

Chairman's Report to Performing Suppliers

Dear Performing Suppliers

Lean Manufacturing and other programs typically show early progress. And then things return to the way they were.

What do weight-loss plans and process-improvement programs have in common?

They typically start off well, generating excitement and great progress, but all too often fail to have a lasting impact as participants gradually lose motivation and fall back into old habits.

Many companies have embraced lean manufacturing, which aims to remove all activity that doesn't add value to the final product. But many of those companies have come away less than happy. Recent studies, for example, suggest that nearly 60% of all corporate initiatives fail to yield the desired results.

We studied process-improvement programs at small companies over a seven-year period to gain insight into how and why so many of them fail. We found that when confronted with increasing stress over time, these programs react in much the same way a metal spring does when it is pulled with increasing force—that is, they progress through "stretching" and "yielding" phases before failing entirely. In engineering, this is known as the "stress-strain curve," and the length of each stage varies widely by material.

A closer look at the characteristics of improvement projects at each of the three stages of the stress-strain curve—stretching, yielding and failing—offers lessons for executives seeking to avoid failures. The discussion that follows is based on what happened at one aerospace company that implemented a number of improvement projects, only to determine less than two years later that more than half had failed to generate lasting gains.

Stretching Phase

When a metal spring is pulled initially, the material stretches to accommodate the increase in pressure. In much the same way, the people involved in a process-improvement project generally find themselves stretching and willing to tackle all necessary tasks in the early going.

Chairman's Report to Performing Suppliers

At the aerospace company, an improvement project typically began with the formation of a team of members from various departments. A lean improvement expert was assigned to the team to guide and train them. At this stage, teams were excited to learn and apply what they were being taught.

Team members collected data on their current working environment and, with the help of the lean expert, identified the changes they most needed to make to achieve their stated goal—say, a reduction in the rate of defects in manufactured parts or fewer mistakes in order writing and billing. The expert developed a "to do" list that included action items, responsibilities and deadlines and made sure needed resources were available.

Because top executives were paying close attention to the project at this stage, managers made clear to employees that the improvement initiative was their top priority. For example, producing error-free bills became more important than processing a certain quantity of bills each day.

While daily production slipped initially when the team transitioned to the new way of working, it improved when the group grew accustomed to the new process. When the team reached its goal—say it reduced billing errors by a certain percentage—the improvement project was declared a success.

The director who was spearheading the company's lean initiatives shared the teams' achievements with others in the company. Team members were given rewards such as gift certificates to restaurants, and their pictures appeared in the company newsletter. The division vice president reported on the team's success to the company's other vice presidents and to its top executives.

Yielding Phase

Unfortunately, the story doesn't end there.

If a metal spring continues to be pulled, there will come a point when the material yields as it struggles to support the increase in pressure. Though still intact, the spring becomes permanently deformed—stretched out, for example—as the bonds between atoms are broken and new ones formed.

Chairman's Report to Performing Suppliers

Similarly, in the middle stage of an improvement project—when the lean expert moves on to another project and top management turns its focus to other priorities — implementation starts to wobble, and teams may find themselves struggling to maintain the gains they achieved early on.

With the departure of the lean expert, the teams at the aerospace company lost their objective voice and the person who performed the analysis that allowed them to prioritize the tasks that most affected performance, thus needed fixing the most. Without the expert to rein them in, some team members began pushing agendas that benefited themselves and their departments, making it harder for the team to agree on new goals.

While teams at this stage continued to look for the flaws in their current working environments, they got bogged down trying to lead improvement projects previously handled by the expert. Some teams started spending too much time on the improvement project, which affected their ability to meet production quotas and other daily responsibilities.

Amid the confusion and facing pressure from managers to keep up with day-to-day duties, some team members started reverting to old habits in the much the same way a person who recently lost weight might start skipping gym sessions when work and family demands heat up. The team's performance stopped improving and, in some cases, started to regress.

When reporting on the status of their projects, teams tried to make themselves look better by highlighting what they hoped to accomplish in the future, instead of what they were accomplishing now. Some team members became discouraged and started to doubt the benefits of the improvement strategies.

