

Lean manufacturing

Why aren't there more successes?

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Lean manufacturing allows manufacturers to be fast and nimble enough to quickly react to changes in customer demand and do it with little inventory. Gone are the days when companies could stockpile large quantities of raw materials, load up production with work in process, and stack up finished goods. Creating the lean supply chain by streamlining the business and production processes to significantly reduce cycle time, decrease inventories, lower costs, and increase customer service, has become the mandate for survival.



Walking through the shop floors in recent times, I have found that many of today's decision-makers in the manufacturing arena take pride in assigning themselves to the elite association of lean manufacturing organisations. They use jargons and fancy terminologies liberally, even though the actual philosophy has not yet sunk in. Certain companies show off their single bin or two bin system created at the delivery end, (mostly on the insistence of their customer to avoid shortages) but there is no real relation here to the lean philosophy. One company has taken all its overproduction and arranged the assemblies in a newly purchased rack, and described it as Kanban waiting for customer orders! There are other organisations that buy books on the subject, and managers try to duplicate the forms described in the books. In doing

so what they do not realise is they are probably a different industry compared to the narration, their demand patterns are different and so are their varying volumes and variables.

Raising these issues would give some answers to questions such as – Many want to be in the league of successful lean manufacturers, why do most fall short of their aspirations? Why aren't there more successes? There can be many reasons and many explanations; a few of them are listed below.

Key principles

A common experience amongst all teachers and consultants who teach the lean concepts is that even though they show the way, people are unable to duplicate it on their own, although they have understood it. The key principles of lean are very simple to understand,

but very difficult to integrate into daily managerial behaviour. A Japanese Sensei (master teacher) once said, "I can show you how to do this, but you cannot do it." What he actually meant was that one could get the idea intellectually, but to actually do it one would have to do a number of key things opposite to the way one had done them for years. One's instinct and gut feel would make it very hard to do the lean thing. It takes dedication, persistence, perseverance and staying focussed on the goal to achieve it. Changing habits is hard in the beginning, but only by inculcating new habits, one can build a lean culture.

For instance, the idea of one-piece flow sounds straightforward. But do you have any administrative processes that actually operate in a one-piece-flow fashion? It is easy to say 'continuous improvement', but we think of making

a step-by-step improvement. We do not really believe that improvement can be continuous. We do not actually believe that the whole point of a lean transformation should be to build a lean-learning culture, where continuous improvement is what is expected everyday – forever.

Coming from one of the first organisations in the country to build a lean culture, transforming the organisation from group technology concept to lean manufacturing was a great learning experience to all of us. Changing layouts to adapt single piece flow saw throughput times come down from as high as 45-60 days to as low as two days or less. The impossible became possible. The change took a lot of learning, teaching, training, doing, persevering, falling down, getting up and improvising. The change was not always easy, but the results were always encouraging and inspiring.

A mixed bag of learning

There are very few master teachers (Sensei's) out there, but most of your leadership lessons will come from attempting to start lean transformations. It takes a long time to learn lean tools at a fundamental level. We think of going to class to learn. When we began to transform our manufacturing way back in 1990 we had no real Sensei then, we thought of organised experiments in the workplace as how we could learn. Today's organisations that want to build a lean culture can benefit by seeking to work with those who have been there. The basic learning element for TPS is the weeklong Jishukin or voluntary study event. Back then in MKL we called it a Kaizen event or rapid continuous improvement (RCI) event. (Of course, the 'voluntary' part was not in the same concept as probably TPS, but the goal was market leadership and we used lean manufacturing as our competitive strategy – ref: 'The Lean Mindset', Indian Management Nov 2004.) It is through these RCI events that everybody from manager to workmen learnt how to apply lean tools and concepts. And it is only from a great deal of this kind of experience that you actually come to believe the core principles of lean manufacturing.

Based upon personal experience, I do not expect someone to be a good Sensei

at the tools level of knowledge without at least some of these experiences and success stories under his belt – ideally with many of them in administrative or product development processes, as well as in production processes. As students of lean, we always want to short cut this experience, and doing so never works. Because, at any point on the journey, 'we do not know what we do not know'. We will not won't come to learn something – to believe something – until we get there through personal experience.

