



An eMaint
Whitepaper

WHAT'S THE SECRET TO CMMS SUCCESS?

Follow These Ten Steps

BY: GREG PERRY, CMMS IMPLEMENTATION SPECIALIST, EMAINT

No matter how large or small your operation, a computerized maintenance management software (CMMS) is an enabling tool that translates your needs and wishes into real-time practice. By centralizing and automating the tracking of your assets, bottlenecks are anticipated -- and prevented.

A maintenance engineer's dream, right? Yet experts estimate that up to 80 percent of CMMS implementations fail to meet expectationsⁱ. Why? There are 10 steps to a successful CMMS implementation that if followed, will assure that yours is one of the success stories.

But first, let's make sure we are on the same page about just what a CMMS is and can do – and what it is *not*.

A CMMS can transform the productivity of your maintenance team to “world class” status by:

“A CMMS can transform the productivity of your team to ‘world class’ status.”

- Centralizing the storage of data on all of your assets, from equipment to supplies.
- Automating workflows and processes.
- Tracking work orders, including the time required for project completion and the associated costs.
- Monitoring inventory levels and triggering “just-in-time” parts orders.
- Ensuring compliance with industry or government regulations.
- Producing data that allow priorities to be set and decisions to be informed.

Maintenance teams working for world-class operations spend 55-65 percent of their day on wrench time (in other words, performing maintenance, rather than finding parts or determining who submitted a work order), vs. the 18-30 percent averageⁱⁱ. The result: The volume of tasks your team is able to complete increases substantially, with a smaller investment of man-hours. Likewise, when you are able to track maintenance activity over the lifecycle of your assets, performance is optimized. In world-class operations, an average of 65 percent of the team's time is spent on scheduled, preventive maintenance, rather than on unplanned repairsⁱⁱⁱ.

A CMMS cannot, however, manage finances or procurements – although those systems may be integrated so they dovetail and support each other. It also is *not* a magic wand; it requires the investment of time and training.

That prospect may seem daunting at first. But I like to remind my clients of the fortune I found in a Chinese cookie when I was a field engineer: “The secret is to begin! The rest is easy.” These 10 steps will guide the way.

1. ***Choose a project champion and cross-functional implementation team.***

The most successful implementations are championed by a central “owner” who understands that maintenance management is an ongoing process of continuing improvement – not just a one-time project.

This champion should choose a supporting team that draws expertise from a variety of departments, ranging from information technology, to purchasing, to materials management. Software developers, as well as other consultants, may be tapped as well.

Wherever they come from, certain roles are critical to fill, including:

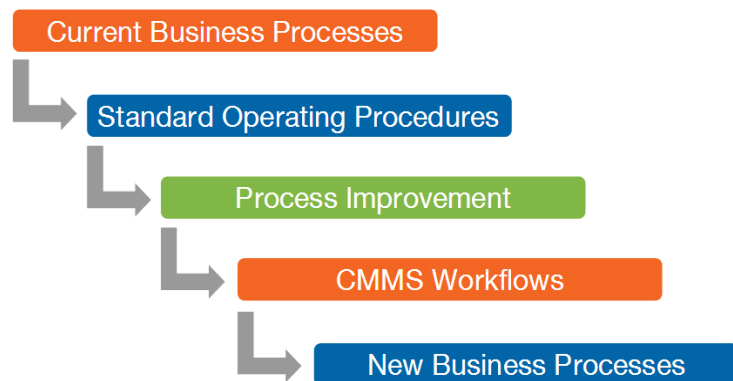
- Executive leadership, to approve funding and critical decisions.
- Maintenance leadership, including the champion and the future system administrator.
- Project leaders, including a manager who documents the requirements and an analyst who defines how the system will be used.
- Subject-matter experts, such as individuals knowledgeable in purchasing and Six Sigma.
- IT liaisons.
- Implementation consultants.

2. *Familiarize the core team.*

The core team must become your CMMS experts and future trainers. But in the outset, they won't know what they don't know. Your software developer or other consultant should provide upfront training to bring members up to speed and assure the system's capabilities are fully understood.

3. *Define workflow processes.*

This is a critical step; giving it short shrift is one of the most common causes of implementation failures. A CMMS must be blended into every aspect of daily operations – from work orders, to preventive maintenance schedules, to placement of parts orders. This is not a time for assumptions; processes for each task must be accurately mapped. A team member who is proficient in flow diagrams can be invaluable, along with a Six Sigma point person or an expert in any other process-excellence system your organization has adopted.



