

5S Again and Again

Q) I've just inherited responsibility for our 5S efforts in our company. And I face a huge challenge getting the program back on track.

Last summer, a consultant launched a big 5S program with an internal lean Champion. We had great results for the first few months. But the consultant is gone and the internal Champion is stepping down. It's my program now. I recently reviewed 5S scores from the past 2 months as scored by the last team. Scores were in the 80's for all departments. They were giving themselves high scores and everyone was happy. I just did my own audit and I came up with scores in the 40's- 50's! The production floor is a mess. Tool boards are missing tools, there's trash on the floors, and all sorts of equipment and supplies hidden behind machines. Much of what was done over the summer is gone. It's going to be very difficult to get everyone excited about this program again. And it doesn't help that every time Management is scheduled to visit, team leaders tell people to "Go 5S your area before they get here". That's not 5S. That's tossing the dirty clothes under the bed before your in-laws arrive. This whole cycle has happened at least other 2 times before. Consultant comes, 5S, consultant leaves, 5S dies. Any suggestions or pearls of wisdom on how to do this right? It seems we do 3S over and over but never get to the last 2 Ss.

A) The 5S question has dogged the lean movement since the 1980s, when some of the early Japanese sensei insisted that you should do "5S" for two years before moving on to anything else. At the time this Karate Kid "paint the fence" approach (i.e. do nothing but a simple preparatory drill) had the unexpected results of splitting people interested in lean in two camps. The first were those who gave up because, come on, "5S for TWO YEARS? Where's the payback?" The other camp comprised the true fanatics who did it, but then had trouble graduating away from 5S into other systemic tools. And establishing the "lean is for dorks" myth in the process.

5S is a fundamental tool of the lean toolbox and absolutely necessary at many stages of the transformation. Let's take a step back and try to clarify the problem from a PDCA point of view. In other words, what is the problem you're trying to solve with 5S?

Remember that most lean tools are typical responses to typical production problems. Additionally, most lean tools are essentially methods to help people visualize production—drawing the right conclusion is up to the lean practitioner. 5S is primarily a tool for “cleaning the window”: a method that helps someone see the shop floor or the workstation by getting one’s hands dirty, sorting, eliminating, ordering, cleaning, and so on. Practicing 5S is essentially a way to learn how to see. Getting someone else to do 5S defeats the purpose. The person who most needs to do the 5S is the person who will have to solve the problems.

But what is the Check? What results are expected of a 5S initiative? 5S is mainly useful in two ways in the lean journey. First, as a wake-up call. Okay, this use may come more from a one-time hit of 3S. If the shop floor is a complete mess, there’s very little chance of implementing any lean processes. So the first step is to teach supervisors to keep the workplace in good working conditions. The Check here is whether individual supervisors can maintain a good enough standard of 3S in their areas, and the Act is how to help them if they can’t. It makes sense to launch this with a big campaign, because it forces supervisors to engage all employees and deal with resistance, especially with those who have not been exposed to this new discipline.

The second use of 5S is more involved. Lean at the workplace rests on the twin notions of standardized work and kaizen. Effectiveness comes from the ability of operators to make good parts within a takt time by following a standard sequence of actions. Whenever they can’t – they stumble for whatever reason – this is an opportunity for kaizen. As lean focuses on the workplace, it quickly becomes apparent that the mess there is a large cause of variability – as well as the lack of forethought in the ordering of placements. 5S (5 here, not just 3) is a key tool to, again, clean the window at workstation level and teach team leaders and operators how to organize their cells better – and have a say of how their work environment is organized. The check here is not an audit on 5S level, but the stability of hourly productivity in terms of parts per person per hour. This second use of 5S can no longer be done through an across the board 5S program, but by teaching each individual supervisor how to train their cell team leaders (and we’re assuming cells and stable teams here, by no means a given) to work with their teams at maintaining the full 5S – creating the cleaning routines and maintaining the discipline through regular checks and adjustments.

The key transformation lesson I've had to learn the hard way from my senseis is that lean transformation is about using the lean tools to develop the kaizen mindset in every employee, as opposed to applying the lean tools to every process to get a quick boost. Clearly, at the beginning of the transformation it makes sense to ask a champion to push through a transverse 5S (or 3S) program to get the car out of the mud and on the track. One has to be clear, however, that such a program can't be sustained (many lean Champions have been burned by attempts at keeping transverse "5S" programs alive over time), by its very nature. There is no clear check (beyond audits – yuck!) and there is no half-assed engagement of people. You must see the transformation in terms of how well the individual supervisors are creating standard conditions in their areas. The issue then becomes a "train the trainer" program: how to train supervisors at 5S so that they train their teams at practicing it every day. Sustainability then becomes a straightforward management issue of making sure people do what they're trained to every day, and if quality, productivity or delivery lags, knowing to first check the 5S conditions as a cell, not as a way to solve the problem, but as a way to keep production visible so that the problems will be revealed.