LEAN SIX SIGMA AWARENESS PACK

2018

An Introduction to Lean Six Sigma

Over the last few years Lean Six Sigma has come to mean a number of things but in reality, most organisations use it as a tried and tested approach to implement Continuous Improvement. It incorporates a wide range of methods, tools and techniques, which have their origins in different histories and backgrounds.

This range is developing and changing over time as more and more organisations build ever increasing experiences of using the approach in very different organisations. The latest, most successful implementations of Lean Six Sigma bring together thinking, principles, approaches, tools and techniques from:

Six Sigma is a disciplined, data-driven approach and methodology for eliminating defects (driving toward six standard deviations between the mean and the nearest specification limit) in any process – from manufacturing to transactional and from product to service.

Lean Thinking means creating more value for customers with fewer resources. A lean organization understands customer value and focuses its key processes to continuously increase it. The goal is to provide perfect value to the customer through a perfect value creation process that has zero waste.

Change Management process is to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, in order to minimize the impact of change-related incidents upon service quality, and consequently improve the day-to-day operations of the organization.

Agile thinking uses a process called Scrum most commonly used for product development, especially software development. Scrum is a project management framework that is applicable to any project with aggressive deadlines, complex requirements and a degree of uniqueness.

This starter pack aims to give you an understanding of Lean Six Sigma and the vision as to how you might use these skills personally or within your business.

How could Lean Six Sigma Help You?

Learn the benefits of Lean Six Sigma

Is any of this familiar to you?

Frustration: You don't seem to be able to do things easily.

Confusion: No-one really seems to know what's going on.

Complaints: You're spending too much time dealing with unhappy customers.

Hassle: There are always fires to put out.

Overload: There is always too much to do.

You have to reduce costs and do more with less.

So how can Lean Six Sigma help?

You would be able to understand your customers' requirements

You've designed or improved your processes to ensure they are capable of meeting the customer requirements consistently

These requirements are reflected in the products and services you provide

You have accurate data that enables manaagement by fact

And when problems occur, you tackle them in a systematic way and addresss the root cause

What exactly is Lean Six Sigma?

The Lean Six Sigma Concepts

It's the best of Lean and Six Sigma put together!

Lean Process Thinking

Focus on customer value, Waste elimination, Speed and Flow.

'Efficiency' Focus

Six Sigma Defect Reduction

Focus on customer value, defect reduction, variability and rigorous project driven problem solving.

'Effectiveness' Focus

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Lean Six Sigma Improvement
Business Improvement methodology with lean and data analysis tools built in

And it's a bit more as well!

Change Management: We need to gain acceptance for the changes we seek to make.

Theory of Constraints: Improvement needs to be concentrated at the weak links.

Agile: The pace of chance is accelerating. We need to find ways to do things in a more Agile manner, taking weeks instead of months.

Theory of Constraints: We need to think in terms of end to end processes and identify the weak links, bottlenecks and constraints.

The key 7 principles of Lean Six Sigma

- Identify and understand how the work gets done - the process
- Manage, improve and smooth the process flow
- Remove non-value-add (NVA) steps and waste
- Involve and equip the people in the process
- Focus on the customer
- Manage by fact and reduce variation
- Undertake improvement activity in a systematic way

What exactly is Lean Six Sigma?

Lean Defined

Lean in a Nutshell

"All we are doing is looking at a time line from the moment the customer gives us an order to the point when we collect the cash. And we are reducing that time line by removing the non-value-added wastes".
Taiichi Ohno, Toyota Production system 1978

