Measuring Your Way to World Class

WHAT ARE THE ELEMENTS A CONSTRUCTION ORGANIZATION SHOULD USE TO MEASURE IMPROVEMENT?

The saying goes, “If you are not measuring, you’re only practicing.” Well, we would all agree that we are not in it for practice, but how does a construction organization measure improvement? At least three ways come to mind: establish critical success factors, create self-directed teams, and develop project specific activities.

CRITICAL SUCCESS FACTORS

Critical success factors are items that we must improve in order to thrive in the future. We should seek long-term and world class results in these carefully selected areas.

An example is safety. Consistently achieving zero in all OSHA categories of measurement for the past 5 million labor hours does not happen overnight. But world class organizations realize the need to provide an injury-free work force and develop strategies and skills to...
THE KEY IS TEAM-ORIENTED PROCESS IMPROVEMENT AND ASUPPORTIVE CULTURE THAT REQUIRES EMPLOYEE INVOLVEMENT IN MAKING THINGS BETTER.

achieve the desired result. They not only measure accidents but begin to measure all at-risk behaviors for each worker and each task to be performed each day.

SELF-DIRECTED TEAMS

Self-directed teams are a group of people who work together on a regular basis. The teams establish measurable goals consistent with the overall corporate direction. An example of a self-directed team is an accounting department setting a goal of getting all billings out within a specified time period. One organization went from only 3 percent of their billings out by the first (premonitoring) to consistently (13 months running) having 96 percent to 98 percent of their billings out by the first, after implementing process improvements and training.

A goal of short interval schedules completed weekly on all jobs was consistently (100 percent) achieved during 1995 by construction firm after they started monitoring and charting the performance of each crew. A dramatic improvement in having signed change orders prior to work proceeding was achieved after using a similar charting method throughout 1995. Many weeks the goal of 100 percent signed prior to work beginning was achieved, and the weekly low was 60 percent. Before measuring, no one knew for sure but best estimates were only 30 percent signed prior to beginning work.

PROJECT TEAMS

Project teams have so much to measure
they must carefully select the right drivers for the phase they are currently performing. One team called the “Mud Cats” had a goal of placing concrete at the rate of 100 cubic yards per hour. As they began to measure they found that they were achieving only 34 cubic yards per hour. The answer was process improvement.

After several meetings with workers, drivers and the concrete supplier, many ideas were generated to reduce cycle-times at the batch plant, with the trucks, and in field preparation and placement. The peak result was 95 cubic yards per hour on average. A significant team improvement! Morale was high as a sense of teamwork evolved and innovative ideas became the norm.

Teams also monitor key information processes to help keep the workers working and doing things right the first time. For example:

- Submittal reviews completed with a target goal of four days, took eight days. Not bad for a very complex, fast paced micro electronics project.

- The team goal for change-order pricing approval was 14 days, but the process actually took 23 days.

- The team goal for replying to requests for information was two days for hot items, and it was met. Replying to RFPs for typical items was also two days, but it took eight days.

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The payment goal from the owner to general contractor was 10 days. The actual time was 14 days.

• The payment goal from general contractor to specialty trades was five days. The actual time was seven days.

The key to these measurable improvements is team-oriented process improvement and a supportive culture that requires employee involvement in making things better.

A survey conducted last fall by FMI of construction firms found that only 51 percent of the firms felt they had elim-
inated fear and blame within their firms. Clearly this is inadequate if we are to fully implement process improvement within the industry. Our first challenge is to build the leadership skills necessary to foster team-work and to increase everyone’s comfort with measuring. Score-keeping is not a club, it is a way to show workers whether we are winning or losing and how they can truly contribute to the team’s success. It brings out pride in one’s efforts.

The role of front-line supervisor is changing from task master to facilitator. To truly become world class we must increase the rate at which we are improving. World class firms must have big goals that compel them to think outside of the box. They must invest time in getting the best thinking of others involved. It is not easy; that’s why so many construction firms have not even begun. Celebrate successes, large or small!

About the Authors
Lou Bainbridge and Bill Abberger are vice presidents for the Quality and Productivity Improvement Group of FMI, management consultants to the construction industry