4. *Invest time in standard operating procedures (SOPs).*

Document all of the processes captured in the previous stage in SOPs. Likewise, assets should be classified and grouped in types (pumps, generators, etc.), then ordered in hierarchies. Assets should be defined by their location and criticality, with clear demarcations separating assets from parts. This also is the time to define the level to which you need to track; which codes you will assign to items, problems and costs; the tasks required for maintenance (including the tools and materials needed); and who is responsible for each procedure. Don't fall into the trap of thinking that SOPs don't have to be written down; failures occur when they aren't clearly defined.

5. *Prioritize your implementation.*

Prioritize the processes you want to automate first, starting with the "low-hanging fruit," and

commit to a timeline. A series of quick wins will give your entire team confidence and build support within the organization. Focus only on collecting the data you know you need; ancillary information always can be gathered later. This is a good time to leverage the experience of a seasoned CMMS implementer for guidance. So many lessons have been learned by your industry colleagues; why not benefit from them?

6. ***Remember your users!***

When configuring a CMMS, keep both users of the system and users of the data in mind. If data isn't entered consistently according to pre-set standards, and if access isn't intuitive, users will follow the path of least resistance and you won't get the buy-in you need.

7. ***Avoid the 'garbage in-garbage out' trap.***

“Your CMMS will only be as good as the data it contains.”

Your CMMS will only be as good as the data it contains. Data stored in separate spreadsheets can't be tracked. Bring it under one roof! Likewise, if data is entered, then not kept up to date, you won't benefit from quality intelligence. Start with core asset data; you can add attribute information later.

Remember that a strategy must be developed for populating the CMMS with the data you've gathered. Manual entry may be the easiest, but it's the most time consuming. If you are importing data from other systems, protocols for data conversion must be written and run, and considerable clean-up may be required – necessitating several passes. Identify upfront who will be responsible for this step and how quality will be verified.

8. ***Don't skimp on training.***

The people responsible for training are perhaps the most critical members of the team. They must be expert in using the CMMS at a higher level than anyone else, as well as be good communicators and effective teachers. So, while the “train the trainer” approach certainly minimizes costs, the quality of instruction can degrade as the process rolls out.

Another option is online, Web-based training, whether pre-recorded or live. However, nothing can replace face-to-face interaction with plenty of time for questions and interaction with peers. In that environment, you literally see the mental “light bulbs” firing.

9. ***Provide support after you go live, and consider doing it in stages.***

Support and coaching will continue to be needed after the CMMS goes live. Consider rolling it out in stages, allowing you to identify and resolve problems at smaller scales. It's easier to gain acceptance that way. Perhaps pilot it in one location first before spreading to others. And if you need to integrate the CMMS with other systems, such as purchasing, wait for future phases to test that out.

10. ***Adopt a philosophy of continuous improvement.***

This is an ongoing process! Your CMMS will never be fully implemented; there are so many ways to deploy it that improvement is always possible. As you use the intelligence from

your CMMS to drive decisions, you will understand the causes of failures and can make continuous adjustments. Establish success metrics right from the get-go, along with a team responsible for a continual review process. Set this up *immediately* after your initial “go-live” to prevent bad habits from settling in.

These 10 steps may seem overwhelming at first, but remember that a journey of a thousand miles begins with one step. If you walk through them one at a time, they lead to success – reduced cost for your employer and enhanced reputation for your team.

Consider the case of Cintas, a premier provider of business services headquartered in Ohio. The Cintas team prioritized what it wanted to tackle -- starting with worker safety. Full roll-out was accomplished over six months. Prior to the implementation of the CMMS, reliability was not central to the production culture. That turned around completely with the implementation, and the results included a 20 percent increase in revenue and significantly decreased maintenance and capital costs.

You too can achieve dramatic results. Just think of it like the challenge of “eating an elephant.” Tackle it systematically and methodically – one part at a time!

Greg Perry is a biomedical technician, clinical engineer and maintenance professional with more than 12 years of experience in software implementation, manufacturing reliability consulting and mentoring on operational best practices. He personally supervises the most challenging implementations for eMaint clients, from start to finish.

ⁱ <http://www.reliableplant.com/Read/28838/CMMS-implementation-keys>

ⁱⁱ <http://www.maintenancephoenix.com/wp-content/uploads/2012/01/Tool-Box-Talk-Wrench-Time-JL-Final1.pdf>

ⁱⁱⁱ <http://www.reliableplant.com/Read/212/world-class-maintenance>