

Hard, fast results



Denis Becker, Global Master Blackbelt Support Manager at Gemalto and a lecturer on the MSc Lean Enterprise at the University of Buckingham, UK, discusses how critical the achievement of quick business results is to a company's lean strategy.

Lean would be easy, if only there weren't so many people that just don't get it. Bob, dad and lean guru in *The Gold Mine*, swore he would never set a foot in a factory again because he was tired of the battles he fought trying to make lean stick. No more of that people stuff! There are a lot of bitter lean guys like Bob. I myself used to do my fair bit of moaning about people's reluctance to "get with the programme" in the past. What about you?

But does it really have to be *that* hard to do lean? Why is progress slow? Why is it that after over 20 years of lean we still have to fight battles over what appears to us as so obvious?

The problem with lean progress is us, the lean community. If decision-makers do not support lean, something is wrong with how we sell it and how we deliver on the promise. Lean is not about the tools, it's about business: making (and keeping) more money and beating the competition by improving much faster. As George Koenigsaecker at this year's Lean Enterprise Research Centre conference in the UK put it, "lean guys have to buy their freedom every quarter."

Every quarter? Wow! Visibly shifting performance at this pace - and sustaining the momentum over time - cannot be achieved by doing what we've always done. We need a lean strategy that focuses our efforts, is easily sold and delivers tangible business results fast.

So what should we focus on? How can it be sold? How can we deliver fast-paced results?

WHAT SHOULD WE FOCUS ON?

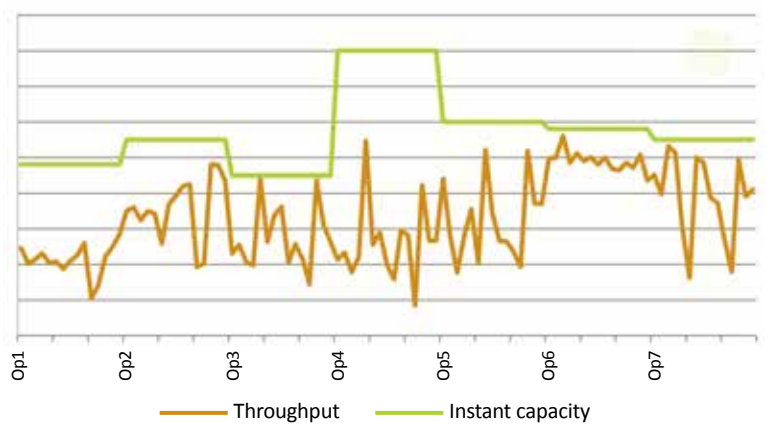
The purpose of strategy is to focus attention and resources on what matters most. Sharper focus will lead to faster progress. To determine the right focus we need to start with the business problem. This is about setting the operations improvement strategy, forget about lean (for a moment). What is the one operations problem that, if we cracked today, would increase our profit the most?



There are four levers to make money from lean - quality, capacity, time and inventory - and the key to understanding, and shifting, any of them is variability. Unfortunately, one of the most frequently used lean strategy tools - value stream mapping - has very little to say about variability. A better starting point for defining lean strategy are therefore simple charts that visualise the performance gap by comparing current performance variation with target performance. Let me illustrate with two charts visualising the capacity and lead-time challenges of a plant, below.

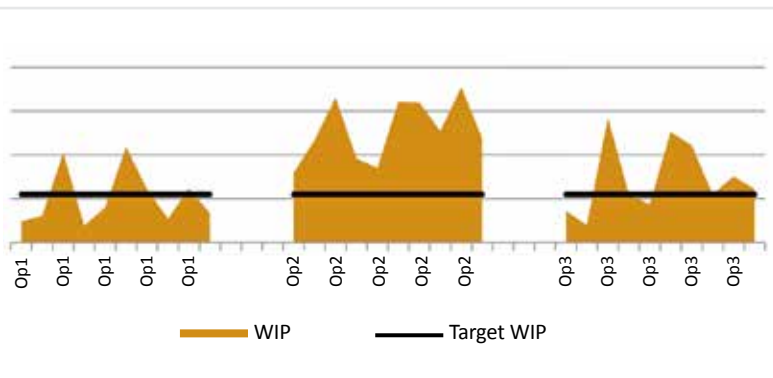
Business problem: the plant is 'fully loaded' - to accept additional orders we must increase capacity, but without increasing cost. Plant throughput is constrained by the bottleneck; therefore capacity can be increased by improving bottleneck utilisation. The Pipeline Map compares the instant capacity of each process step (operation) with actual throughput over time (Figure 2 shows daily output for seven operations over two consecutive weeks). This makes it easy for the team to identify the bottleneck (highest utilisation) and predict the improvement potential.

