

IMPROVEMENT SKILLS CONSULTING LTD.

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*“Simply, improvement...”*



# Lean Sigma: Bandwagon or Value-add?

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*“We get brilliant results from average people managing brilliant processes, while our competitors get average results, or worse, from brilliant people managing broken processes.”*  
[Toyota Chairman: Fujio Cho]

## The bandwagon is rolling...

Over the past 12-18 months an increasing number of organisations have been talking about, and implementing, “Lean Sigma”. And, needless to say, consultants have been touting their wares as Lean Sigma experts.

So, is there anything new in Lean Sigma? Will it add value to your improvement efforts? Or, is it just the latest bandwagon to roll into town?

There will no doubt be a few Lean and 6-Sigma “methodologists” around who will completely reject the idea of combining the two approaches and who believe a purist approach is the only one that will work. We’ve always taken the view that the methodology isn’t that important and our experience is that, whatever methodology you choose, it usually has to be adapted to meet each client’s requirements, starting point and improvement objectives.

Let’s explore the principles of Lean and 6-Sigma...

## Lean

Lean has evolved out of the Toyota Production System (TPS) and has moved from its manufacturing roots into service organisations and the public sector. Toyota’s successes inspired many others to follow, with a desire to eliminate waste and implement flow. Lean is based on:

-  A focus on identifying and delivering customer value
-  Managing horizontal value streams

- Aligning capacity to match demand by segmenting tasks and creating flow
- Engaging front-line staff in daily improvement and problem-solving
- Using “visual management” approaches to ensure real-time performance can be tracked
- Managers, at all levels, who “go and see” where problems are and enable their people to use systematic approaches to solve problems

Lean is certainly not a quick fix. Although there are many tools in the Lean toolkit, which ones you need to use, and in what order, will depend on your organisation’s starting point and needs.

There are far too many current examples of Lean experts coming out of manufacturing and trying to apply an approach which worked in that sector, to service and public sector organisations. The bad publicity surrounding “active bananas” in HMRC is perhaps the most well-known. (Accountancy Age: Nov. 15 2006) But, we’ve seen plenty of “Airfix Kit” examples applied by consultants in recent months that completely ignore the prevailing culture and, unsurprisingly, run into resistance from managers and staff alike.

Those who have successfully applied Lean thinking report reductions in defects of up to 90% and capacity increases of 30-40%. As with all improvement approaches, the successful organisations have demonstrated leadership by example. Fujio Cho’s (Toyota Chairman) three keys to Lean Leadership are:

- Go see
- Ask why
- Respect your people

## 6-Sigma

Depending on who you speak to, or which books you refer to, you’ll typically find three “levels” of definition for 6-Sigma:

- It’s a “technical” process-improvement project approach, based on heavy-duty statistics and requires the support of highly trained and experienced “Black Belts” to implement it successfully

- It's a natural evolution of the Philip Crosby "Zero Defects" thinking that was common in the 1980s; its focus is on achieving no more than 3.4 defects/errors per million defect opportunities
- It's "TQM on steroids", where there are three underpinning principles of:
  - understanding and meeting agreed customer requirements
  - identifying failures and eliminating them, to reduce costs
  - involving staff, at all levels in continuous improvement

In our opinion, one of the best books to read is Peter Pande's "The Six Sigma Way" which really does explain and emphasise the "culture change" nature of 6-Sigma. Here, it is made clear that there are several "on ramps" for 6-Sigma. Depending on where you are starting and what you want to achieve, any of the three definitions above could be appropriate. Each organisation needs to decide what is best for its situation.

## So, what is the difference?

To a large extent, the discussion and debate is pedantic. Each approach has its merits and highly relevant tools, for the right situation.

One thing that does sometimes differentiate 6-Sigma from Lean implementation is the use of improvement project teams. Projects, facilitated by Black Belts, follow the DMAIC improvement process (Define, Measure, Analyse, Improve, Control). Often, these projects are chosen by management as areas where a high return on investment from 6-Sigma will be achieved. The risk is that the teams "do it" to the organisation, lack buy-in and improvements are not sustained. With the right leadership and facilitation though, these teams can achieve high staff engagement and sustainable improvements. And, arguably, that level of involvement and empowerment of the people operating the process is exactly what Lean would advocate.

Another often discussed difference is that "Lean is about flow and 6-Sigma is about reducing variation". Does that stack up? We don't think that's wholly true either. In order to introduce flow, you have to identify value streams and understand the demand/capacity variations caused by "runners, repeaters and strangers". Lean also introduces tools such as 5S which improves standardisation (reduces variation) and Poka Yoke which reduces mistakes (errors). Lean's kaizen approach, using PDCA (Plan, Do Check, Act) problem solving also has many similarities with 6-Sigma DMAIC project approaches.

Lean does encourage “whole systems thinking” by identifying value streams. Without this end-to-end thinking, it would be perfectly possible for an organisation pursuing 6-Sigma to set up an improvement project that creates a world-class sub-process that isn’t actually required. 3.4 ppm defects in a non-value-adding process is still waste! Do you really want to be world class at complaints handling, or dealing with warranty claims?

However you want to argue the case, there is probably an equally strong counter-argument that proves the two approaches are complementary.

## **Best of both worlds**

The reality is that you can have the best of both worlds. Both sets of tools can help you improve performance.

But, we have deliberately used the word “tools” here. Neither approach will deliver sustainable improvement without the right leadership. Tools and methodologies on their own are inadequate. That means senior managers must understand what a culture of continuous improvement really looks like and how they have to behave in order to help create it.

While white collar workers see themselves as “professionals” and “knowledge workers” who don’t have processes (and if they do, they believe they can’t be standardised) it will be extremely difficult for either Lean or 6-Sigma to deliver much improvement.

Fujio Cho’s three rules of Lean Leadership listed above are critical. Managers, at all levels, are there to create the environment in which any of the tools can work. For most organisations, this will be the biggest challenge.

If you can achieve that, Lean Sigma will not be just another bandwagon, but, applied intelligently, will truly add value.

## **Caveat Emptor**

One of our concerns about the Lean Sigma bandwagon and associated debate is that there are a growing number of snake-oil sellers trying to persuade clients it is the latest miracle cure. And, there are already consultants claiming to have tools that go beyond Lean Sigma.

Sadly, many clients seem to be taken in by this and demand for Lean and 6-Sigma consultants almost certainly outstrips supply. One, or two days, of “Lean induction” does not turn a process improvement consultant into a Lean expert. Learning to use Minitab statistical software does not make a 6-Sigma expert.

Buyer beware!

## **Our track record**

Our consultants have been helping organisations in the private and public sectors to manage and improve their processes for nearly two decades. We are not wedded to a particular methodology. We help clients identify their improvement goals and then develop an approach to achieve these; invariably ensuring their people develop the skills to make further improvements themselves. We work with senior managers to help create the environment in which continuous improvement can flourish.

Please contact us for more information about how we can help you to manage and improve your processes, using Lean, 6-Sigma or other improvement tools.

SIMPLY, IMPROVEMENT...

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