The improvement director, whose salary and bonus depended on the success of the company's lean initiatives, highlighted projects that were showing great progress and ignored those that weren't. As a result, company executives were unaware that some improvement teams were slowly starting to crack under the pressure.

Failing Stage

Over time, pulling will cause the material in one area of the metal spring to narrow, creating a neck that becomes smaller and smaller until it is unable to sustain any pressure at all. At

Chairman's Report to Performing Suppliers

that point, it breaks into pieces. Similarly, in the final stage of a process-improvement project, team members find themselves unable or unwilling to tackle improvement tasks, and the effort ultimately collapses.

With the improvement expert long gone and no additional training in lean strategies provided by the aerospace company, team members became increasingly discouraged by their failure to build on earlier success. They eventually stopped caring about the improvement project, partly because it wasn't tied to their performance reviews.

As morale sagged, no one stepped forward to assume leadership of the improvement project, so the team lost interest in looking for ways to improve their current work environment. The company allowed newly formed improvement teams to poach people and resources from older teams, so the only improvements that were made were those related to safety—and even then, only the bare minimum was done. Members steadily regressed to their old ways of working, and the group's performance returned to what it had been before the project began.

With projects failing miserably, many teams reported their achievements incorrectly, giving a false sense of success. Because the director continued to communicate only about projects that were showing excellent results, it took several months for the division vice president to become aware of the widespread failures and reluctantly inform the company's top executives.

Lessons Learned

Three lessons stand out.

First, the extended involvement of a lean improvement expert is required if teams are to remain motivated, continue learning and maintain gains. Only as new internal resources are trained can the company stop their reliance on outside lean experts.

Second, performance appraisals and recognition need to be tied to successful implementation of improvement projects. Studies point out that bonuses, even in small amounts, can motivate team members to embrace new, better work practices. Without such incentives, employees often regress to their old ways of working once the initial enthusiasm dies down.

Chairman's Report to Performing Suppliers

Third, executives need to directly participate in improvement projects, not just "support" them. Because it was in his best interests, the director in charge of the improvement projects at the aerospace company created the illusion that everything was great by communicating only about projects that were yielding excellent results. By observing the successes and failures of improvement programs firsthand, rather than relying on someone else's interpretation, executives can make more accurate assessments as to which ones are working and why.

How the SEA Lean Enterprise System addresses the common failures of "Lessons Learned."

- 1.1.1 Executives set goals and priorities for performance improvement and establish a scorecard to be used to continually review improvement efforts.
- 1.1.2 Executives provide regularly communication and updates about the improvement efforts as well as recognition for those participating.
- 1.1.3 Executives review performance on a regular basis using the scorecard, report outs from department managers, and standup meetings with cells and work area teams.
- 1.1.4 Executives review the improvement efforts with reports outs from Kaizen teams, improvement projects in departments and workgroups, and process owner report outs relating to progress on process maturity.
- 1.1.5 Executives continually focus on workforce and management development.
- 2.1.1 The workforce is trained and given responsibility for standard work. This spreads and becomes a standard part of the culture – employees help to keep improvements in place through the efforts on standard work processes.
- 3.1.1 Kaizens are standardized and run continuously – the executive team attends each report out and improvements are recognized and rewarded.
- 3.1.2 A new culture that takes pride in the organization of work areas and cells through 6S implementation continually involves everyone in the effort to improve.

Chairman's Report to Performing Suppliers

3.1.3 A continuous focus on setup and changeover time reduction helps to reduce batch sizes and enable mixed model production improving on-time delivery and shortening lead time.

3.1.4 Materials management begins to focus on lean production methods.

3.1.5 Production planning begins to focus on lean production methods.

Why study the things that can go wrong with process improvement when the SEA Roadmap provides a proven step-by-step process that avoids these problems? Over the past seven years, many suppliers who pioneered the SEA Lean Enterprise System process. Implement this proven management system and sustainability of improvement is guaranteed.