Figure 1: Pipeline map: visualise capacity utilisation



Business problem: Sales insist that a significantly shorter lead time than our competitors' (at no extra cost) would attract more orders. Lead time is linked directly to work in process (WIP), the more WIP - the longer the lead time. Therefore, the lead time challenge can be re-stated as a WIP challenge. The 'WIP Variation Chart' (Figure 2) compares WIP evolution by operation to a target WIP level (calculated using Little's Law). Again, it is easy for the team to identify and communicate the improvement focus.

Figure 2: WIP Variation Chart: focus on lead-time improvement (and cash)



These and similar simple charts make it easy to pinpoint the process steps with the biggest potential ROI from investing improvement resources. Defining the strategy in terms of solving a shared operations (rather than a lean) problem also reduces undesirable competition between lean and other departmental silo strategies (e.g. the lean manager's strategy, the quality manager's strategy etc.). There is one core challenge: everyone contributes from their departmental perspective and with their resources to closing the gap. This provides sharper strategic focus and avoids scattergun improvement activity that squanders valuable resources.

Once the core business problem has been pinpointed, appropriate analysis tools (such as VSM) can be used to dig into root-causes and define a physical target condition and countermeasures to close the performance gap. This is structured problem solving at a strategic level: we select the right tools to study and solve the problem, and capture the team's insights in a "strategic A3".

HOW DO WE SELL THE STRATEGY?

Fast-paced improvement does not happen without widespread support, yet this is often lacking in the early stages of a lean transformation. When I first got into lean, I believed this was a matter of educating everyone in lean thinking and tools - if they understood the principles and tools they would support the required change. But even if we impart the right knowledge to the right players and even if they believe lean is the way to go, this does not easily translate into action or faster progress.

The Heath brothers in their excellent book *Switch: how to change things when change is hard* use the analogy of an elephant and its rider to illustrate why: our actions are determined by two competing systems - the rational mind that wants to change things (rider) and the emotional mind that loves the comfort of existing routines (elephant). If we can overcome this tension, change can come quickly. This is probably the most important skill for a lean and, in fact, any change leader.

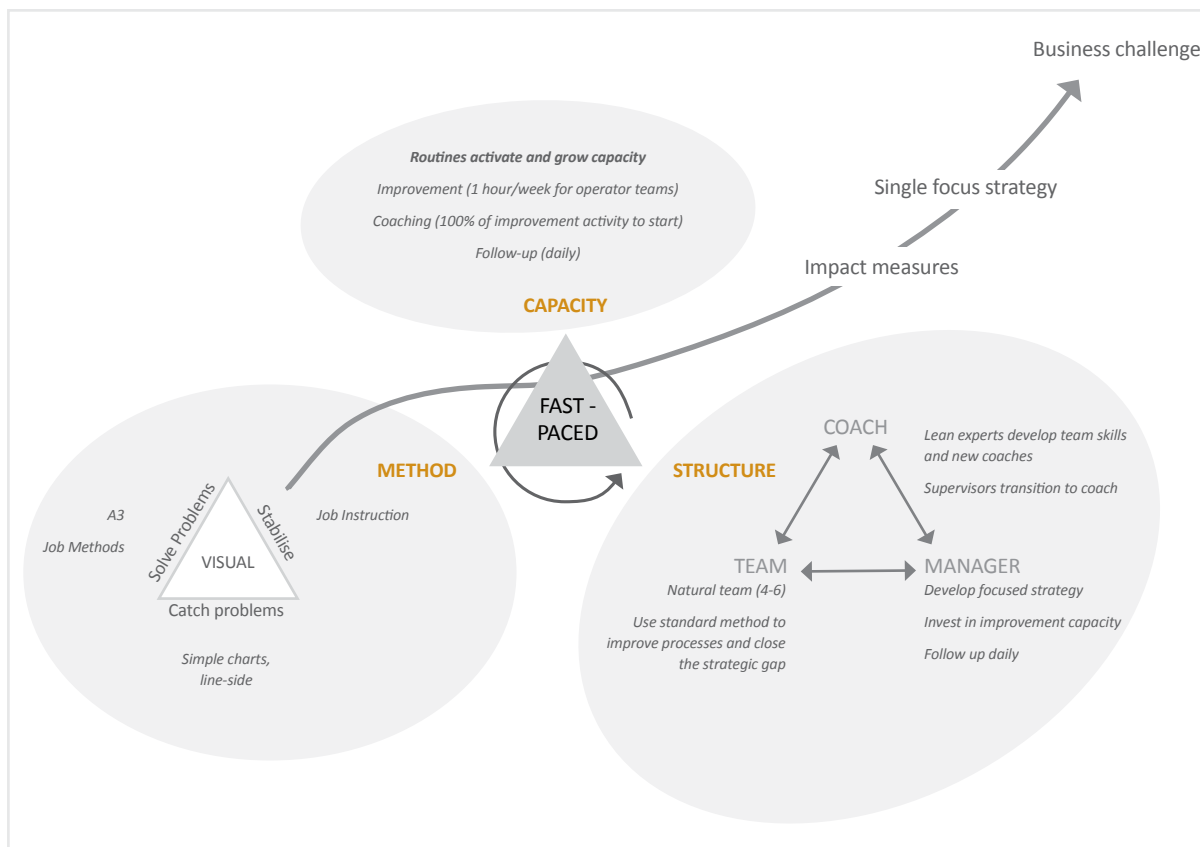


Figure 3: Fast-paced building blocks

In Training within Industry (TWI) job relations we teach leaders “to get people to do what needs to be done, when it should be done, in the way it should be done, because they want to do it.” So, how do you get your VP, plant manager, department managers, supervisors and operators to want to do lean?

