

Lean manufacturing as a 'competitive strategy'

Money mind, strategy lean

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'When your only tool is a hammer, every problem looks like a nail' says the proverb. There are two basic rules in business. Rule number one is 'never loose money', and rule number two is 'never forget rule number one'. If you are among those who tend to get carried away by the growth in turnover resulting in profits; especially if you are not a lean organisation, remember the Japanese proverb 'where profit is, loss is hidden near by'. When the basic goal in lean manufacturing is 'profit through cost reduction', the ability to convert ideas to things is the secret of outward success. Read on...

Through one of its subsidiaries, Boigon Pty in Australia ordered over a dozen different components on AV Engineers*, a company that specialised in manufacturing a particular family of parts. The initial supplies made were of acceptable quality. But over time, their deliveries and contractually obligated conditions began to falter. At Boigon, they rated the supplier low on effectiveness and response. The supplier eventually lost the export contract.

Fragrance Engineers* dialogued with an Australian dealer for regular supply of certain types of machines. They sent over their product information – literature and price. The buyer was willing to look at buying these machines against the Chinese machines that he was trading. The customers in Australia have accepted the Chinese machines for the application, and so the product has an acceptance in terms of expectations on performance and price. The buyer was willing to test market these machines as the initial price indications matched the Chinese. In the discussions that followed, the Indian machine was re-quoted in bits and pieces, eventually culminating at twice the price of the Chinese machine. Posturing on the Indian side was, let the buyer buy the basic machine from India and the accessories and tooling from China. Now, do you honestly think this is going to work? We analysed what could have gone wrong and found that Fragrance Engineers worked on the RM/FG ratio of almost 1/10! This meant that either the conversion efficiency was very poor or the manufacturing is not cost effective (even though the domestic customers pay more to buy these machines), rendering the product not saleable in the global market space. It is of little surprise then, that in the last two years Indian exports were only six machines in that category (as per published figures on IMTMA website). Efficient manufacturing can make the product competitive and profitable by adapting the right strategy irrespective of size and

volumes. Fragrance Engineers clearly did not have a competitive strategy and lost out to more efficient manufacturers.

When the Japanese manufacturers were gaining market share from the Americans, it took the Americans a while to realise how and where were they being beaten. Reluctance and rigidity to accept change only made them lose more. But they did learn and by changing their thinking to lean concepts, they were not only able to bounce back, but regain lost space.

Traditionally in India, the machine tool industry has only looked at the immediate market (domestic) and they seem to be satisfied with the results. Satisfaction leads to complacency. Today's markets are global and that is how any senior management should look at it. Contentment in a market devoid of brisk competition is more of a threat. Contentment with only immediate markets could also be because of lack of a good competitive strategy in global markets. After the global recession of the 1980s; having predominantly exported over 80 per cent of their produce to Europe and America, MKL Hubli saw its market share dwindle. They knew that to increase their market share, they had to re-assess their competitive strategy. In what ensued as a vigorous strategy workshop, they decided to lock into lean manufacturing as their competitive strategy, and that is how they turned their business around – from closure to abundant demand even during the lean times.

Today's customers not only evaluate the products by design, quality and price; but they also emphasise on two performance dimensions – responsiveness and effectiveness. Responsiveness is how good you are at meeting customer requests and effectiveness is how good are you at meeting your commitments. Already some industries are affected by these performance parameters. Soon, emphasis on responsiveness and dependability will increase leading to more customers

demanding these measures.

For the top management, the business model is becoming more complex and challenging, especially with issues of how to increase profits and market share, ultimately leading to the inescapable question – *What is the right manufacturing strategy for us to follow?*

An important aspect to consider in formulating such a strategy is the company's ability to implement an effective competitive strategy. The various operating problems such as delay in delivery, locked up working capital, slow inventory turns, slow response, high costs, etc, are some of the identified culprits that can spoil the best of strategic intents. Yet, these are only suggestive of the more serious underlying problems in the flow of material and information, which is often the result of poorly designed processes. In practice, the processes that govern the flow of material and information are typically not the issues that are focussed on by the senior management, although these should be a priority.

Changing the rules

Even without an indepth understanding, some managers are less hesitant on IT investments, and attract a common criticism – 'expected returns on investment were not achieved'. The reason for this failure is because the focus was on the wrong issues. Basically, the problem resides in the way many managers think a manufacturing organisation should be run. This thinking of the management endorses the rules and operating logic that people follow on a day-to-day basis and can defeat the effective implementation of a competitive strategy. This is especially true when inaccurate and poor flow of information and interrupted material flow, is allowed to exist.

A common reaction from managers in detached manufacturing environments to the possibility of adopting lean manufacturing in their own organisations is an 'it won't work here' kind of an attitude. Lean manufacturing clearly defies the logic of their detached operational environment. Instead, what they need to do is challenge the existing approach or method. Understand and accept that the old, agreed-upon operating logic with its agreed-upon but poor rules is, in fact, outdated. The difficulty in changing mindsets, at all levels of the organisation, should not be underestimated; but the bias must be changed or you will not succeed in

achieving the levels of performance of true lean manufacturers.

