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# LEAN THOUGHTS

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## Why is no one asking the Product Development Community to create low-waste designs?

*We met Mike at a recent Lean Design Conference hosted in Chicago and wish we could have him on our engineering staff... he is the kind of engineer that really understands lean .. we look forward to ongoing contributions from Mike.*

As we know, lean is about eliminating waste on all fronts – in everything we do. But if we truly believe that about eliminating waste on “all fronts”, someone has to explain to me why the Product Design Community is largely exempt from lean initiatives. After that explanation, I’d like an answer to a follow-on question: Why do we tolerate the status quo thinking and status quo behavior of the Design Community? What’s doubly troubling about the situation is that the Product Design Community has the largest influence on costs. We know that once the product is complete most of the cost is already “locked in”, or more precisely “designed in”. Estimates on how much cost is “designed in” range from 60-90% of total cost.

There are good arguments why traditional lean methods don’t directly apply to the product development process (though they apply when twisted the right way). For example, the product development value stream is almost the complete reverse of the production value stream. In the product development value stream, information flow (which is actually the learning needed to improve the design) is the primary deliverable and the product flow (prototype designs and design revisions in the case of the product development value stream) is the means for creating the information flow. It could not be more backward. However, there is no argument that can stand up to the idea of creating product designs that are low-waste designs – designs that create less waste in the production system. Imagine if your company’s Product Design Community designed a new product with 50% less labor content than the previous design. The Lean Leaders in manufacturing would have shifted their lean activities from a significantly lower waste level and achieve savings that were thought impossible. Imagine if your company’s Product Design Community designed a new product with 50% fewer parts than the previous design. Think of all the transactions that would save: fewer parts to receive, fewer parts to move, fewer suppliers, few delivery trucks, fewer loading docks.

It is discouraging to watch how hard our Manufacturing Lean Leaders work to reduce costs by 5% per year when we know the Product Design Community can design out 10 times the cost with simple tools and methods. These 50% reductions in product cost and 50% reductions in the number of parts are common and don’t let anyone tell you otherwise. And they will tell you that your product is different and that these levels of reductions are impossible.

There are methods and mechanisms to help the Product Design Community design low-waste designs. The best method is to educate an important leader who is willing to drive the change. The toughest part is to find that important leader because the leader must have organizational responsibility for the Product Development Community and deeply understand the importance of manufacturing processes and assembly processes. Sometimes it is easier to form a coalition of important leaders who, between them, have the required knowledge and responsibility. But because the payoff is so significant – 50% reduction in product cost – it is worthwhile to find the right leader or build the right leadership coalition.

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Where “Lean Thoughts” Become Reality



### *Is Your Implementation Process Going Slower Than Expected?*

One of the main problems when establishing these disciplines, either TPM or any other Lean Manufacturing strategy, is that when all is said and done, the effort is diluted and eventually gets lost. This is a worse consequence than if the effort had never started.

We have found this a common source of frustration in a big number of companies. What happens is that there is a mistaken idea that it is sufficient to have a handful of people trained in these disciplines, usually supervisors or managers. Unfortunately, they are still of the old management style where they consider their function is that of a *boss*.

The reality is some of these people feel that with the implementation they will lose power. The truth is that yes, they will lose the power of giving orders, but for those who become true leaders, they acquire the new power that comes from the respect and admiration of their team members.

The process is simple, perhaps, that is the reason why key points can be overlooked although they are crucial to the success of the implementation.

The steps are relatively easy to follow:

1. Only issue invitations and accept those people who show interest and enthusiasm about learning advanced productivity technologies. Never include people in the projects by force or command.
2. Make an appropriate mixture of operators, leaders (supervisors and managers), engineers, staff personnel, etc.
3. Develop an atmosphere of authentic leadership by making them aware that their ideas and voices will be heard; where people cooperate by their own will of being part of the success.
4. Cross training is a key element in understanding how everyone's job fits into the big picture. This promotes an atmosphere of Cooperation and Motivation.
5. Constantly acknowledge and recognize people's ideas and contributions.
6. Listen to all with attention and try to put into practice their creativity and ingenuity in minor or big improvements to the processes, work areas, machines, facilities, and the product.

7. Close each event making sure that each person learned something, and felt great satisfaction for the achievements. Have the participants express these achievements in the presentation to management.
8. Emphasize that management recognizes these achievements and commits to keep supporting the continuous improvement process.

If any one of these points is not thoroughly completed, it can mean that the effort will have poor results or fail. Therefore, it will be a waste of your invested time and resources.

Source: *Enrique Mora*, [www.tpmonline.com](http://www.tpmonline.com)

### **Fun With Statistics, Median Edition**

Extracted from the Evolving Excellence Blog,

Posted: 18 Aug 2007 09:33 AM CDT

Previous editions of [Fun With Statistics](#) have seen us explore various distortions and misrepresentations of statistical data, but today's post has a simple lesson: beware the fundamental knowledge of the media writer.

