

Frequently Asked Questions on Lean Six Sigma

By Chris Rees

How will it benefit me and my company?

Despite Lean Six Sigma being around for over twenty years now, it is remarkable that a significant number of companies and individuals still don't really know what it is. Oh, they've heard of it, and may even have been involved in it, but when it comes to defining it or reaping the huge benefits it can offer, then far too many are still in the dark.



A few of the frequently asked questions from students and companies regarding Lean Six Sigma and how to use it are rehearsed below, together with some answers to these questions.

What's the difference between Lean Six Sigma and other problem solving methods?

There are any number of ways to solve problems, some work better than others, however.

The trial and error problem solving method, sadly still in use, is the equivalent of groping in the dark, with little or no data, little or no method and often little or no idea. The result, quite predictably is little or no improvement.

The "just do it" method, where the problem solver is encouraged to jump straight into process changes, can be effective if the problem and root cause are understood and the person doing it knows what they are doing, but the method lacks rigour and repeatability.

More advanced methods such as CEDAC (Cause and Effect with the Addition of Cards) or 8D (Eight Disciplines) are more structured. These methodologies utilise simple and often subjective tools such as the Fishbone Diagram and Pareto Analysis, however, they lack statistical rigour. 8D for example is a useful method to employ when reacting to customer problems.

Lean Six Sigma uses the DMAIC process of Define, Measure, Analyse, Improve and Control to solve problems. The methodology is data centric with excellent tools that are more powerful because they offer statistical validity. They are easily learnt if taught by seasoned professionals. Usually run as a project based strategic deployment or improvement method, Lean Six Sigma has proved to be an effective problem solving method with average savings, according to the DTI, of $\pounds 150,000$ per project.

I want to progress my career and wondered if training in Lean Six Sigma will help me?

In a word YES! The disciplined and structured approach combined with the tools and method of Lean Six Sigma are all highly effective and will help you to be more successful at solving problems and making improvements in your place of work. Typically, people who bring a Lean Six Sigma qualification to a job can command 10 to 15% higher salaries than an equivalent untrained applicant.

What's the best way to identify projects for Lean Six Sigma?

The good thing about Lean Six Sigma is that there is a whole suite of tools to use to identify projects. An enterprise level Value Stream Map can be used to highlight projects in context to the whole company.

A Cost of Quality analysis usually identifies a host of projects to work on and techniques like Voice of Customer and Customer Journey will illuminate the customer's perspective of what the important projects to choose are.

Undoubtedly though, the best way to identify projects is through a strategic deployment process, which takes in to account the external and internal customer perspective and aligns projects and goals to strategic objectives.

How do I keep my projects on track?

Well, the best way to keep projects on track, is to employ the age old adage of discipline. However a number of techniques, employed in Lean Six Sigma, can be useful to aid you in keeping projects on track.

It is important to spend time and effort upfront defining your Project Charter (a semi formal contract between the Belt and the Company detailing the problem to be solved and the resources required to solve it) and get buy-in from stakeholders. This can't be emphasised too strongly. Poor planning and communication are the main reasons projects go wrong. The SigmaPro Lean Six Sigma tools will come in handy here.

Plan your activities and assign responsibilities, then meet regularly to review progress. The frequency of meetings will determine the pace of the project. Hold well structured meetings, here's where the discipline comes in, and tackle delays and issues quickly to keep the project on track.

Treat your project as a process. Define it, choose KPIs (Key Performance Indicators) such as DMAIC stage reviews and monitor progress. A good way to do this is to have a war room or notice board with project measures and progress easily accessible and simple to understand. Hold your meetings there, stood around your progress charts. This usually keeps meetings focused and short! And don't forget, what gets measured gets done!

What is your favourite Lean Six Sigma tool?

Lean Six Sigma has such a wide variety of rich tools to choose from, but if I were to pick a favourite it would be Regression Analysis. It is simple, but extremely powerful.

A company once needed help to set up a Design Of Experiments trial and analyse the results to

optimise the drying times of various sized components in an oven. There were 5 variables and each trial could take up to three hours to complete. Even using experiment reduction techniques the work to set-up and run the experiment would have taken over a month to complete with considerable disruption to production.

However, good quality data on the five variables had been taken over a period of time. It was a relatively simple task, taking less than a day, to run the data through a regression analysis and produce an algorithm describing the drying time as a function of these five variables.

The model proved to be highly accurate and simple to use. Needless to say the company was extremely pleased and enrolled several of their staff on a Lean Six Sigma course in order to have their own capability in-house.

Lean Six Sigma is an effective tool for improving business processes of all kinds. By adopting a grading system from Yellow Belt at the starter level, through Six Sigma Green Belt and Six Sigma Black Belt to Six Sigma Master Black Belt at the expert level, Lean Six Sigma can effectively engage a range of people with varying levels of ability and disciplines to make impressive improvements in any business.

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