



## IMPLEMENTING CMMS

### 1. APPLICATION

A CMMS can be utilized in the management of a range of facilities from a single facility to a complex/campus. They can also be used to manage the maintenance program for a grouping of equipment such as a fleet of vehicles. The systems are very versatile since most are in modular form for the various maintenance functions and can be customized to fit the particular application. Whatever system or set of modules are selected for use, careful consideration needs to be given to Functional Requirements and a sound deployment plan. The CMMS must meet the needs, constraints, and opportunities of the business and be implemented in a way that users will welcome the technology and have a vision for the benefits it brings. Proper configuration, testing, and training cannot be over emphasized when bringing a new CMMS or upgrading an existing system to an organization.

### 2. CONSIDERATIONS

When considering a Computerized Maintenance Management System (CMMS) there are certain things that must be considered if the system is to be an asset and a usable tool in the managing of the day-to-day maintenance and operations within an organization. Here are some general considerations that should be included in the development and selection process as well as some "pitfalls" that will impact the success of the system:

- 2.1 Do not go into the selection of a system without a clear definition of requirements - what you expect it to do and how it is to meet your specialized needs. Also, have a clear understanding what metrics you want your CMMS to produce and what the work process is for your organization. You may want to bring in outside professional guidance that is experienced in CMMS but not associated with any particular vendor or system.
- 2.2 Do not try to develop a CMMS in-house. You will spend an inordinate amount of time and money designing a system that is likely already available on the market. There are many vendors of good off-the-shelf systems that have the advantage of years in developing and improving systems for other similar clients.
- 2.3 Understand what other systems are in use by your organization that the CMMS will have to interface such as financial and geospatial systems, and ensure that this interface can be easily managed. Users and managers of these systems should be involved in the developing your CMMS, including your IT group.
- 2.4 Do not make your CMMS your primary payroll and accounting system. Remember it is a work management system that requires data relating to time and costs (thus interfacing with your financial systems) but it should not be the system that employees rely on to get paid, otherwise it will get tied up every two weeks with payroll time entry.
- 2.5 Do not get locked into a structure that is difficult to enter data and lacks the necessary flexibility to be upgraded or modified. Consider who will be entering the data and their computer skills. The CMMS should have the flexibility to enter data from multiple sources and media. The more ease of data entry will improve its accuracy and the resulting output. Also, the system should be flexible enough to allow the transfer of



data during the design and construction phases of a project, e.g. Construction Operations Building Information Exchange (COBIE).

- 2.6 If you are considering replacing your existing system, do not get locked to "lost costs." Don't fall for the logic that what you have now is not doing the job but you have too much time and money invested in it to change. Consider only the time and cost to correct your existing system to meet your needs versus what a new system would cost.
- 2.7 When considering a new system, make sure that the data from your existing system can be easily and accurately transferred.
- 2.8 Do not limit yourself to looking at only one system early in the selection process. Develop a short list and "road test" each product. Establish rating criteria and score the actual performance of each candidate.
- 2.9 Do not be the Beta test. Look for systems that have a proven track record with agencies similar to yours. Avoid unneeded complexity.
- 2.10 Look for full support from the vendor during installation and testing. Ensure this includes ample training of your staff in the use of the system in both operating the system and how to maximize the benefit of the information within the system. The vendor should leave you with a clear understanding of what it can and cannot do.

### 3. ISSUES

Failure of CMMS implementations is a continuing problem voiced by industry experts. To avoid this pitfall a thorough management study of the system is required to evaluate the use of such a system in their organization and to determine the costs benefits. Not all maintenance organizations require the use of a complete set of CMMS modules. Those that have implemented CMMS programs without a complete study, typically fail to use the capabilities incorporated in the software and may eventually view the program as a failure.

Avoiding the pitfalls in decision-making concerning implementing or modifying CMMS in a maintenance organization means research must be a high priority.

CMMS would benefit significantly from a standardized asset identification system in which each piece of equipment or building component is given an identification number common to all facilities throughout an organization. GSA has such a system called the Government Asset Identification System. It uses National CAD Standards acronyms to identify assets. It will cross reference CAD acronyms with Omniclass. If Government agencies adopt National CAD and Omniclass standards to identify their assets, they will expect to reduce costs, improve information fore executive decisions, increase operational efficiency, and integrate facility management with new and existing technologies.