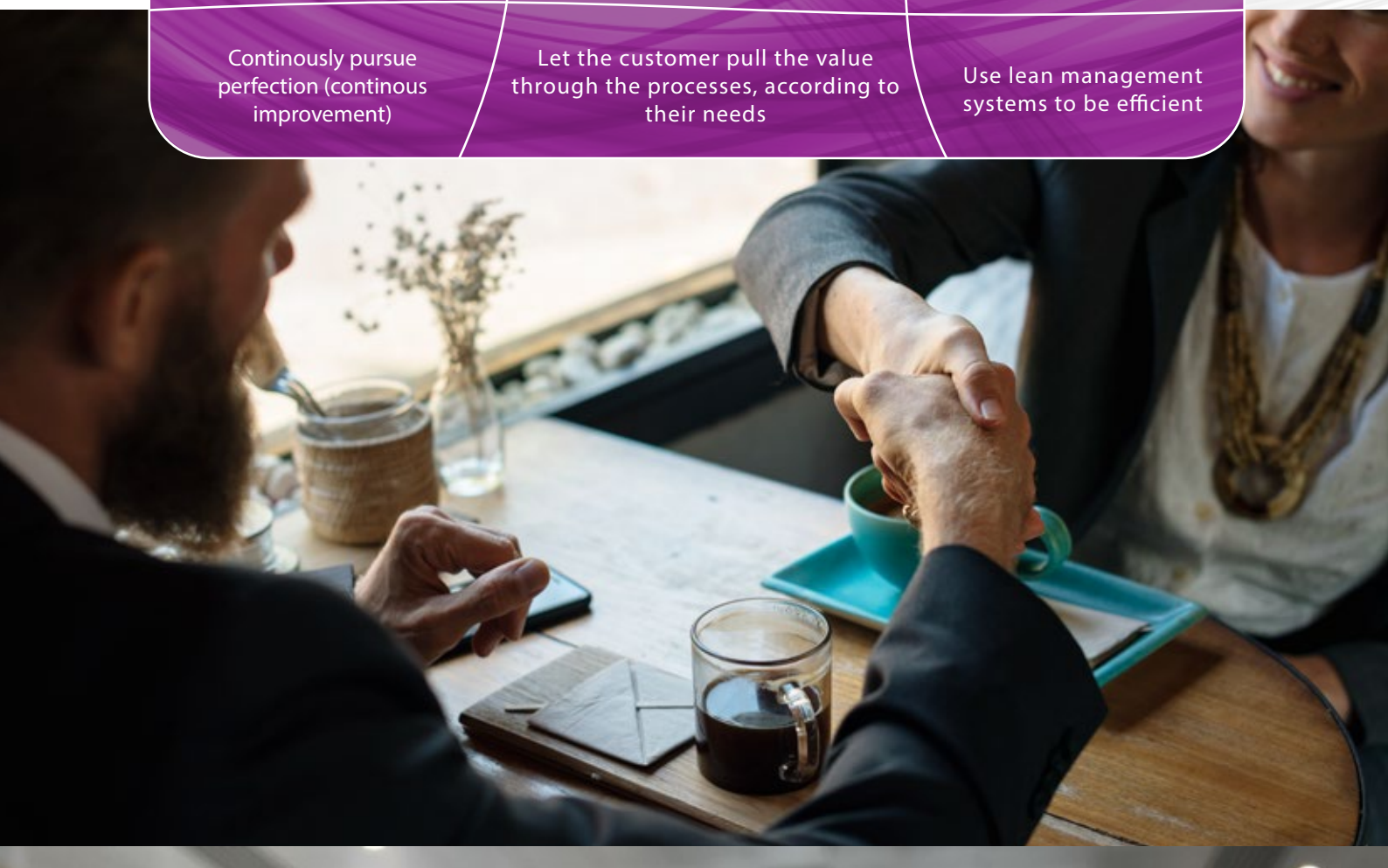
Customer Order — How long does this take? / How do we reduce this timeline? — Money in the bank

How does this apply to you in terms of your day to day activities?

Think about your various processes - do you think there might be some unnecessary steps involved?

The Key Principles of Lean

Understand the customer and their perception to value	Identify and understand the value stream for each process and the waste within it	Enable the value to flow
Continously pursue perfection (continous improvement)	Let the customer pull the value through the processes, according to their needs	Use lean management systems to be efficient



What exactly is Lean Six Sigma?

Six Sigma Defined, DMAIC & DMADV

Taking a look at Six Sigma

Motorola introduced the concept of Six Sigma in the late 1980s - they saw it as a vehicle to help them acheive world class performance

Six Sigma performance means you are making very few errors. It is often described as 3.4 defects per million opportunities

σ ' Sigma' links to the concepts of standard deviation

Morotola's initial focus was very manufacturing-based and it was Jack Welch at GE who helped drive the approach into service organisations

Xs and Ys: Cause and Effect

$y = f(x)$

The 'y' relates to your process outputs to customers. The 'x' relates to the inputs into your process, and the activity within the process

These 'x variables' influence the process performance, your 'y variables' and the service you provide to your customers

x variables include the volumes, type, accuracy, timeliness of things coming into your processes from suppliers and activities inside the process such as delays, backlogs, amounts of rework for example.

Undertake Improvement Activity in a Systematic Way

Define: What do you think needs improving? **Organising.**

Measure: use facts and data to understand how your processes work and perform. **Fact finding/symptoms.**

Analyse: use facts and data to determine the foot cause(s) inhibiting your performance to the customer. **Diagnosing/Causes.**

Improve: identify, select and test the most appropriate solution(s), validating your approach with data. **Prescribing/Solutions.**

Control: implement the solution and use data to help you hold the gains, and prompt new opportunities. **Implementing, sustaining, learning/benefits.**

DMAIC looks to improve existing processes. Where you don't have a process or the current process is so badly broken we use DMADV and the Lean Six Sigma Innovation and Design Journey

Other Lean Six Sigma Concepts

WOMBAT, Manage by fact and reduce variation, Involve and Equip

Tim Wood and his WOMBAT

Sometimes referred to as the 'seven wastes', there are several more in reality, including, for example, wasting the potential in people.

Transport	Inventory	Movement or Motion
Waiting	Over-production	Over-processing
Defects		

Manage by Fact and Reduce Variation

Recognising things are different, and understanding why, will enable you to know when to take action and when not to.

