

Updating Your Value Stream Maps !!

Many of you have made the huge plunge to develop Value Stream Maps for all of your key products. Teams hopefully have been working diligently to achieve the "Desired Future State" I am sure the time has just flown by ... and now it is time again to review and update your Value Stream Maps and begin developing your CI plans for next year. Even if your Value Streams have not changed, your business model definitely has changed to support the new economy so it is even more important to take time for a review. The following past article from Jim Womack is a great thought starter for your teams ... Richard

Dear Richard,

It amazes me, but I still get lots of questions about how "lean" compares with Six Sigma, Total Productive Maintenance, Business Process Re-engineering, Demand-Flow, the Theory of Constraints, and other approaches to improvement. And I always give the same answer: At the end of the day ***we are all trying to achieve the same thing: The perfect value stream.*** Here's how I think about it:

To create value for the customer - which I hope we agree is how we should be earning our living - a series of steps must be conducted properly in the proper sequence. These steps collectively are what we call the value stream for each product. As I walk through any value stream - and I walk a lot every year as I visit many companies in many countries -- ***I ask the following very simple questions about each step:***

Is the step valuable? Or would the customer be equally happy with the product if the step could be left out? If the latter is the case, the step is at best what Toyota would call "incidental work" and what I often call Type One muda. Get rid of it as soon as you can!

Is the step capable? Can it be conducted with the exact same result every time? This is the starting point, but never the end point, for Six Sigma.

Is the step available? That is, can it be performed whenever it is needed? Or is the step subject to breakdowns and varying cycle times so you are never sure what will happen? This is the starting point, but again not the end point, of Total Productive Maintenance.

Is the step adequate? That is, is there capacity to perform it exactly when the value stream requires it? Or is there a bottleneck? Bottleneck analysis is, of course, the starting point of the Theory of Constraints. Or, and more likely in the current era, is there too much capacity? Toyota tries to avoid this by adding production capacity in small increments rather than in big hunks, increments that can be flexed by adding or subtracting employees.

Is the step flexible? Can it shift over quickly from making green ones to making red ones quickly? And can it changeover without compromising capability, availability, and adequacy? Flexibility is the key to rapid response to changing customer desires while avoiding the inefficient production of big batches.

If all the steps in your value streams are **valuable, capable, available, adequate, and flexible**, you are well on your way.

What remains is to perfect the linkage between the steps.

"Unless you try to do something beyond what you have already mastered, you will never grow."

Ronald. E. Osborn

Where Lean Thoughts can become Reality

UPDATE YOUR VALUE STREAMS

Does the product flow from one step to the next with no delay? Henry Ford pioneered with "flow production" in 1914 by moving the process to the product rather than the reverse. This is how he created nearly continuous flow not just on the assembly line but also in component fabrication at Highland Park. Unfortunately, he found flow hard to sustain in a world with changeable demand and wide product variety. That's where Toyota came in. **Does the product only flow at the pull of the next downstream step?** This is the central point of JIT, one of the pillars of TPS: Products should only flow at the command of the next step downstream.

Is the flow leveled back from the customer to the extent possible, with a standard inventory of finished goods if necessary? Leveling permits every step in the whole value stream to operate smoothly while still satisfying the customer with exactly what is needed exactly when it is needed.

None of us, of course, have created any perfect value streams. Probably we never will. But energy expended on comparing and criticizing improvement methods rather than pursuing the perfect value stream, is surely Type Two muda. That's the type of waste we can get rid of immediately!

Best regards,

Jim

P.S. For a value stream to advance toward perfection it needs a steady supply of nutrients (materials) and a steady removal of waste (in the form of packaging, empty containers, etc.) That's where a lean material-handling system comes into play to respond to the stream's needs, providing the exact amounts needed exactly when needed.

One More Time --- The Things That Kill "Going Lean Successfully"

Poor communications – upward, downward and sideways... you cannot over communicate.

No metrics – no reference points, no ability to measure achievement accurately; no motivation as there is no achievement that is credible

Poor training – "the last thing I will do is embarrass myself" - no training = no tools = no confidence = no risk = no application of new skills

No top management support – 'let the games begin' might be the better opening statement. Human beings are inspired when they are doing meaningful work. Without top management's visible support, how do I know the work I'm doing is meaningful? Does it count?

No project plan with milestones – Paraphrasing the Cheshire cat in 'Alice in Wonderland'... *if you don't know where you are going, any road will get you there*

No ownership for improvements – Ownership only comes from true involvement. No involvement = no ownership. And no ownership means no inspiration to continuously improve. Without such ownership, there can be no World Class performance

Culture for blame when things don't go right - Folks are smart – in 'Blame Environments'; they hide mistakes rather than endure ridicule. The human being fears humiliation and embarrassment more than death. As data is the voice of the process... the voice is mute.

Poor commitment – Little perceived connection with an overall vision, with my compensation, or with meaningful work. Again, no involvement = no ownership = no commitment

No time allotted for team meetings – Just more evidence that management is not serious or sees no value. The message: 'this is not real work'

No team training – A lack of understanding that 'no one is as smart as all of us' – but to tap into this reservoir is not natural – team tools are needed along with the genuine desire to drive decision making down

"Never mind lean this one time, let's just do it the way we have always done in the past, just this once." – The old work standard is reborn yet again... The message: The new way (Lean) is of only marginal value and is not to be trusted to generate results when you really need them... the old way is better

No clear understanding of all intra-relationships – No understanding that the velocity of enterprise-wide results is geometrically proportional to the excellence of the relationships in the team achieving them. Only High Performance Relationships generate High Performance results

Problem solving by intuition – How many people do you know have the same intuition? The best results come from the best data PERIOD. Continuous improvement **demands a process** that's widely understood.

Lean Thoughts