

Sustainment – The Final Frontier

By Sandra K. Miller

President

X-Stream Leadership Group LLC

31948 J Road

Hotchkiss, CO 81419

How and Why to Measure Sustainment of Change in Your Company

For the past ten year, all over the world companies have been jumping on the Lean/Six Sigma bandwagon. Millions of dollars have already been spent, and hundreds of thousands more are currently allocated to the pursuit of “Perfection”. The paperwork/power point charts generated by continuous improvement events could sink the largest cruise ship in the world, and even as you read this, you may be working on your next out-brief or setting up your next event. “So what”, you ask, “that’s my job description. I’ve promised my boss that’s we’ll have Lean/Six Sigma totally implemented in this company by the end of 2009”. You may even secretly believe that with just a little/lot more work and a little/lot more support from the Leadership your company will become THE company against which everyone else will be benchmarking. I applaud your efforts and your incentive – and, having “been there, done that” I understand the drive and commitment it takes to push an implementation throughout a company. However, it may be time to sit down and take a break.

In several of the companies with which I’ve been associated, a small handful of dedicated change agents are frantically running from one process improvement event to the next, trying desperately to figure out who can take over getting the action items completed and how to convert minutes saved in Engineering, Human Resources or the factory floor to bottom line impacts. In many cases, the Leadership those change agents report to are busy setting ever increasing goals for more savings. It’s a vicious cycle of allocated resources, anticipated savings, action item closure and on to the next event with allocated resources, anticipated savings, For those of you caught up in this dance, we have one word of advice – STOP! Whether you are the CEO, the process owner or the change agent, you must take time NOW to take stock of what you have really accomplished, what needs to be done immediately, and where you should be aiming for tomorrow. In other words, you need to look at your current state just as it is today – not what you predicted with anticipated savings, not what you wished it were to be benchmarked against, but the ‘real’ current state.

Said another way, let’s stop and take a look at what we have been able to sustain from all of the events and changes made to our processes. If we were to measure how well we sustained all of the changes anticipated for each project how would we score? Keep in mind that I have heard of Value Stream Mapping events ending with anywhere from 10 to 80 action items. If this happens in your company, you might want to answer the following questions: How long does it take to complete 80 action items? Do all of those great changes the team came up with ever get implemented? And, once they’re implemented, how long do they last?

Let me share the formula to use to measure ‘current’ sustainability:

- 1) Collect the Data. Randomly select 15% of all projects completed to date.
 - a. This must be random, so print the names on slips of paper and draw them out of a hat, or use any method that eliminates bias. We all have our ‘star’ events where we know everything was implemented and sustained, but true data should come from random sampling.
 - b. If your company counts “Just-Do-It” episodes as events, do not include them in the data. By their very nature, JDIs should be 100% sustainable.
- 2) For each event selected:
 - a. Compare the anticipated Future State from the event to what is happening today in that process to see if all action items/changes were implemented and sustained.
 - b. Give the event a percentage score based on how many changes were implemented and sustained. The scoring should be xxx number of changes sustained through today’s date divided by xxx number of changes implemented at the end of the event.

For instance, at the end of a hypothetical event, once all action items were completed, 25 changes to the process were implemented. As we look at the process today, 10 of those changes are still in place. This event sustainability score is 10/25 or 40%.
 - c. If the change was not sustained due to improvement of the original action item, it should certainly be counted as sustained – if the improvement is also still in place.
 - d. This scoring takes someone who has no personal bias towards the outcome, so make sure the auditor selected has no preconceived notion of a score. If there are no unbiased auditors available, use at least three auditors, working independently, and average the score for each process.
- 3) Once every process is scored for sustainability, you can determine your Lean/Six Sigma Program sustainability score much the same way rolled throughput yield is calculated. That is, each process sustainability score is multiplied against the next to arrive at an overall (throughput) sustainability.

