Applying Lean & Six Sigma Principles to Behavior-Based Safety (Part 3 of 3)

ProAct Safety

Custom Solutions for Safety Excellence

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Welcome to Safety Culture Excellence. Today's topic, Part 3 of 3: Applying Lean & Sxi Sigma Principles to Behavior-Based Safety. My name is Shawn Galloway, and I'm proud to be your host.

Let's start with my first topic for today: Value Stream Mapping Expanded

I spoke in part two about using the Value Stream Mapping approach and I received some questions about this so let me go a little further this time with an example approach we took after a process audit, to identify the difference between value and waste and, most importantly, efficiency and additional results.

To refresh your memory, the Value Stream Mapping tool is commonly used to identify the three main areas that do add value, the areas that add no value but are necessary to the process, and lastly, the areas that add no value and can be immediately eliminated. So consider creating a visual map of how the activity, data, and communications flow during and as a result of the process. Consider this map to be an "as is" state. By the way, staying true to ownership principle, I would recommend that you do this as a team effort using as many visual aids as possible and map it out on a whiteboard or no a table. Consider accomplishing this as a scheduled kaizen.

Now some people call these maps spaghetti diagrams which attempt to show the physical flow of the activities. Other teams use the "swim-lane" approach that focuses more on who does what, and of course, some processes use both. Regardless it is important to document and understand these flows as quickly as possible. Look for what the job functions of the process are, how information is gathered and the flow of communication between activities. I say that because I have seen sites take months to complete this, so whatever is feasible, try to shoot for deep understanding, (profound knowledge) quickly perhaps as a scheduled kaizen.

While doing, one of the most important questions to ask is, what triggers an observation? We have helped sites in their efforts to improve and expand the use of data by identifying new ways to communicate the change of focus or need for additional insight. Some sites have integrated the process with their existing Kanban tools or philosophy or other Pull Systems. Whether what you have is electronic and/or manual, these tools can be used to communicate and trigger the need: for example, of focused observations; rather than just pushing the blanketing of observations. More does not necessarily equal effective. As the Toyota Production System says, "Flow where you can, pull where you must." In other words, let the data pull the effort, don't push it haphazardly.

Now remember if you don't have a good answer to what triggers observations, consider this: Are further observations triggered by the insightful data that's collected or is it triggered in order to meet a number requirement? More often than not, this is where we find rapid opportunities for increased value and results when auditing existing processes. This is a symptom of where someone has lost sight of the goal and is focusing on the numbers, again what we call, a "process orientation".

After you have a snapshot of the reality of what you are working with, the next activity is to develop the "should-be state". Begin with the end in mind and look at what should be communicated to the shareholders and what results you want to provide them. The shareholders could be the employees, supervisors, and/or managers. Work to map it upstream in the "should-be" manner.

Now before you implement any changes from these findings, you should also consider obtaining what is commonly called the "voice of the customer". You should interview the different levels within the site, whether it be one on ones, focus groups, or you could use a customized survey that's created by the committee, another small Kaizen opportunity. Regardless of what methods you use, you will find it is important to really understand who places value on what element of the approach. What you're after here, is to determine what people like, don't like, would support, and wouldn't support. Don't be surprised if you find that departments and individuals place value differently.

Lean or Six Sigma, is the Debate Useful?

My first thought is, yes I believe so because this has taken people out of the paradigm that you have to choose, one or the other. When you are done listening to this podcast, do a quick search of the news relating to Lean and Six Sigma. Business executives around the world today are looking at implementing some variation of Operational Excellence (commonly referred to as OPEX) and are being bombarded with the current debate surrounding whether to choose for their organization, a Lean or Six Sigma approach to business improvement. You will find that there is one side that obviously favors Lean Thinking (or Lean Manufacturing or Toyota Production System) and points out their strengths, and of course on the other side there are the Six Sigma experts touting its benefits and differentiators.

Most companies trying to achieve an excellent safety culture are searching in the same manner, on ways to improve safety or Behavior-Based Safety processes or programs. They are finding that it's also a best practices approach that provides the greatest results.

Think of the potential positive impact you could have if you jointly deploy the Lean & Six Sigma technologies that results in the capabilities of focused Kaizens and statistical predictions.

If you disagree with this, I challenge you to attend our annual Safety Culture Excellence conference and find two sites from within the same company and ask them why they didn't do what their other site did. I can promise you that they will respond with... "Well... because we are different than them." Every group is unique, and in my opinion, that's what makes our job fun.

