Creating the Environment for Continuous Improvement

What are the biggest challenges facing operations excellence initiatives like lean manufacturing and six sigma. Based on my experiences with managers from a widely diverse group of industries, one common thread seems to be difficulty "sustaining" improvements. I must admit, I do not like the term "sustaining" when it comes to continuous improvement because this gives people the false idea that improvements, once made, should remain (as originally made) in place for months and years. In actuality, sustaining operational excellence means constant change for the better (kaizen). All levels of employees should be constantly looking for waste in their operations and eliminating it. The question is: how can we ensure that this happens? In this article, I'll cover three basic concepts that will help create an environment for sustaining continuous improvement.

The first concept is to create visual standards for all operations that can easily be verified. Standard work charts and visual metrics are examples. Standard work charts should visually depict a set of operations or work elements and how they are to be accomplished in meeting customer requirements (usually expressed using takt time, the heartbeat of the customer) Visual metrics generally involve graphical depiction of a few key process indicators. For example, an area involved in injection molding operations might post process indicators like equipment downtime, changeover time, and defect rate. Both standard work charts and visual metric displays do two things: they allow everyone to understand the operating standard and the performance of the area. Standards are the basis for kaizen, or change for the better. As standard operations are observed, we can improve them. Performance metrics can be trended over time to identify problems or opportunities for improvement.

The second concept is to create visual means of communication. When improvements are made to a process, there are usually minor problems that arise as a result. These minor problems are often ignored because there is no effective method in place for communication. The result is usually regression back to the old way of doing things and a perceived lack of "sustainment." It is important to institute a visual means of communicating problems and improvement ideas that can be tracked. What we've found to be the most effective method is to use a kaizen board. A kaizen board, pictured below gathers feedback in the form of problems or improvement ideas. The feedback is written and addressed.

The third concept is to create a "no-blame" environment for employees. Having visual standards and an effective means of communication is great, but, if employees are afraid to expose problems, the system will fail. Creating a "no-blame" environment is absolutely the most important of the three concepts, and it is based on the idea originally made popular by Shigeo Shingo: "Errors occur because the system allows them to occur." When an organization works under this paradigm, problems are exposed and solutions/ideas are generated and more effective. The reason solutions will be more effective is because they will be aimed at improving systems rather than re-training or disciplining people.

In summary, three items need to be in place to create a true environment for sustaining continuous improvements:

1. Visual Standards to create transparent operations

2. Visual Communication to create a feedback mechanism.

3. A No-Blame Environment that brings problems to the surface and focuses solutions on system improvement.