From [an article](#) in the Albany Times-Union last week,

*Half the nation's families earn below the median family income of about \$56,000.*

Uh, yes. I guess that would be the case. I bet half of the nation's families also earn above that same number. And an auditorium of journalists filled to half capacity is... half full... and half empty. Although they apparently wouldn't understand why. Perhaps they could debate it a while and save us some drivel. Don't get me started on drawing an analogy to the glass being half empty...

Just to ensure that full credit is truly given, this astounding feat of statistics-based persuasion was written by [Kevin G. Hall](#) of the McClatchy Newspapers. Believe it or not he's an economics editor and his previous articles include the likes of [Beachwear Crackdown](#) [Bares Paradox in Brazilian Culture](#). I hope that crack isn't half... well, never mind.

Consortium Event Schedule



Tour Workshop Conference

| January  | February   | March   | April   | May   | June   |
|--|--|---|---|---|--|
| <p><b>T</b></p> <p>Wednesday 24<br/><u>Eaton Electrical</u>,<br/>contact Joe Fisher,<br/><a href="mailto:JoeRFisher@eaton.com">JoeRFisher@eaton.com</a></p> <p><b>W</b></p> <p>La-Z-Boy<br/>Corporate<br/>Monroe MI<br/>February 14 &amp; 15<br/><u>Enterprise Value Stream Mapping</u><br/>How to use the VSM tools to map admin processes.<br/>Contact Richard Kunst for info.<br/><a href="mailto:Richard.kunst@la-z-boy.com">Richard.kunst@la-z-boy.com</a><br/>Register at <a href="http://www.ame.org">www.ame.org</a></p> | <p><b>T</b></p> <p>Wednesday 14,<br/><u>CFN Precision</u>,<br/>contact Paul Kaulback,<br/><a href="mailto:pkaulback@cfm-inc.com">pkaulback@cfm-inc.com</a></p> | <p><b>T</b></p> <p>Wednesday 21,<br/><u>Nestle Waters</u>,<br/>contact Mariela Castano<br/><a href="mailto:mcastano@perriergroup.com">mcastano@perriergroup.com</a></p> | <p><b>T</b></p> <p>Wednesday 18,<br/><u>CTS Corp.</u>,<br/>contact Bob Garces,<br/><a href="mailto:Bob.Garces@ac.ctscorp.com">Bob.Garces@ac.ctscorp.com</a></p> <p><b>C</b></p> <p>Lean Design &amp; Development Conference<br/>Wed 18 to Fri 20<br/>Chicago<br/>Contact<br/><a href="http://www.iirusa.com/lean">www.iirusa.com/lean</a></p> | <p><b>T</b></p> <p>Wednesday 16,<br/><u>Stackpole CSD</u>,<br/>contact Don Barber<br/><a href="mailto:Don.Barber@stackpole.ca">Don.Barber@stackpole.ca</a></p> <p>Consortium Shareshowcase</p> <p>Saturday 05<br/><u>CGL Guelph</u>,<br/>Contact Cindy Grolleman<br/><a href="mailto:Grolleman@canada.com">Grolleman@canada.com</a> or<br/>Dave Deskur<br/><a href="mailto:daved@cglmfg.com">daved@cglmfg.com</a></p> | <p><b>T</b></p> <p>Wednesday 20,<br/><u>Morrison LaMothe</u>,<br/>contact Tony Vita<br/><a href="mailto:tvita@morrisonlamthe.com">tvita@morrisonlamthe.com</a></p> <p><b>C</b></p> <p>AME Regional Conference<br/>Mon 18 to Thur 21<br/>Edmonton, Alberta<br/>Contact<br/><a href="http://www.measureupforsuccess.com">www.measureupforsuccess.com</a></p> |
| July   | August   | September   | October   | November  | December   |
|  |  | <p><b>T</b></p> <p>Wednesday 26,<br/><u>Kraft Foods</u>,<br/>contact Hanif Jivraj<br/><a href="mailto:hjivraj@Kraft.com">hjivraj@Kraft.com</a></p>                      | <p><b>T</b></p> <p>Wednesday 10,<br/><u>CGL Manufacturing</u><br/>contact Dave Deskur<br/><a href="mailto:daved@cglmfg.com">daved@cglmfg.com</a></p> <p><b>C</b></p> <p>AME National Conference<br/>Mon 29 to Friday Nov 2<br/>Chicago<br/>Contact<br/><a href="http://www.ame.org">www.ame.org</a></p>                                       | <p><b>T</b></p> <p>Wednesday 14,<br/><u>Messier-Dowty</u>,<br/>contact Mike Smith<br/><a href="mailto:Mike.Smith@Messier-dowty.on.ca">Mike.Smith@Messier-dowty.on.ca</a></p>  | <p><b>T</b></p> <p>Wednesday 12,<br/><u>Orenda</u>,<br/>contact Brenda McIntosh<br/><a href="mailto:brendamcintosh@orenda.com">brendamcintosh@orenda.com</a></p>   |