Your customers would almost certainly value consistent performance, so you need to understand the variation in your processes and reduce it.

Using Control Charts will enable you to interpret your data correctly and understand the process variation.

Involve and Equip the people in the Process

People need to feel able and be able to challenge & improve their processes & work methods.

People issies and the 'soft stuff' are vital elements in acheiving success.

Visual Management and daily meetings are an essential element.

DMAIC Projects

DMAIC Starts with a Problem, Choosing Projects with Care

Potential Projects could include?

- Too many enquiries that can't be resolved first time?
- Too much rework?
- Too many complaints?
- Too many things that are not in your control?
- Process steps with long processing times?
- Excessive delays between steps?
- Supply chain issues?
- Excessive checking?
- Steps with high inventory?

Some typical examples of Projects

- Sales Order Management - reductions in cycle time, and in processing errors, cost/waste reductions
- Customer information - improvements in CRM database records integrity
- Marketing - improved effectiveness of marketing / advertising campaigns
- Call Centres - improvements in call handling quality, reduction in call handling times, optimisation of staffing patterns, cost / waste reduction
- Sales Management - increase in effective time in front of customers / increase in sales volume

Benefits realised...

- 50%+ increase in sales revenue
- £6m saving in costs of customer support centres
- £m cost savings in outsourced services
- 20% increase in conversion of qualified sales leads
- significant improvements in customer and employee satisfaction scores
- Avoidance of regulatory compliance files
- 20 day reduction in complaint resolution times
- Major client contract renewals
- Elimination of one whole logistics warehouse

More Lean Six Sigma Concepts

Successful Deployment, AIM & Roles

Successful Deployment

Doing the right work	Doing the work right	Creating the right environment
Strategic Alignment	Lean Six Sigma Tools	Leadership Behaviour
Project Selection	Programme Management	Effective Sponsorship
Managing by Fact	Project Management	Mentoring, coaching
	Process Management	Effective teamwork
		Resourcing

Applying AIM to the Organisation

Assess
Organisational and Process Assessments

→

Improve & Innovate
Lean Six Sigma Improvement and Innovation

→

Maintain
Process Dashboards with Visual Management

Support Essentials Below

Business Process Framework	Leadership Commitment

Roles, Responsibilities and Summary

White Belts to Master Black Belts

Different levels of Lean Six Sigma are graded at belt levels. Here are the basics of each belt level.

White Belts	If you have read this, you are now a White Belt level in Lean Six Sigma!	Induction and Awareness.	Training varies from an hour or 2 to a full day.
Yellow Belts	Team Members and leaders.	Improvement team members.	Up to two days of training.
Green Belts	Part-time (-20%) project team leaders and team members.	Two projects a year, certified after first project completed.	Training is between 4 and 10 days.
Black Belts	Full time project team leaders.	Training is between 16 and 20 days; some go on to Design for Six Sigma training.	Minimum 4 projects each year, certified after the first 2.
Master Black Belts	The MBB is an internal consultant who will have operated as a Black Belt for at least two years.	They act as a full time coach, trainer and mentor to the Black and Green Belts	

Supporting all of this are the project sponsors or Champions!
You'll need someone to co-ordinate the whole programme, of course, and an Executive sponsor, ideally the Chief Executive.

Summary

- Lean Six Sigma is a journey that takes time
- Lean Six Sigma takes energy and commitment
- Lean six Sigma delivers results

You must...

- Focus on the customer
- Manage, improve and smooth the process flow
- Remove Non-Value-Add steps and waste
- Manage by fact and reduce variation
- Identify & understand how the work gets done - the value stream
- Involve and equip the people in the process
- Undertake improvement activity in a systematic way

What's next in your Lean Six Sigma journey?

How can we help?

Firstly, congratualtions, you have taken your first steps on the road of Lean Six Sigma! You can now officially say you are a White Belt in Lean Six Sigma. So what's next?
Come and join Martin Brenig-Jones, Author of Lean Six Sigma for Dummies, as he takes you through this guide in much more detail in our monthly webinar!

Find out more about the Webinar here

Talk to us

Would you like to talk about the use of Lean Six Sigma in your organisation and discuss your requirements with us? We provide on-site bespoke and blended training and coaching programmes. We will help you design and deliver the most appropriate Continous Improvement programme for your organisation. Click anywhere in this box for more infomation.

Online Training

Our online training combines downloadable materials and a programme of high definition video training modules on our highly accredited Business Improvement Zone. Available with BQF certification and coaching support, learn in your own time with our most flexible and cost-effective way to build capability in your organisation. Click here to learn more.

Open Training

Our Open Training courses our held in London, Birmingham and Edinburgh. Our courses are available with highly acclaimed BQF certification, which sets a benchmark for the UK for Lean Six Sigma certification. We pride ourselves with our high quality trainers, who all have vast experience in their sectors. Click anywhere in this box to find out more.

Our courses

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More information on Catalyst's Consulting Training can be found here:
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