Whether you are integrating or starting something new, involve those that know the most. As we all learned in the Lean Manufacturing teachings, these processes are much more successful if you take the problem solving into the business area, or as Lean Thinking says, "Take the problem into Gemba and involve the people that know the issues." Moreover, allow them to make some of these decisions rather than handing them yours for them to implement. By creating a pride of ownership in culture change, you will find that you will reduce the resistance of implementation.

Timing & Support: They Are Absolutely Critical

I'd like to share a quick story to further show the importance of gathering cultural understanding and support before pioneering an implementation of change. The following paragraph comes from a book called, "The Essential Drucker" and can be found on page 52. Peter Drucker writes: "In the late 40's and early 50's one American automobile company tried to make the American public safety-conscious. Ford introduced cars with seat belts. But sales dropped catastrophically. The company had to withdraw the cars with seat belts and abandoned the whole idea. ... 15 years later the American driving public became safety-conscious, the car manufacturers were sharply attached for their "total lack of concern with safety: and for being "merchants of death". And the resulting regulations were written as much to punish the companies as to protect the public."

I thought that was a great example of why you need to check the pulse of those affected and validate, "does this make sense at all levels? Ford was trying to do the right thing and should be admired for this, however, the timing wasn't right. I don't know if you've heard this before but in the old Wild West they said that the pioneers were the ones that got shot in the back with arrows. Don't let that happen to you.

Two other things Peter Drucker said that were pretty profound were: "So much of what we call management consists in making it difficult for people to work. Management is doing things right; leadership is doing the right things." Along the same lines he also said that: "The successful person places more attention on doing the right think rather than doing things right."

You can't argue that the established predefined packaged or consultative methodologies have some great attributes. But rather than a one size fits all approach, for lack of better analogies, we need to look at it like a menu of options. Consider all of the many examples in your own life where goods or services were pushed on you the customer, regardless if you need them or not. Make sure that those implementing this effort for you follow good implementation practices and let you, the customer, pull the next steps. Or if you are on a committee, if at all possible, don't allow the entire strategy to be taught or implemented all at once. By lumping it all together, you run the potential risk of overtraining, with minimal retention, and certainly, a high chance of minimal sustainability and enthusiasm.

Ensure what we refer to a Just Enough/Just-in-time (JIT) Process Implementation takes place. This is where the site can identify what they want from the process, when it is wanted and what amount of external assistance is needed. This helps ensure that value is created and most importantly creates the habit of targeting immediate recognizable results at each step, what I have referred to before as a "Results Driven Change Philosophy", rather than focusing on implementing all the scientific steps, really well. This is what Drucker meant by "doing the right things rather than doing things right."

So let's consider all of the strategies available to us on this menu, let's use the best of them while also ensuring a quicker start up time and shorter gap to recognizable results by integrating with or bringing to the culture, the business improvement tools that are currently available as well? Too often we're called in to audit existing processes where some sort of variation of the following has happened: A manager has been asked to take their eyes off the results and focus on the scientific methodology for eventually the results will come. It is understandable that their response was, "If I took my eyes off the results there would be someone else here in my place next year!"

As busy as we all are, we can't just ask our people to continue to put out more and more effort in this approach without a sense of accomplishment and recognizable increase in cultural value. It's not hard to get burned out when you don't know if your effort has helped or not. The question will get asked by people, either out loud, or internally: If we put forth discretional effort, what impact does it have? If we put forth discretional effort, what impact does it have? If we can focus a Kaizen, what are the results? If we train a little more on a topic, if we focus our communication, if we remove an obstacle or barrier to safety, are people really safer and have we truly reduced the risk? This needs to be set up so that the results are measureable and very quickly communicated to all of the stakeholders; and most importantly, this knowledge and these capabilities need to be transferred to the organization, so they have the capabilities to develop the standard, from which to self improve.

Summary

Now I have talked a lot about how the proven use of these technologies and philosophies can have an obvious positive impact, by more quickly creating a caring, collaborative and cohesive culture, which focuses on compassionately achieving success in safety, rather than avoiding their failure rates. Now please don't be misguided, it is certainly valuable if ProAct Safety can leverage existing certified champions or Yellow Belts, Green Belts, or Black Belts in these technologies. However, if these capabilities do not already exist, don't worry, you don't need to go looking for the closest process improvement dojo, to find your starting point. We can begin this journey together.

Until next time, remember: “In safety, prevention trumps reaction.” For more information on Safety Culture Excellence or if you have a topic to suggest, please email us at podcast@proactsafety.com.