

This is My Maintenance System... Isn't It?

[Published in PaperAge, Vol. 116, No. 6 - June 2000]

By John Yolton

Many paper companies have come to the recent realization that there are savings to be achieved from the cost of maintaining their equipment and facilities. More important, CEO's have become aware that these savings go directly to the bottom line. On Wall Street, bottom line savings relate directly to the share price through the P/E ratio. Market capitalization is affected.

Many maintenance managers understand this opportunity and take action. To accomplish these savings, "programs" are required. These programs require managing. Managing a program requires information. Many maintenance managers take proactive action by replacing outdated "legacy" computerized maintenance management systems. Those systems typically delivered savings during the 1980s by reducing the clerical effort associated with the collection of information (data). They also changed the way mills reported maintenance needs and managed the work associated with these requests. In some cases a parallel, but separate stores system provided information relative to MRO inventory and its supply chain management.

One manager, in the southeastern US, spent an entire year off-site reengineering the mill's reliability and maintenance effort only to find that the company's information system could not provide the transaction data on a timely basis—the essential data required for efficient and diligent actions. The existing system could not support the improved business processes he and his team had developed during their sabbatical.

The Objective

The objective is to initiate a process that ends in the implementation of new solution software designed for managing the reliability and maintenance of the mill's assets. Included are the associated processes, supply chain management (SCM) for stores inventory and direct MRO purchases. In the past, the leadership of this initiative was typically assigned to the MIS or IT group within the company or the facility. The reasons for this are twofold, and typically maintenance managers feel:

- Out of their league when understanding, discussing and managing information technology.
- That they do not have time to spend on this intensive effort.

That is changing. A paradigm shift has occurred in the past ten years. Maintenance managers in the past had viewed one of their functional objectives as controlling the "spending" of maintenance. That objective has expanded to controlling the "business" of reliability and maintenance. In many cases this means investing to achieve a greater goal ... Profitability.

The Solution

This shift has resulted in increased exposure to the Enterprise Asset Management (EAM) model for managing the transactions accompanying the business of reliability and maintenance. In the past, a CMMS system's "footprint" dealt with work order processing and work management. The enlightened maintenance manager, like my friend in the southeast, recognized that his responsibility includes the total well being of the assets that manufacture the product. Management of the supply chain for the MRO component of materials used by the process is a large part of that overall asset care responsibility, as is a program for providing improved reliability, as well as promotion of efficiency of the resources.

The enlightened maintenance manager recognizes that the tool to assist in this management is not just an IT responsibility, it is a business responsibility. Knowledge of reliability and the maintenance issues and how they are best resolved is a major factor in determining the effectiveness of such a tool. That is the challenge of today's maintenance management in selecting an application that ultimately determines their business future.

The Issues and the Users

Everyone talks about the necessity for “ease of use”. Certainly, how easy the application is for use by the casual user is important. In today’s business and personal environment, an increasing number of people are becoming more proficient in using applications for their daily activities.

What functionality does the casual user require? Creating and/or looking-up a work order and looking-up a stock item are the two most mentioned. Any solution for today’s paper mill will have the look and feel of Windows and most solutions are migrating towards a browser user interface because, simply, more and more homes are becoming internet capable and browsers are familiar.

What about the “power” user? And who, typically, is the power user? In most facilities the power user is the maintenance planner. What functionality is required here? A library of preplans, searching asset histories, scheduling capabilities, parts reservations and PM management are among the needs of the planner.

Another power user can be the reliability or maintenance engineer, and the staff working on reliability issues. They require functionality that enables them to devise the proper maintenance strategies for any given asset that is deemed a reliability-centered maintenance (RCM) candidate. The capability to track mean time between failures, root cause failure analysis, failure modes, and so on, will be essential.

What about the “business” user? What functionality is required for the maintenance manager, or the operations manager, so that they have information from which to make decisions affecting their business? Reporting of costs against the equipment? Graphic displays of key performance indicators (KPI’s)?

What about the storekeeper and the purchasing agent that handles maintenance, and repair and overhaul (MRO) equipment and parts? What is the functionality that they require from the EAM system? Automatic replenishment capability? Vendor performance tracking? Warranty tracking?

What about the engineer? Does the EAM package include document management? Or Project Management? Or work flow capability for the proper routing of business processes? Does it use popular CPM’s like Microsoft Project or Primavera?

And what about the IT person? If you ask the question of IT, you will typically get a response that centers upon simplicity of system. Many ERP solutions have been purchased because the application is consistent across the many modules being offered—from financials to human resources to purchasing to maintenance. There is integration of the data being used for each of the applications. The database is the same, the operating system is the same, and so on. Simplicity is cost effective from the IT standpoint.

So Whose System is It Anyway?

As the famous comment goes, “Toto, we’re not in Kansas anymore.” Reliability and maintenance of the operating assets, performed well, is a hugely profitable effort in today’s competitive environment. A savings of \$1 million going directly to the bottom line is equivalent to adding as much as \$5 – 25 million of value in market capitalization depending upon the company’s P/E ratio. There are less and less other opportunities like this available in the industry today.

So, the answer is? This maintenance system belongs to everyone in the mill work force, from the shop floor to the front office. Properly used and packed full of functionality by which it will support the business processes that contribute to reliability measures and resource efficiency, that maintenance system is a true competitive advantage.