Written by Bob Williamson, Contributing Editor Wednesday, 01 July 2009 08:15



One of the BIGGEST challenges we have in the "maintenance arena" is being fully valued by our senior leadership. Many don't know that because we are routinely asked to do so much "non-maintenance" work it actually prevents us from doing productive maintenance work.

The potential for eliminating equipment, process and facility problems, the potential for lowering operating and maintenance costs and the potential for improving plant performance often go unexplored because senior management does not appreciate what "maintenance" is truly capable of accomplishing. No, this is not a "poor pitiful me" story, but rather some serious observations and recommendations based on factual evidence from hundreds of plant visits, assessments, audits, discussions and improvement initiatives. Ever wonder why many capital-intensive businesses fail to achieve their competitive potential? Read on...

Note to Maintenance Technology readers: After reading this column and doing the appropriate underlining and margin notations, make a copy of it and drop it on the desks of your senior operations management.

#### **Productive maintenance work**

The number one priority of the maintenance organization should be to sustain a desired level of performance of the equipment, processes and facilities. "Sustaining" or preserving the desired operating conditions is essential for competitiveness in a capital-intensive operation. Frequently, maintenance is called upon to make repairs that restore the equipment, processes and facilities to the desired operating condition. Planned repairs are productive maintenance. Emergency repairs can be costly and should be avoided. That's why we believe in a sound preventive maintenance program—one that prevents the causes of problems. The result of productive maintenance work is lower maintenance cost per unit produced.

# Non-productive maintenance work

Unfortunately, many maintenance organizations are simply re-directed from their primary priority

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of maintaining the assets. Equipment relocation, installations and special projects may be important to the business, BUT they take valuable time away from the planned and preventive maintenance. Without a rigorous planned and preventive maintenance approach, the assets break down or require emergency, unplanned repairs. **This increases the maintenance cost per unit produced!** 

Emergency and unplanned repairs are often caused by the lack of proper preventive maintenance. In other words, many asset failures can be prevented.

While special projects or relocating and installing equipment may seem like common-sense uses of the in-house maintenance resources, they can be very counterproductive. Redirecting maintenance resources often leaves planned and preventive maintenance tasks undone-which can lead to more unplanned and emergency repairs. **Again, this strategy increases the maintenance cost per unit produced!** 

# Not enough maintenance personnel

Individuals in a plant maintenance department recently complained to me that they did not have enough maintenance mechanics (or technicians) and asked if I could help them justify more staff. During a plant walk-through, I noticed a number of maintenance staff hanging new lighting fixtures in the high-bay production area. When I reviewed the maintenance work orders and observed the typical workdays, I noticed that the department was operating in a highly reactive mode by responding to countless trouble calls. When I reviewed their PM completions, I discovered that very little preventive work was being done.

My first recommendation was to contract out all of the lighting installation. This would free up maintainers to be more responsive to the critical needs of the plant and let them focus on more preventive maintenance—which they did. In fact, the contractor labor charges were less than the in-house maintenance staff. Furthermore, the contractors were more efficient because they had only one job to focus on: the hanging of new lighting fixtures. The contractors' work went virtually uninterrupted. More planned and preventive maintenance work was accomplished. Trouble calls began to decline.

This is not a "poor pitiful me" story, but rather some serious observations and recommendations based on factual evidence from hundreds of plant visits, assessments, audits, discussions and improvement initiatives. **The bane of "Lean Projects"** 

Many organizations are pursuing "Lean Operations, " something that involves many "continuous

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improvement" (CI) and "TPM" teams making improvements and changes to their work areas and equipment. Typically, they rely on the maintenance department to support their action plans. Because it is Lean, or CI or TPM, it has to be a top priority or the teams will become frustrated and lose momentum. So, the maintenance shifts from their planned and preventive work to these special projects. Guess what? Soon they become more reactive and trouble calls start pouring in because the true maintenance work is set aside.

Special projects are often seen as an interruption to routine work within the maintenance organizations that have limited resources. On the other hand, special projects completed in house are seen as "free" labor.

#### The true role of maintenance

All too often a maintenance department will become overwhelmed with work and all of those "number one" priority jobs have to be sifted down to the critical few. Some requestors will make a work request as a "safety" item so it will get to the top of the priority list. Stop playing games. Maintenance of the assets is the true number one priority of maintenance. Safety modifications—true safety modifications—can and should be addressed in a timely manner. The maintenance request basket often gets full, overfilled with things that are 1) not maintenance; and 2) problems caused by lack of maintenance.

# So, what is "maintenance" all about, anyway?

When I visit plants and facilities and ask that question, I may get textbook answers. More often than not, however, I get confused looks and fuzzy responses. Most organizations DO NOT KNOW WHAT MAINTENANCE IS! There are no clear guidelines, no charters, no policies that guide either the perceptions or the realities of "what maintenance is."

Try this: Ask anyone in a leadership position "What is **safety** all about, anyway?" Or ask "What is **quality** all about around here?"

Better yet, ask "Why should we listen to our

# customers

?" I will guarantee that you will receive very specific answers and examples that make sense to your business. Start asking the same questions on the plant floor and you will likely get some very well-thought-out answers.

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Imagine how unproductive and uncompetitive your business would be if employees had the same lack of respect for safety, quality and customer service that they have for maintenance.M ost people in your plant or facility understand safety, quality and customers. As a senior leader YOU expect that, don't you? In fact you probably have very specific safety and quality expectations and goals, with posters, signs and, quite possibly, periodic meetings and feedback reports. Furthermore, if employees do not adhere to the safety and quality expectations, there are often very specific and severe consequences. The bottom line here? Safety, quality and customer principles go well beyond the safety, quality and marketing departments. These things are a way of life in today's competitive environment.

Now, ask the same people polled my previous question: "What is maintenance all about, anyway?" Do you get specific answers and examples that make sound business sense? Most people polled probably will cite problems fixed and projects completed, or they will invariably get into all the stuff that does NOT get done by maintenance. This is a PROBLEM of significant magnitude, one that will have a negative impact on the business—especially the more capital-intensive your business is.

Sadly, the maintenance paradigm is often one of fix, repair, special projects and odd jobs. This paradigm is one of being subservient to operations, an expense, an indirect overhead cost. **This often leads to high "maintenance" costs and the lack of a productive purpose.** 

#### Call to action

Without a clear policy, a set of expectations and dedicated resources, safety, quality and customer responsiveness WILL NOT HAPPEN. Employees understand the importance of safety, quality and customers.

Likewise, without a clear policy, a set of expectations and dedicated resources, true maintenance will not happen. Employees do not understand the importance of maintenance and are unclear as to its roles and responsibilities. Imagine how unproductive and uncompetitive your business would be if employees had the same lack of respect for safety, quality and customer service that they have for maintenance.

Maintenance must have a productive purpose in an era of a growing skills shortage—*especially in maintenance jobs* 

—an era of increasing competitiveness and an era of serious cost controls. Maintenance efficiency and effectiveness is crucial to business prosperity. That's because maintenance is truly about sustaining a desired level of equipment, process and facility performance, NOT just fixing things that break or pursuing countless special projects.

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As a senior operations manager you can make the maintenance paradigm shift happen. If you already have done so, bless you and thank you. You are worth your weight in gold.

One last thing to remember: Maintenance by the maintenance department alone will not necessarily lead to reliable equipment, processes and facilities. Entire organizations must share a new paradigm of reliability. **MT**