The long-accepted traditional method of manufacturing allows the flow of information and material to be interrupted many times in its path. Now, this takes up time – cycle time – and significantly increases the operating expense. Even with computers that can process data at the speed of light, most of a company's information and material flow processes are loaded with the worst kind of time – waiting time. It is not at all unusual to find information and material waiting for up to or more than 90 per cent of the time. When you pause and think that, central to effective competitive strategy are responsiveness and dependability, then cycle time reduction in the flow of information and material is of prime importance.

Is it worth it?

We can learn from the organisations that have walked this path before (*refer 'The Lean Mindset' – Indian Management November 2004*). Developing the most dependable and responsive operation can make the difference between winning and losing. This by itself should be enough to at least initiate a thorough investigation of a lean strategy. Both west and east, a number of companies, large and small, have successfully adopted lean manufacturing as a business strategy with astounding results. Your business case may point to improvement potential that may look like this (depending on where you presently are) :

- Reduction in lead times 50-90 per cent
- Overall reduction in cycle times 60-90 per cent plus.
- Reduction in inventory in excess of 50 per cent
- On time delivery 99 per cent plus
- Quality improvement – over 90 per cent
- Reduction in floor space 40-75 per cent
- Material cost reduction 5-15 per cent
- Cost reduction 25-50 per cent
- Growth in profits - from doubling to well over 10 times at base prices.

Such results are more than enough for any senior management team to certify lean as the most sensible of strategies.

Consider the potential of a 10 per cent increase in throughput. If overhead expenses are fully absorbed at the current



rate of output, then usually the only major cost to manufacture is the direct material. With cycle times reduced by 60 per cent or more and on-time delivery exceeding 99 per cent, most sales managers will agree that market share will increase. If the increased output is truly scalable, then at least 20-40 per cent of every additional sale rupee is increased profit, since the only additional expense is direct material. Just imagine what can be the saleable throughput increase and the difference it can make on your company profits. One client CEO once said, "I'll be happy with half of that" and understandably so.

There are many other valid viewpoints. For example, a considerable amount of overhead activity costs are a direct result of the company's inability to consistently and dependably respond in meeting customer requirements. The amount of schedule misses and changes create a high overhead activity cost, as the organisation scrambles ineffectively to meet customer requirements. Without an ability to consistently meet customer-requested schedules, overhead activity costs increase rapidly with the organisation's inability to meet plans and schedules. Most cost accountants bury these as 'overheads'. The fact is these costs are unnecessary.

A large part of these unnecessary costs is often the true and unknown cost of expediting an overhead activity with a ripple effect that ultimately impacts the income statement and balance sheet. Want to know how? Think of the resources consumed, missed shipments, lost sales, higher production costs, quality problems and sales expense among other things. The question 'is it worth it to switch to lean?'

is, in most cases, easy to answer with an overwhelming 'yes'. The consequences of not adopting lean manufacturing as a business strategy are so costly that it should become a high priority strategic objective.

What should you do?

It is always better to embark on this journey with the help of a Sensei or Teacher, who has already been where you want to go (refer: *Lean Manufacturing – Why aren't there more successes?* in MMT Feb-Mar 2006 issue and *Trim Wonders in Machinist Jan 2006*). As managers learn more and more about lean manufacturing and lean supply chain management as a competitive strategy, understanding and acceptance of improvement potential from lean evolves. Consequently, management will want to determine and understand how good their company could really perform, if the old, agreed-upon operating logic was changed to a lean strategy. At that time, management should consider an expert, guided and focussed assessment of the 'as-is' condition versus what will be required to achieve a 'could-be' state of lean manufacturing. This focussed assessment should have the objective of quickly evaluating what improvements are needed and when and what is the potential impact on the overall business performance. The end result of this assessment should be a game plan that specifies the improvement actions and measurable performance improvements. Certainly, nothing drives the adopting of the new and better way of doing business better than a very compelling performance improvement potential.

Once management's understanding and acceptance evolves to setting your company on a lean strategy course, the real work begins. Introducing the technology of flow, while challenging, will be easily superseded by the challenge to change the old mindset. Long established value and belief systems are going to be 'upset' as the long, management-endorsed rules and operating logic are challenged to be unfit and 'scheduled' to be discarded. This is the critical point in the lean adoption cycle where only management's leadership and dogged persistence will assure that lean actually happens.

Most of us do not recognise an opportunity until we see it working for a competitor. Yesterday's struggles are either today's success or lost in history. With manufacturing gaining ground in India, sustainable business growth – as the markets become more competitive – will come from the ability to sustain continuous cost reductions and yet make continuous profits. By far, lean manufacturing is the best competitive strategy to make any business successful. Accept it, adapt to it, implement it and profit from it. ♦

(* Name changed. For a copy of
'The Lean Mindset' you may mail your request
to the author)



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