Implementing Manufacturing Performance Measurements

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In today's manufacturing industry, customers demand more for less. While this mantra can apply to almost every industry, how can your manufacturing company deliver more when profits are shrinking?

Many manufacturers have instituted programs to reduce costs and improve their internal operations but frequently fail to evaluate whether their operational changes achieved their desired results. An active performance measurement system can help you determine areas to improve before you invest time or money. Your performance measurement system should:
- Provide timely feedback to determine the operation's successes,
- Determine improvement areas, and
- Enable quick decision-making.

Let's look at how to develop manufacturing performance measures.

**Involve Key Personnel**

Before choosing measurements, involve managers and other key personnel at the start. Solicit input from those whose individual performances will be judged using these measurements. Some manufacturers even use performance measurements to determine compensation and incentive bonuses.

When determining the areas to measure, take into account your manufacturing strategy. It is important to link performance measurements to key areas of your manufacturing strategy to provide a framework for managers and employees to concentrate their efforts to work with the strategy, not against it. For example, if your strategy is to be more flexible to become more customer-responsive, measuring labor productivity would be counter-productive. Instead, you could achieve flexibility through smaller batch sizes, quicker setups and shorter cycle times. Choose only the measurements that are most important to the desired manufacturing outcome. Too many measurements can cause confusion and lose effectiveness in providing feedback.

**Monitor Measurements Closely**

Performance measurements should be relatively easy and inexpensive to monitor. Don't base them on assumptions or data extrapolations. Subjective data clouds the measurement system. Also, choose a meaningful period to monitor the measurements. Balance the benefits of collecting the most useful measurement data with the cost.

**Examine Key Manufacturing Areas**

Many areas in the manufacturing process can be measured, but only a few contribute to meaningful direction for you and your managers. Key areas to measure include:
- Quality,
- Cost,
- Cycle time, and
- Customer service and delivery.
Once you have chosen the measurements and selected their monitoring frequency, determine the personnel responsible for collecting and communicating the measurement data and a standardized process for gathering it. Present the measurements in an easy-to-analyze format, such as charts and graphs. Set performance measurement goals at the start of the implementation process and represent them in the graphs distributed to your management team.

When the new performance measurement system is ready to implement, communicate to your staff how and why you developed it. Immediately stop using any existing measurement system. This reduces organizational confusion and enables you to provide a measurable management direction.

**Analyze Measurement Data With Employees**

After implementation is complete, conduct feedback meetings to discuss the measurements and the actions that contributed to a positive or negative trend in the data. Keep the focus of the meetings positive and avoid negative behavior such as finger pointing. Have managers and employees spend time analyzing the measurements and participate in a learning organizational environment. Key questions to consider are:

- How have management's decisions made during the measurement period contributed to the measured outcome?
- Do areas of operation need to be improved to achieve better outcomes?
- What steps can we take to achieve each performance measurement's goal?

Feedback meetings should result in action items that will contribute to improved operations. Management needs to encourage all personnel to contribute in the meetings and participate in implementing improvement initiatives after the meetings.

**Review Goals and Follow Through with Changes**

Review performance measurements and goals every six to 12 months to ensure their overall effectiveness. Both internal and external changes can make a measurement system less effective over time. Periodic reviews should consider new customer demands, changes to external competition, changes to material and labor costs, and other areas that affect manufacturing. Following through with this important review step will ensure your performance measurement system remains effective and meets current environmental pressures.

If you would like help developing and implementing performance measurement systems in your plant, please contact Joy Hougas at 312/980-2922 or jhougas@bkadvice.com. Joy is a senior manufacturing consultant with Blackman Kallick Bartelstein, LLP, among the 15 largest accounting and consulting firms in Chicago. Joy would be happy to speak with you about business situation. Specifically, she can help you reduce costs, improve internal operations and boost your bottom line. You can also visit our Web site, http://mfg.bkadvice.com, for more information.