By nailing down the one thing that really needs doing and why (single-focus strategy), we take care of the rider. We now need to get the elephant to move. We are in the business of selling (lean) change and the trigger to the “purchase” - and the “repeat purchase” - is emotional. Everyone asks: “What’s in it for me?”, so how can we ensure they find a good answer to this question again and again?

Firstly, selling lean is easier if people see it as a fun challenge. People love problem-solving, just implementing a given solution is far less enjoyable and rewarding. This is part of the reason for framing the strategy definition as team problem-solving. A good strategy keeps the target condition generic and flexible enough to allow teams at every level to fill in the gaps and make it their change. An incomplete proposal is better than trying to find the “perfect” one (80%>100%) and not trying to anticipate every detail gets you moving sooner!

Secondly, we must keep it simple. The term “lean” easily invokes negative associations in the minds of front-line employees - often related to past negative experiences - which are hard to shake. So why insist on the lean “brand”? Japanese and management jargon and complex tools, too, put people off. The simple chart we start off with needs to be translated into a clear and simple message that is repeated again and again to provide focus for everyone.

Thirdly, old and static routines must be replaced with new and dynamic ones, which build and sustain the improvement momentum. Lean change requires constant reinforcement to elephant and rider: keep their focus on the core challenge and keep them moving. If the elephant loves routine, the trick is to make the new routines all about generating the desired change. This is why Koenigsaecker advocates a heavy kaizen event regime used by Danaher to indoctrinate senior managers of acquired companies to become lean leaders. And it is why David Mann’s recipe to create a lean culture involves daily accountability administered through tiered meetings. The new culture is created by frequently repeating desired behaviours until they stick. Much of the convincing is done through social confirmation, once you get going: if my colleagues are doing it, it’s probably good for me, too.

It is by building these routines, and delivering hard business results fast, that we guarantee the “repeat” purchase.

SO, HOW DO WE DELIVER FAST-PACED RESULTS?

“Setting a strategy” suggests that it makes sense to separate strategy setting and implementation in the first place. If lean is about improving the pace of improvement, the questions “Where do we want to be?” and “How do we get there?” are inextricably linked. We cannot just set a strategy and hand it over for implementation, because the capabilities to implement and sustain (at the new pace) do not yet exist.

Every plant has a set improvement capacity that constrains the pace of progress and our ability to deliver results. Developing this capacity is a critical leadership responsibility: leaders need to invest in improvement structure, create routines that grow capacity and develop its utilisation, and maximise the impact from improvement activity (Figure 3).

Building an **improvement structure** is an investment decision: to become truly fast-paced we cannot rely on staff experts to implement the change. We need the eyes, brains and hands of front-line teams. They must be given time and coaching to develop the essential improvement skills of catching problems, solving problems and stabilising the process (to avoid slipping back). The method needs to be quick to learn and effective in tackling diverse problems.

The Training within Industry (TWI) programmes, for example, were developed for this purpose: with minimal training investment (10 hours) teams learn job instruction (stabilisation) and job methods (problem-solving). Together with a simple method to visualise problems at the time and in the place they occur (line-side), these programmes make it much easier to build the team improvement skills we need.

Growing capacity is all about routines that activate the structure. Skills are developed through repetition, so problem solving needs to be regular.

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Operator teams, for example, should have at least one hour each week of formal problem-solving time (their minds continue working on the problem in between sessions). As teams get better at catching problems, solving problems and stabilising their process, the pace of improvement increases naturally.

Impact requires strategic alignment and routines for management follow-up. It is a key leadership responsibility to provide feedback, follow-up and coaching. The leader sets the pace: checking up every month generates monthly progress, checking up weekly generates weekly progress, and so on. Follow-up must happen daily, at the gemba: are teams focused on the core challenge? Are they freed up to problem-solve? How can we improve progress and impact?

In sum, the key to lean success lies in delivering hard business results fast, again and again. Lean strategy definition is a team challenge that must start by visualising a business problem in a way that can be easily communicated to provide a compelling, single focus for improvement. But making people understand the need for change is not enough to build momentum, we must get their elephant to move by making lean fun and building routines that make change feel normal and comfortable. If done correctly, these routines not only make subsequent strategic changes easier to sell, but also much faster to implement because they enhance the organisations improvement capacity.