuss needs and concerns, to seek improvements to the system, to share ideas, and to enhance the implementation of the system.
- d. As a result of the SCIFI Users' Group, subgroups are being formed to seek solutions to specific issues regarding interrelated and/or like processes.

In addition to the major CAFM application, OGS planned computer application and communications around the need for sharing data from multiple areas. By providing an environment where data from a multitude of applications is accessible for reporting purposes, it allows managers, as a minimum, to:

- a. Determine trends and study whether particular buildings or equipment are experiencing recurring problems.
- b. Track and plan activities for better resource allocation and improved customer service.

- c. Track size and ownership of offices and common areas for more accurate leasing data.
- d. Improve preventive maintenance planning and execution.
- e. Enhance access to CAD drawings representing grounds, properties and building information.
- f. Provide more finite and timely data to the State legislature.
- g. Increase coordination of work management and facility information among departments, agency customers and contractors.
- h. Enhance the capture, analysis and reporting of daily work information for performance monitoring and accountability reporting.