I have read that organisations like the GM-Toyota joint venture NUMMI reinstated the requirement for all managers to get personal experience each year as members of weeklong improvement teams. Some very deep thinking and observation went into the format of what Toyota old timers call the 'five days and one night' Kaizen/RCI event format. Going back in time I remember we had lean learning sessions every week for the managers and workmen. This approach is still the primary lean learning method. If your real goal is to build a long-term learning culture, you should keep in mind the learning value of every Jishukin or RCI event for the members of your organisation. It is the growing hidden asset on your balance sheet.

Leadership

A third way to answer the question of 'why is there not more lean successes?' comes down to leadership. In business schools and other places you are trained to manage, rather than to lead. You are taught, for instance, delegation is a skill that must be used to be a successful manager. And this statement is true in many ways – you cannot do everything and expect to manage a large organisation.

But it can be false in the lean setting – if you are undertaking something that involves new levels of learning, and no one in your organisation has ever been there

before. As a senior leader, you need to get some 'learning', or you will not have the minimal knowledge necessary to manage the lean transformation. In addition, something that is transformational by definition involves a lot of change management. You cannot delegate change management to someone who has not been there before, is lower in the hierarchy, and does not have the clout needed to manage the politics of change. Given the magnitude of change, the team wants to know that the leader is also going there.

Culture

Simply said, culture is what we do and how we do it. The leader always builds the culture. What and how we do is based on what and how we think. Lean thinking is also a culture. It has got to do with the thinking at the top. Lean will only succeed if the senior management builds in this changed thinking ('Changed Thinking – A Eureka Moment in MMT October 2005 issue). One cannot expect the lower rung to adopt lean thinking while at the top one wants to go by their old cultural ways and thinking. There will be a clash, and you will not get your desired results. One CEO said some thing like this;) "I have been hearing a lot of technical terminologies like 'single minute die changing', 'self inspection' and a lot of other things... It was exciting in the initial phase as I thought I would be 'learning' more about it in days to come, but we are still 'talking' about same concepts and ideal situations... Now I feel I could have read them in an average production philosophy book as well... Change management and weekly



lectures are not taking us anywhere as we are still not able to do specifics.”

In the real world

Here is an example of a CEO who after listening to the practices of the more successful organisations has a mental block in believing it. Perhaps he is unable to visualise it. Although he has intellectually got the idea, he is either lacking in leadership prowess to see the change through or is unable to manage the politics of change. Since nobody in the organisation has been where they want to go, is he making an effort to learn? There comes a time when frustration is likely to show its ugly face for various reasons, typically when the organisation structure below you is slow to change. Intensified training and staying focussed on the goal alone will get him there. Patience is a tested virtue in any transformation process.

What could be happening? Change is uncomfortable. And habits die hard. People do not want to change and for a variety of reasons, mostly they do not want to get out of their comfort zones. There are those who do

not know how to deal with the change. Here, while he understands that people are acting in their old and undesired ways, what he probably overlooks is that they might be seeking his acceptance of their actions, or create situations which force him to accept old ways. Also when marketers make overstated commitments beyond the competence and capability of the manufacturing set up to meet commitments, it unlocks doors to potential failures and gives rise to frustration. It is usual to find that the marketing and production are not integrated. Going back, MKL had developed two tools to overcome this situation: one being the predictability tool and the other, the delivery tool. Both these were measured on a daily and weekly basis and continuously adjusted to balance the market demand with the intrinsic capacity to meet those demands.

You need to be hands on...

Managing change or change management is the role at the top, one that cannot be delegated. A CEO is expected to lead a winning team, and not expect the team to play and win

with him applauding as a spectator. The concept of a non-playing captain does not work here. In the medium and small sector where there is more than one partner, the threat to implementing change comes from the conflict of intent and actions being different. This happens where intent may be in the new paradigm and the thinking has gone to sleep in the old paradigm. The seed of lean thinking has to incubate right at the top. ♦

(* For the references 'The Lean Mindset' & 'Changed Thinking' contact the author)



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