Improvement — An 8-Step Plan

By: Sheila Julien, Senior Associate

Everybody is into "improvement" these days.

Even when we visit an organization that is way behind their competitors, they can point to things they have changed, hopefully for the better, in recent months or years. But what makes for success, what makes the difference between the industry leaders and the follow-behinds are two things: what you work to improve and how you go about the improvement.

Those of you who are familiar with Conway, know that we focus on helping you get further faster by identifying the best things to work on and going about the improvements in a systematic and effective way. We use an "8-step Improvement Process" for studying and improving your work to help you get the results you need faster. It is an expansion on the Deming cycle. Other organizations sometimes use different categories, but no matter what you call them, you basically need to:

1. Identify and quantify the waste you want to eliminate
2. Clearly define what you want to do (including problem statement, objective, measurements, scope, team, and plan)
3. Study and measure the current situation
4. Analyze the root causes and evaluate and plan solutions
5. Implement
6. Study the results and take appropriate action until objectives are met
7. Stabilize and standardize the improvement so that it stays in place and is used throughout
8. Evaluate and learn from this improvement effort and plan the next

This seems like a lot of steps and wherever we go we meet people who want to "streamline" this process and cut out all the unnecessary stuff. We call them the **"two-fivers"** because the improvement process they follow is very simple:

- think of something you believe will improve things and
- implement it

Two-fivers eliminate 3/4 of the steps we recommend! A great idea, except that the whole point of these steps is to make sure you work on the right thing, that you get to the right solution, and that it sticks. If you can do without that, by all means, be a two-fiver.

Step 1: Identify & quantify the waste

A two-fiver skips over identifying and quantifying the waste, because he or she has already become convinced this is a good idea and decided to just do it.

Identifying the waste makes sure that you are working on something that in some way is going to make an impact on the business. If the problem does not in some measurable way waste time, material, capital (such as space, equipment, or money), or opportunities for sales & margin, chances are you won't get any payback from working on the problem.

Quantifying the waste makes sure you give the problem the right amount of focus, neither too much nor too little. We have seen groups skip this step and invest large amounts of effort on problems that have little real impact; other groups work too little or too slowly on problems that generate huge waste every single week they go unsolved.

Finally, when you get to implementation, you may find that you need someone to spend some time and/or money to try to fix it. Without having some measurement of the importance of the problem, it is much harder to motivate others to help. What seems like an obviously good idea to you may seem much less important to someone else unless you have a quantification of the waste the problem causes.

Step 2: Define the problem, project charter, team, measurements

A two-fiver generally defines what they want to do and may even do a cost benefit analysis of the idea. But your chances of success are much, much higher if you are clear about several key aspects of what you are trying to do. This means having a clear quantified stake in the ground about where you are today with the problem, what you want to accomplish, how you will measure success. It means spelling out the scope of the effort, who is on board to help and what their roles are, what additional support or resources you will need, and what your rough timeline is. If any of these are skipped over, your project will likely take you longer and meet with less success or at least less clear success.

People that skip over step 2 find themselves with any number of annoying problems down the road, including but not limited to the following:

- Scope creep - the project that gets bigger and bigger until your effort is expected to save the world. Eventually it crumbles under its own weight
- Instead of defining a problem, you define a solution - sometimes thinly disguised as a "problem" such as "Lack of [your great idea here]." This often seems like a real nifty shortcut at the time, but we have seen hundreds of good ideas fail to solve the problem because they missed the mark, i.e., the real root cause. There is quite often something important and undiscovered going on that you won't know about until you study the data closely and from different perspectives (steps 3 and 4). When someone starts with the solution/idea already in hand, very little learning happens in step 3 and 4. Sometimes it succeeds; often it doesn't
- Differing agendas - key people have different ideas about what the project should accomplish, why, and how, and when it is complete. This makes for very inefficient meetings
- You need people or resources to make this work and you learn - only after you've sunk a lot of effort into the project - that they will not be available
- You implement a solution but you can't tell if or how much it really helped because you never got a good baseline measurement
- No end point - you don't know when you can say you have finished so you go on until the project drops dead of exhaustion
- Key people do not participate in the way you expected them to and balls are dropped

Step 3: Study the current situation

The foundation to developing a really great lasting solution to a serious problem is to really study and understand it. If you skip this step, or give it short shrift, your chances of lasting success are slim.

There is always something important to learn about the problem that you do not yet know. Often the breakthrough insight that will enable you to really put an end to the problem is hidden in that which you have not yet learned about the current process.

Step 4: Analyze root causes & possible solutions

If you do not analyze and test your ideas about causes well enough, you may draw a mistaken conclusion about it and target a solution at the wrong cause. If you do not consider a variety of solutions, you are very unlikely to settle on the best one. The odds are quite low that your first workable idea for solution is the best one; yet the first idea is almost always the one you will want to run with. Careful attention to this step will lead you to explore several possibilities.

Step 5: Implement the chosen solution

The problem with skipping this is obvious. Almost nobody skips implementation, although it is not always done as well as it could be. A well thought out plan is very useful at this point.

Step 6: Study the results

Once you implement, you will want to declare victory and move on. Not so fast! If you do not study the results, you will not know if something did not work out the way it should have and will not be ready to take corrective actions. Many different snags will cause the solution to fail to produce the desired results ranging from simple-to-fix problems like someone not really understanding the new procedure all the way, to unexpected consequences that make the solution unworkable.

Step 7: Stabilize and standardize the solution

This is the step where you create poka-yokes, monitoring tools, etc. that will prevent or alert you if and when the problem creeps back in. If you skip over stabilizing the solution, the problem often returns as time passes. Changing the procedure manual is not sufficient, unless you have a means of ensuring the manual is followed in letter and spirit.

If you skip over standardizing the improvement, other organizations or similar process will not benefit from your improvement effort. Moreover, the larger the amount of variation among similar processes, the more difficult it is to build future improvements that suit all.

Step 8: Assess progress and plan for the future

Unless you make a conscious effort at the end of the project to assess what went well what didn't and learn from it, you will miss an important opportunity to steadily improve the organization's improvement skills. Organizations that consistently assess progress and plan for the future improve their capabilities in process improvement at a much faster pace.

One of our clients has created a template in Word for every improvement project to store their work on each of the eight steps. The analysis done to quantify the waste is included in section 1, the charter is included in section 2, charts used to study the current situation are entered into the document as "pictures" with "paste-special" in section 3 - along with the conclusion drawn from the chart, etc.

Not only does this reinforce the 8 step methodology, but it creates a complete history of the project, and provides a useful parking lot for ideas that are ahead of their time. For example, when one has an idea for a solution while still studying the current situation, someone will say, "Put a note about it in 8-step in section 4." That way the idea is captured, but the team stays on task. Similarly, if data reveals a related problem that is outside the initial scope, they put the data and the observation under step 8 so that it will be available for consideration when they plan the next steps; but the current project stays on task.

Whether you use a Word template, a binder, or a checklist; you will get further faster when you do not skip over the steps in the improvement process. Follow these eight steps conscientiously every time and you will quickly grow an efficient and effective improvement organization.