



The High-Performing Contractor Assessment Program Update

May 2004

This Update highlights interest in the SMACNA High-Performing Contractor Assessment Model and provides relevant information.

CONTRACTOR magazine has carried six articles on the SMACNA High-Performing Contractor Assessment Model, starting with the September 2003 issue. The sixth and final article is on Keeping Score and is featured in the April issue.

***** SMACNA Sponsored Overviews

The following SMACNA-sponsored events include an overview of the High-Performing Contractor Assessment Model:

South-Southwest Sheet Metal Contractors Conference	April 30, 2004
Sheet Metal Industry Week	May 2-7, 2004
Vancouver BC Chapter Meeting	May 19, 2004
San Diego Chapter Meeting	July 21, 2004

Depending on the chapter needs, Dennis Sowards is available for one-hour to four-hour consulting sessions. If you are interested in your chapter sponsoring an overview of the High-Performing Contractor Assessment Model, contact Tom Soles at SMACNA national or your local SMACNA chapter leaders.

***** What to Measure?

There are two general kinds of measures:

- after the fact tell the score; and
- in-process measures indicate the current situation.

The after-the-fact measures are those that we don't typically see until a few weeks after the month's end. These are good for knowing the score; they tell us history. We have either won or lost the game for that month. They are also useful in viewing trends and overall performance, and for predicting the future.

In-process measures or "indicators" are not very good at telling the score, but are most useful during the game to help us make needed corrections. They inform when things are starting to go wrong so we can take corrective action to prevent a bad outcome. The in-process measures are much like the instruments in an airplane cockpit; indicating during the flight how things are going. These instruments help the pilot prevent accidents and/or landing at the wrong airport. The indicators don't tell the score for the airlines. But no one really wants to see a score of the times we hit a mountain.

High-performing contractors understand the difference in the two types of measures and use both appropriately.

***** Critical Success Factors Tell the Score

High-performing contractors keep score by using what are called Critical Success Factors (CSF) or Key Result Areas

(KRA). These are the areas or factors that the company must do correctly to be successful. These areas are tied to the strategic plans. Each factor has one or more measures associated with it. Typically, most contractors use these four factors: Customer, Employee, Operations, and Finance.

What to measure? While each company determines its own CSF measures, here are some typical ones used by contractors:

FACTOR	MEASURE
Customer	Customer Satisfaction (by survey) Repeat Business Days Sales (collections) Revenue per Customer Bid Success Rate
Employee	Employee Satisfaction (by survey) Employee Turnover Absenteeism OSHA Reportable Rate
Operations	Percent of Planned Tasks Completed (PPC) Rework Productivity (estimated man hours to actual)
Finance	Revenue per Employee EBITDA Days Underbilled

What do you measure and what's the score? Are you winning?

***** Why Measure?

In the contracting industry, we usually say we don't have time or resources to measure. It is my observation that we measure much more often than we realize. Usually, we measure but we also make two mistakes while doing it:

1. We measure the wrong things; and
2. We don't do anything with the measures.

We often measure the wrong things because it is easy to measure. For example, many shops measure their output in tons of metal fabricated. They measure this per day or week or month. So what? This is a measure of output but what does it tell us? It tells us if we were busy or not. We already know that! What should we measure? We could measure cycle time to tell us if we are putting more product through the shop system. It can tell us if we are getting lean in our operations. We can measure rework. Some shop managers tell me their rework is so low it is not worth measuring. This may be deceptively true if one measures rework as a percent of total work. By measuring the amount of rework as manufacturing does, in parts per million, one can see if its



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rework really is very low. Six SIGAM means about 3 defects per million opportunities. Does your shop achieve that level of performance? The goal is really not Six SIGMA but Zero Rework. For those who argue that this is not a valid goal, consider this - I have yet to see where it was cheaper to do something over than to do it right the first time.

What about field productivity? We usually measure it in some way that compares estimated labor hours to actual hours. Once we get the results of this metric, we usually spend the rest of the time explaining how the estimates can't be compared to actuals because we didn't build it as estimated. Or management talks about how lazy the work force is and threatens to free up some supervisor's future if productivity doesn't improve. A better measure is the percent of planned (tasks) that were completed (PPC). This is a Lean Construction approach. It measures how much of the work we planned to do at the beginning of the week was actually completed by the end of the week. There are no partial completions; it is either done or not. Because of the nature of construction, PPC is rarely ever at 100%. But by measuring PPC and looking to remove barriers that limit our planned execution, we can improve planning and achieve better results instead of arguing about productivity.

Like the dog that finally caught a car, many managers don't really know what to do with measures once they have them. We should never measure for the sake of measurement. We should **measure** to **analyze** to take **action**. We then measure again to see if our action worked and repeat the cycle based on the new analysis.

Some may recognize this as Dr. Deming's PDCA approach. Deming also offered some thoughts on how to analyze measures. We should look for trends in the data to determine if we have special causes or common causes. Special causes require that we look for the root cause and eliminate it if possible. Common cause trends lead us to look to the system to make process changes not root causes. If you want more on this, read Dr. Deming's writings or Donald J. Wheeler's book, *Understanding Variation: The Key to Managing Chaos* (SPC Press, Knoxville, Tennessee, June 1993), or give me a call. Measurement isn't about being a statistics' expert - it's about learning to read data - the same way that we learned to read blueprints.

What gets measured gets done. If we measure the right data and analyze it for special and common causes, we can use the measurements as tools for real improvement. Or we can just stick our head in the sand and pretend we can't measure anything. We have a choice.

***** To Multi-Task or Not – That is the Question

Hal Macomber writes in his Bloglet (March 30, 2004):

Multi-tasking is a primary source of waste in professional services firms. We have our attention on keeping people busy all the time. And then we go measure people on that. It's no wonder that those same people are starting and stopping tasks. We've got to stop multi-tasking before we go broke!

At the portfolio level, prioritize and launch projects only at the rate that the system can absorb them. If you try pushing ten pounds of project through a five-pound pipeline, you won't even get five pounds of successful projects through to the end.

Here's what you can do: adopt a hard and fast rule. Staff are not allowed to start a task that is not in a condition to be finished. That way, the only stopping is when the task is completed. Now, the action for you as project manager is to see that tasks are queued in a ready state for work. That's no small task. However, profits will soar and customers will be delighted!

***** Quote of the Day

Collecting data is much like collecting garbage ... you must know in advance what you are going to do with the stuff before you collect it. Mark Twain

For more information about the High-Performing Contractor assessment process, contact Dennis Sowards (telephone: 602-740-7271; e-mail: dennis@YourQSS.com) or Tom Soles (telephone: 703-803-2988; e-mail: tsoles@smacna.org).