Keys to a Successful CMMS Implementation

The transition to using maintenance software as part of your asset management program can be a smooth one.

By John Dorner, OPS Systems, Inc.

Einstein searched for the Grand Unified Field Theory. It’s a great concept, but he never found it. Asset management may be thought of as a Unified Theory, bringing all the factors that affect equipment and maintenance systems management into one integrated system. For example, in a municipal utility, typical factors include equipment records, maintenance records, personnel records, accounting records, geographical records and more.

The first requirement for success in unifying your equipment and maintenance systems is to have enough money. This could mean millions of dollars.

Second, you must have a few people who can understand the total scope of work — real Einsteins.

Unfortunately, many of these projects aren’t successful. Just in the subcategory of Computerized Maintenance Management System (CMMS), we have heard it said that 50 percent of CMMS projects fail.

A more successful approach, especially if your company doesn’t meet requirements one and two, is to implement pieces of the grand solution that a person can understand. Find pieces of the puzzle that have been proven to work. Get “best of breed” software — Best CMMS, Best Accounting, Best GIS, etc. — and implement them. Then build bridges (interfaces) between these packages.

Keys to Success

First, find your system champion. This is someone who has the skills and desire to make the system work. The system champion must be both computer literate and have experience working in maintenance.

If you can’t find such a person, stop. Wait until you find one. Then make sure that person has the time outside of his or her normal duties to focus on the project. When starting a CMMS implementation, the time commitment will be almost full time. Without that commitment, you never get to the starting line.

A CMMS need not be overly complicated. It should show your organization what needs to be done and keep a record of what is done. Then, you need to send summary information to other functions. For example, Purchasing needs to know what needs to be ordered and Finance will need cost information.
To begin, a database must be populated with equipment information, the preventive maintenance tasks to be performed and their frequency. If the package you've chosen doesn't use a database, stop, go back to the beginning and pick one that does.

If you're moving from a paper system, or worse, no system (fix it when it breaks), you'll need to go back to the Operation & Maintenance (O&M) manuals for your equipment. Check with your equipment manufacturers to see if they have an electronic format of the O&M manual to save you a lot of typing.

Any CMMS program will have a place to put everything you ever wanted to know about an item. Do not attempt to get everything in on the first round. Remember, your goal is to get to the starting line before you get fired. Get the essential information in. You can go back later to put nameplate data in, or hire temporary help. You need to load an accurate and complete description of the work to be done, tools required and materials. Did you ever notice that half of the people walking around an operation are going to get the tools they need?

If your CMMS vendor offers on-site implementation and training services, don't skip it! Take advantage of this invaluable knowledge, especially if you don't have internal information technology (IT) support.

Look for these factors from vendor-provided services:

1. A planning session with your system champion and key management personnel.

You'll determine the resources available for loading the setup data.

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**What is CMMS?**

A Computerized Maintenance Management System (CMMS) is a computer system that schedules, tracks and monitors maintenance activities. It provides cost, component item, tooling, personnel, and other reporting data and history. CMMS systems often can be interfaced with production scheduling and cost systems, and may be used to follow preventive maintenance policies.

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**What is Asset Management?**

Asset management systems have evolved from maintenance management systems. Maintenance management systems use work orders for preventive and predictive maintenance, equipment recording and tracking, replacement parts inventory and maintenance labor scheduling. Asset management optimizes asset use and manages all maintenance efforts involved in making assets as reliable, accurate and efficient as possible. A further crucial element in enterprise asset management is integration with financial, human resources and purchasing functions, as well as production and enterprise resource planning systems.

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Set the timeline goals, including a “go live” date.

2. Administrative training for the System Champion.
   This should be done as soon as possible so he or she has a complete understanding of the program’s functionality.

   This session should cover system security (who has rights to read/write/edit data), system installation, administration of the application, troubleshooting, etc.

3. General training. This can be done just before you “go live,” with the trainer available to monitor the actual transactions. It’s a good idea to budget a follow-up visit after several months of operation because it’s easy to drift off course in the early stages, and this process is a voyage.

Build Interfaces
Once your CMMS process is running smoothly, you’re ready to build some bridges. First, tie into the Rockwell Software RSView™ human-machine interface (HMI) or the RSBizWare™ Historian™ from Rockwell Automation. This interface is a well-known application and should be easy to implement.

Many maintenance tasks, such as run times, starts, etc., are tied to process data. When you bring this data into the CMMS automatically, it’s more reliable and efficient than entering it by hand.

You’re now closer to a Unified Theory and can place the Einstein plaque on your desk — you have successfully implemented a CMMS with bridges (interfaces) to other systems, giving you accurate and secure data.

Success easily can be achieved when using the KISS principle: Keep It Simple, Stupid. Break your grand goals of creating a Unified Theory into manageable pieces a person can understand, identify the system champion and focus on getting started.

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