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LEAN THOUGHTS

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The “Forever” Rule

- an attribute of Product Realization -

Forever means forever until death do we part ... like in marriage so should it be with your production processes. IF we follow the methodology inherent with Product Realization or the former APQP we can quickly see the power of adopting the forever rule. However, many front-line operational managers will chose to defy or ignore the power of the rule.

Changing machines or a process will add variability to your products and to your process. It may seem minor but to the end customer it could provide significant consequences. As Lean Practitioners .. we are high pursuit of achieving the perfect process ... a perfect process that delivers a repeatable product with no variation.

Let us review the traditional 5 steps used for Product realization and how the forever rule plays into our design methodology.

Phase 1 – Program Definition

During this gate check, the organization looks at the request to quote to determine if it fits the organization’s mission vision, process and technical capability. If program seems to have merit we proceed to phase 2.

Phase 2 – Product Definition

Ending with another gate check ...we allow the engineers to play with all of their toys to create a product or service that the customer is willing to pay for. Hopefully, the engineer’s are applying some Lean Thinking to minimize part count, make sure tolerances required can be achieved with current technology and that the product can be produced competitively and provide the customer a significant edge.

Phase 3 – Process Definition

My experience has shown me that the use of Value Stream Map during this process step is not only valuable but can be very powerful. Here is where we define how the product will be produced, the product flow through the facility, how much inventory will be required through-out the process and at what stages. Additional tools that can and should be employed during this phase include Process FEMA (Failure Evaluation Mode Analysis) to predetermine potential failure modes, the triggers and potential corrective actions. Your summary of this phase will conclude with a Control Plan ... this is where the forever rule comes into play. You will clearly define the process by machine number and routing ... even if you have multiple options you must select one specific to this process.

Identical machines have different souls and subtle different characteristics ... do not let anyone else tell you different. Based on usage, machines and internal components wear at different rates hence defining their specific attitude. As you create your control plan you will need to run in the background of your system a dynamic Capacity and Staffing modeller to see what the impact of additional through-put will do to the capacity of your process.

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- ORENDA
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Where “Lean Thoughts”
Become Reality



Phase 4 – Validation

Here is where we finally convert our definitions into a tangible product. Typically Validation can occur through 3 phases ... 1) Prototype where we make the product using whatever means necessary and probably not using production equipment of tooling. 2) Beta Production, our first part using production tooling and finally 3) Trial Run mimicking our standard production methodology and batch size to validate that our run-at-rate estimates can be achieved. Typically, in the automotive world, this where PPAP and PSO activities are accomplished.

An excellent tool to be employed during the validation phase is the “Problem Follow” sheet which allows for documentation of problems or difficulties operators experienced building the product and how the problem was rectified. This document becomes a powerful resource tool later if a problem during production surfaces.

Phase 5 – C.I. & Feedback

Feedback should be constant and always ongoing. However at minimum annually, you need to conduct a complete review of the process. Again, the use of Value Stream Mapping will allow the team to conduct an in depth review of the process. Comparing the “Current State” map to the control plan will allow the team to identify any additional process steps that may have been added, why and are you getting the proper compensation for the additional value add ... or should they be eliminated. Is the process running to the planned Value Stream or have we allowed for excess inventory to creep into the Value Stream and why?

This is also a good time to review the Visual Standard Work Instructions to determine if they reflect the current best practice or is their a better, safer easier way to conduct the process.

The Forever Rule ...

If you enforce the forever rule if you become capacity constrained it will require immediate attention to find methods to increase throughput at the constraint. It may require the organization to improve up-time capability of a particular machine.

It will also eliminate “silo” thinking where a department is focused on meeting their numbers for through-put and delivery performance without thinking of the value stream as a whole. What may be good for that particular department today could play havoc further in the value stream ... but, hey, out of sight ... out of mind, not in my books. If the forever rule is going to be broken ... make it an organization wide decision and truly understand the consequences you make invoke on your team and potentially your customer.

Really ... it is common sense and you do not need 6 Sigma to figure this one out.

Contact me if you need coaching or facilitation help in the areas such as but not limited to; 5S, Value Stream Mapping, Set-up Reduction, Problem Solving or Policy Deployment and Consortium Development



TED VIDEOS OF WORLD-CLASS SPEAKERS TOP-10 LIST

Reprinted from Jim Pinto's e-newsletter

TED (Technology, Entertainment and Design) started as a conference in Monterey, California, bringing together the world's brightest minds, the thinkers and doers, who are challenged to give the talk of their lives - in just 18 minutes. Two years ago, these talks became available with dazzling video player technology on the TED website.

TED just passed an important milestone: 50 million TED talks have now been viewed worldwide, nearly half of them outside the US.

To keep pace with demand, a new talk is released every weekday.

Review the list of the Top 10 TED talks (below). The most popular, viewed over 2,500,000 times and counting, features neuroscientist Jill Bolte Taylor, who observed her own stroke while it was happening.

My favorite is Boston Philharmonic conductor Benjamin Zander, who was a huge hit at this year's conference. He'll convince you that you like classical music. Wanna bet?

Click TED website - go visit:
<http://ted.com>

My personal favorite - Benjamin Zander: Classical music with shining eyes <http://tinyurl.com/46ppww>

Watch the Top 10 Talks highlights video:
<http://www.ted.com/talks/top10>

2008 Consortium Event Schedule



Tour Workshop Conference

| January | February | March | April | May | June |
|--|--|--|--|---|---|
| <p>T</p> <p>Wednesday 16 <u>Eaton Electrical</u>, contact Joe Fisher, JoeRFisher@eaton.com</p> | <p>T</p> <p>Wednesday 13, <u>ACE Bakery</u>, contact Cindy Grolleman, cgrolleman@cebakery.com</p> | <p>T</p> <p>Wednesday 19, <u>Nestle Waters</u>, contact Mariela Castano mcastano@perriergroup.com</p> | <p>C</p> <p>Consortium Shareshowcase</p> <p>Saturday 05 <u>Eaton Milton</u>. Contact Cindy Grolleman cgrolleman@cebakery.com or Joe Fisher JoeRFisher@eaton.com</p> | <p>T</p> <p>Wednesday 14, <u>Alumicor</u>, contact Barry Wood barry@Alumicor.com</p> | <p>T</p> <p>Wednesday 18, <u>Morrison LaMothe</u>, contact Tony Vita tvita@morrisonlamthe.com</p> |
| July | August | September | October | November | December |
| | | <p>T</p> <p>Wednesday 24, <u>Kraft Foods</u>, contact Hanif Jivraj hjivraj@Kraft.com</p> | <p>T</p> <p>Wednesday 16, <u>CTS Corp.</u>, contact Navneet Mann, navneet.mann@ac.ctscorp.com</p> | <p>T</p> <p>Wednesday 12, <u>Messier-Dowty</u>, contact Mike Smith Mike.Smith@Messier-dowty.on.ca</p> | <p>T</p> <p>Wednesday 10, <u>Orenda</u>, contact Brenda McIntosh brendamcintosh@orenda.com</p> |