Managing Your CMMS Database

Introduction: Maintaining an effective CMMS database

It probably has been a couple of years since you and others in your organization have put a major effort into building that pristine CMMS database. Now somehow you are not able to get the information out of the system that you require. It's like the data has disappeared into a big black hole. There is nothing more frustrating than putting all this information in and getting little in return. In my experience, the major contributor to a database's decline is the way in which it has been managed. There are a number of factors that contribute to poor database management including:

- changing and uncertain policies and objectives
- staff turnover
- lack of or poor training
- reduced staffing
- lack of database review and audits
- out-dated software

Changing And Uncertain Policies And Objectives

Before we can determine if your CMMS is providing you with everything it was intended to, we need to understand what exactly we are trying to accomplish. Like many of us, you probably have the documentation used to justify the purchase and implementation of your CMMS filed away. When was the last time you or anyone reviewed the goals and objectives of the CMMS? **Is your CMMS delivering on those goals?** A more important question might be , are those still your goals and objectives? In this ever changing and competitive world, one focus that does not seem to change is the need to improve the financial profitability of the organization. Your CMMS is one of the tools needed to achieve this goal. The Key Management Indicators (KMI) from the CMMS need to support the goals and objectives as set by senior management.

Staff Turnover

When there are changes in staff, all too often there is a loss of experience and training. While it is not practical to document everything we have learned, tasks, instructions and procedures need to be reviewed and updated on a regular basis. It is advisable that tasks and work instructions be reviewed at least once a year and that the information in the database reflects current practices. You need to consider this as part of the annual maintenance of the CMMS. Just as with any valued asset, the database needs to be maintained.

Lack Of Or Poor Training

With staff turnover, promotions and reassignments, training becomes a second priority and to 'keep costs to a minimum', the training is either left to the trainee reading the manual or the training is delegated to a co-worker. This often results in **valuable information being lost or the training not being completed**. If your organization is large enough, a corporate trainer can be cost effective. Besides current product knowledge and the tools of the trade, one advantage an outside trainer often brings is a fresh point of view. Training promotes the effectiveness of that user which directly impacts the integrity and effectiveness of the database.

Reduced Staffing

In the spirit of 'doing more with less', often tough decisions are made to perform only 'value added activities'. Sometimes, this means not only postponing or extending maintenance but also delegating responsibility for portions of the CMMS database. When the responsibilities for maintaining information in the CMMS change, take the time to update job descriptions **and allocate adequate time to the task ensuring that the timeliness and integrity of the CMMS is not being compromised**. Let's not forget the GIGO principle. It is worth the time, effort and cost to prepare additional audits reports. These reports can be used to identify inaccurate, missing or incomplete information being entered into the database. Use the features of the CMMS to your advantage. You develop the rules and let the system identify the exceptions.

Lack Of Database Review And Audits

How do you know if your database is being properly maintained? The first step is to identify who is doing what. The next step is to verify that everyone is doing his or her job. One simple way to check that everyone is doing their job is to review the security setup in your CMMS. Make sure not only that all users have their own user ID and password but also review the user groups and roles or access. This should be done on a continuous basis. Set up tasks in your CMMS to review the security on a quarterly basis. **Use the power of the CMMS as a tool to keep it running effectively.**

There are several ways in which the integrity of the data can be compromised. For example:

- identifiers and/or naming conventions are not documented or adhered to.
- information is incomplete, ie. fields are left blank.
- fields are used for purposes other than they were originally intended.
- information is not current. Timeliness of some information is more critical than others (e.g. inventory, receipts, work order status, requisitions, purchase order status).

Using inventory management as the example, the goal for inventory accuracy needs to be at least 95%. In the early stages of implementation of the CMMS, this should be measured at least monthly and then reduced to semi-annually or annually. Cycle counting is another way of monitoring the inventory accuracy on an on-going basis. Making inventory accuracy a KMI is one way of ensuring that this is being maintained.

In order to keep your CMMS database current, there needs to be a policy for archiving of 'old' information. Ensuring that the archiving is performed on a timely basis usually keeps the database at a manageable size based upon allocated disk capacity and provides for improved system performance. Often the display and reporting times are improved. In addition to properly securing the archived data, a trial recovery of this information is a prudent test. There is no point to archiving data if it will not or cannot be retrieved.

Out-Dated Software

The world of computing is constantly evolving. It takes valuable time, during nonoperational periods, and sometimes involves outside technical assistance to ensure that your CMMS software is upgraded. **Upgrading your CMMS software needs to be a well-planned event despite the nature of the upgrade**. Even if the upgrade is simply to correct a 'bug' in the system, the users need to be informed. Sometimes, a temporary 'work-around' procedure has been implemented and needs to be dropped. If the upgrade involves changes in the user's interfaces, it usually requires changes in the procedures and sometimes even changes to policy. This is probably the most common means by which a well-documented system slides into an 'irrelevant' or 'obsolete' state. Should the changes not be documented, trained users become uncertain of what to enter into the software. Even if there are new fields or features which are not going to be used in the near future, it is worth the small effort to update documentation noting that they are not to be used. Keep your documentation fresh and relevant.

Conclusion:

So what are the rewards for maintaining an effective CMMS? You get accurate and meaningful reports that help you identify problems and trends. With this information, you can deploy those limited resources to where they will make the biggest impact. This will reduce downtime and scrap costs which in turn will hit the bottom line on the financial statements. When people see the system working and know it can be trusted, they will feel better about putting the effort into maintaining the database. This means that all the hard work to build and maintain that pristine database was not wasted.