

Bob Williamson, Contributing Editor Data, metric, measures, assessments, evaluations, scorecards, progress reports... Many of us have been faced with a whole host of measurement opportunities. Seems like some of the performance measurements are moving targets that we seldom hit.

Some measurement processes come and go, ago: "What gets measured gets done" (attributed to Peter Drucker, Tom Peters, Edwards Deming and Lord Kelvin among others). Why, though, is it that we so often get hung up on metrics and measuring things to the point that we sometimes actually lose track of measuring what really matters?

Many discussions about improving maintenance and reliability tend to center around what to measure, how to measure it, and how to calculate the metric. We discuss MTBF (mean time between failures) and MTTR (mean time to repair). We analyze OEE (overall equipment effectiveness) and Availability. We monitor Wrench Time and Schedule Compliance. It turns out that there is an ever-increasing number of "maintenance and reliability metrics" fueling the discussion as to *what gets measured* gets done. But, we should be very careful about that which we measure.

Albert Einstein is said to have had a sign on his office wall that stated: "Not everything that counts can be counted, and not everything that can be counted counts." Remember those words, since, when it's all said and done, we must make improvements—actual, tangible improvements—in our equipment and facility reliability and life cycle operating costs.

Measurements and metrics alone will not do it.

Uptime: What Gets Measured...

Written by Bob Williamson, Contributing Editor Friday, 01 December 2006 20:28

So, where should we start our use of metrics and measures? The first step is to determine the important business priorities. As one plant manager succinctly explained: "On-time, lead time and cost are our top priorities." Everyone at his plant, from the executives down to the plant floor, knew what those improvement priorities were. Their organization's task was to make rapid and sustainable gains in: 1) on-time delivery; 2) lead time from receipt of order to shipment; 3) lower total cost to produce (*i.e. what gets measured gets done*).

They communicated their priorities like a mantra. They identified contributing factors. They set meaningful goals to achieve. They steadily improved their performance one machine, one cell, one area at a time until they reached the performance standards they set. They adopted new work standards. They measured their progress and posted the results for to see. They learned from their failures... and from their successes. They designed and implemented focused improvement projects. They avoided "analysis paralysis" by monitoring performance, progress and the effects of their improvement efforts on their top business priorities. Sustainable gains and continuous improvement processes were the results of their efforts.

"Without a standard, there is no logical basis for making a decision or taking action." Joseph Juran was on to something when he said that. As we consider what to measure, we must have a standard or a goal to attain. We must measure current performance as compared to that standard and take intelligent, consistent actions (standardized work) to eliminate problems. What we measure, though, must be important to both the business and those who directly and indirectly influence what is being measured. Remember, when something is measured, if it isn't important, it probably won't get done. This speaks to sustainability. With so many business and maintenance and reliability-related metrics out there, it is easy to measure things that are not really that important to the organization's success.

Measure the wrong things and you will likely get the wrong behaviors. Improving in most cases, means changing the behaviors of those who operate and performance, maintain. those who budget and control, those who design and install our equipment and facilities.When we look at changing behaviors, we must always consider the people who Do they have the skills and ability to change? Do the rewards must do things differently: and recognition processes encourage and reinforce the desired behavior changes?

Noted leadership trainer John E. Jones said: "What gets measured gets done. What gets measured and fed back gets done *well*. What gets rewarded gets *repeated*." Again, that speaks to sustainable gains in performance improvement through behavior change. We should remember that "measuring things" is not about the numbers, but rather about guiding and

Uptime: What Gets Measured...

Written by Bob Williamson, Contributing Editor Friday, 01 December 2006 20:28

monitoring improvement toward a measurable, observable goal. It's about understanding causes and effects of problematic performance, as well as successes, and then leading human performance improvement in our organizations. Keep this known fact in mind: Our equipment and facilities will deteriorate over time without proper, timely, and intelligent human intervention.

Lastly, most businesses have been under a cost cutting, cost reduction, cost control mission a path to improving competitiveness. Some costs, however, are not in our direct control. According to the Herman Trend Alert (www.hermangroup.com), "non-wage manufacturing continuing to rise in the U.S." These non-wage costs as a percentage of total costs are costs include corporate taxes, higher energy, pollution abatement and insurance don't forget the impact of the "skills shortage" benefits.Moreover. and the significant investment required for training, or up-skilling, the workforce to handle advanced manufacturing practices (which include improvements in maintenance and reliability). The Herman Group warns that these costs "will continue to rise across the developed world." What gets measured gets done

. In this case, "cost cutting" is "what" will get done. That's something that could defeat the entire purpose of whatever you were measuring.

MT

E-mail: bwilliamson@atpnetwork.com