For instance, we scored 15 events with the following results:

1) 40%	2) 70%	3) 65%
4) 100%	5) 55%	6) 25%
7) 70%	8) 85%	9) 65%
10) 100%	11) 80%	12) 80%
13) 95%	14) 70%	15) 95%

The data shows an **average sustainment of 73%** and an **overall sustainability score of .39%** - that is less than ½ of 1%!! And yet, in many companies, an average 73% sustainment of changes in 15 processes is all the only consideration and the Leadership believes they are getting an excellent return on their investment! However, these are two

entirely different concepts. In my opinion, unless every one of your processes are absolutely identical, owned and managed by the same group, events completed by the same team, led by the same change agent, etc., etc.....the 73% average is completely worthless. It does not give you as accurate a picture of how your Lean/Six Sigma Program is working as the sustainability score does.

Some have tried to use average as a measure of how well each department or group under a manager is sustaining change. For instance, if, in the above 15 events, 1), 2), 6), 10) and 11) were all events done by one team within one department, the sum is 315% divided by 5 events = 63% average. You could try to use those numbers to put pressure on a management team to find out what is blocking change in that department. However, what you will most likely hear is that the processes were all different, with differing degrees of complexity, their best team members were on vacation, etc. By using the sustainability score instead you can assert that the management team in that area, regardless of what process or team they used, is only managing to sustain the overall Lean/Six Sigma Program change at a .39% rate.

For another example, let's take another 15 processes where every process except three has 100% sustainability scores. Those three processes are, 85%, 60%, and 90%. Your overall sustainability score is slightly less than 46% (45.9%)! Yet any company I know would be thrilled to have 12 out of 15 processes with 100% sustainment of change, but at what cost to their total Lean/Six Sigma implementation? You don't manage your financials on just inventory, or forecast sales by just talking to your sales group, or measure the Cost of Poor Quality just based on scrap and rework. You have to look at the big picture – include all of the variables and let the data do the talking. Your Lean/Six Sigma Program should be no different. It's time to look at the entire Program – not just the last event. Before leaving this example, let me assure you, that in our experience, any company with a sustainability score of $50\% \pm 5\%$, is probably a World Class Company when it comes to Lean/Six Sigma.

As can be seen from the above examples, if you are not focused on sustaining every change on every process (as long as the change worked as predicted), you are carrying a return on investment that no company can maintain and still stay in business. It would also follow that if you are reporting bottom line savings from your events with a .39% sustainability rate, the numbers are possibly being gamed. Unfortunately, we have seen many instances where the “gaming” becomes more important than the improvement.

So, what is the answer? It is direct focus on the outcome of each and every project to ensure 100% sustainment. In some companies that would mean a dividing up of the team of change agents – some to run events, some to ensure changes are sustained. In other companies it may be that fewer events are run, and the change agent is required to follow every event outcome for at least 6 months, with the proper metrics in place, to ensure all changes are sustained. But in EVERY company, it would mean taking a much closer look at the project/event selection.

Once a company is truly committed to sustaining change, it would mean no more “drive-by” kaizens or value stream events run just for the sake of meeting a goal on number of projects.

Every project/event would be tied to the strategic goals of the program/company and could be traced directly to bottom line savings. A company that is truly committed to change is talking about every on-going project/event in staff meetings, in business meetings, in Customer meetings, etc. Just like the old proverb about the squeaky wheel, in today's business environment, what gets talked about – gets done. Everyone in the company could be expected to check on the process being changed to see how the sustainment is going. Attention equals Action!

Any company that begins to track and measure sustainment of change will soon realize that the key is fewer projects/events with clear ties to strategic goals, where the changes are truly sustained, and the current process is now radically different from the old way of doing things. In order to execute this strategy a company will need both training and communication at all levels as well as the right metrics in place to ensure they are no longer creating change for change's sake. Only when they boldly go where few companies have gone before (tracking sustainment) will they be able to impact their bottom line with out of this world (and beyond) savings.