Lean Six Sigma
A guide to business improvement and certification

...making excellence a habit™
What is Lean Six Sigma?

Lean Six Sigma is a two staged business approach to continual improvement which focuses on reducing waste and product variation from manufacturing, service or design processes. Lean refers to maximizing customer value and minimizing waste; creating more value for customers with less wasted resources. Six Sigma is the on-going effort to continually reduce process and product variation through a defined project approach.

Combined, the two approaches drive continual improvement, building a philosophy that is the foundation of all effective management systems and any business that wants to grow and progress for the future.

What are the benefits of Lean Six Sigma?

The on-going principles Lean Six Sigma can instil into your organization can result in numerous benefits to both internal and external stakeholders, including:

- Increased customer and employee satisfaction
- Reduced costs
- Retained business
- Enhanced reputation
- Increased competitive advantage
- Improved staff morale

Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is DMAIC</td>
<td>3</td>
</tr>
<tr>
<td>Lean Six Sigma training courses</td>
<td>4</td>
</tr>
<tr>
<td>Our training options</td>
<td>6</td>
</tr>
<tr>
<td>Case study</td>
<td>8</td>
</tr>
<tr>
<td>Certification requirements</td>
<td>10</td>
</tr>
</tbody>
</table>
What is DMAIC?

DMAIC is at the core of Lean Six Sigma and stands for Define, Measure, Analyse, Improve and Control.

Define  the problem, the voice of the customer and the project goals

Measure  the key aspects of the current process and collect the relevant data

Analyse  the data to investigate and verify cause-and-effect relationships. Seek out root cause of the defect under investigation

Improve  or optimize the current process based upon data analysis

Control  the future state process to ensure any deviations are corrected before they result in defects

“Our recent experience of working closely with BSI to deliver bespoke-incompany training has been excellent. The commitment and enthusiasm shown by the BSI team to understand our business and then design the training package was commendable. The trainers were knowledgeable, friendly and they adapted their delivery style according to the group. The post training support to embed the learning has also been outstanding.”

Vikas Joshi, Continuous Improvement, Coca-Cola
Our training options

Public:
Choose from one of our set dates running throughout the year at a range of first class venues across the UK.

Off the shelf:
Select a course from our Lean Six Sigma training modules and we can deliver it at your premises or at a venue of your choice.

Tailored:
We can provide tailored training based around your specific requirements, offering a cost effective, flexible solution for training larger numbers.

Exclusive to In-company:
The shorter courses below are ideal for organizations that want to understand more about Business Improvement and the benefits that a business can gain.

Structured problem solving
Get to grips with seven basic tools that will help you solve problems permanently. This two-day workshop uses a step by step approach to solving and preventing recurring problems. Learn to apply each problem solving tool effectively through a workshop based approach.

Customer focus using quality function deployment
This course helps you put the customer back into the heart of your business. And once your products, processes and services are designed and delivered with your customers in mind, you will use your time and resources more effectively to achieve customer satisfaction. This two-day course will show you effective ways to identify your customers’ needs and ways to meet these.

Failure modules and effects analysis
Identify and investigate weaknesses or potential system failures in your manufacturing processes, and find solutions. FMEA (Failure modules and effects analysis) is used to evaluate and manage product and process design risk and this course outlines a structured approach preventing recurring issues. This one-day course is designed for those involved in process, product and service design or specification.

Six Sigma Yellow Belts
The Six Sigma Yellow Belts provides a great starting point for those who will be involved in a Six Sigma initiative or who work in an organization where it's approach is being introduced.
• An introduction to Six Sigma
• Problem solving using basic tools
• The DMAIC (Define, Measure, Analyse, Improve, Control)

Processes for operational and transactional businesses
• Understanding data using basic statistics
• Ideas generation and selection
• Control plans

Statistics process control
Take action before mistakes happen with statistical process control. This technique allows you to track performance on a real-time basis – giving you the opportunity to take corrective action before system failure occurs. The two-day course is designed for anyone interested in learning to use statistics process control within their business.
Training with BSI

BSI offer a unique solution which splits training into manufacturing and service sectors. The tools which are used in Lean Six Sigma are applied differently to each industry, ensuring that the right results are achieved for you and your organization.

**Manufacturing based Lean Six Sigma Training** is used in the operational environment to reduce variation in process output. The customer is the focus of attention, and improvement activities are focused on those areas which will produce the largest benefit in terms of customer satisfaction.

**Service based Lean Six Sigma** is used to reduce variation in administrative or service related processes. A common target of transactional projects is to reduce processing time, which results in increased customer satisfaction and greatly improved efficiency.

**Why train with BSI?**

Invest in training with BSI and we will make an investment in you, ensuring you receive an on-going level of support to help you reach your goals.

- BSI split Lean Six Sigma by sector, ensuring you receive training most appropriate to your requirements
- If you have already completed training on Lean Six Sigma and just need certification, we can also provide this for you
- Our training is delivered by a team of expert Master Black Belt tutors with years of experience
- Certification is free with Green and Black Belt training – enhance your credentials with the Kitemark
- BSI are a global superbrand, the number 1 certification body in the UK and US with training recognized across 147 countries
- All of our courses can be delivered in-company, or bespoke to suit your specific requirements
- Free project mentoring support for all delegates is provided by the tutor. In most cases the benefits from the course project will deliver savings for the organisation many times in excess of the course fee
Lean Six Sigma training courses with BSI

Our Lean Six Sigma training courses are led by our team of expert tutors, who are qualified as Master Black Belts, with years of professional experience. We offer a range of courses to help you in your journey to becoming a fully qualified Six Sigma professional.

**An Introduction to Lean Six Sigma**

This one day course will provide a concise overview of the Six Sigma process and an understanding of the DMAIC process and how it can improve your business. You will gain a taster of the tools and techniques required to analyse and improve your business processes.

**Who should attend?**

- CEOs, Directors and Senior Managers
- Those responsible for evaluating or implementing continual improvement projects

**What’s included?**

8 CPD points, a certificate of attendance, course notes and a £250 voucher towards further Lean Six Sigma BSI training courses.

**Lean Practitioner**

Our four day course will teach you how to evaluate organizational readiness, identify potential benefits, prepare a business case and plan an effective deployment strategy.

**Who should attend?**

- Lean Practitioners
- Senior Managers wanting a more in depth understanding of Lean methodologies

**What’s included?**

32 CPD points, a certificate of attendance along and a set of course notes.

Interested in Lean Six Sigma training? Call +971 4 336 4917
Our 10 day programme is delivered by a Master Black Belt Tutor, in two 5 day modules with one month in between to enable you to apply your skills within your business. Green Belts will play a pivotal role in problem solving and achieving process excellence.

**What will I learn?**
- Get to grips with the history and meaning of Lean Six Sigma
- Progress your understanding to apply Lean tools including the DMAIC model
- Learn how to establish customer needs and measure performance
- Develop skills to use analytics, mathematical models and design techniques
- Gain confidence and a professional qualification

**Who should attend?**
- Those with responsibility for improving operational performance
- Those with experience of improving operational processes as part of a team
- Those with a desire to learn analytical methods to problem solving

Upon successful completion of the Green Belt course you can progress to Black Belt status. Black Belts will be responsible for leading teams of Green Belts and will manage continual improvement processes.

**What will I learn?**
- Gain thorough understanding of Lean tools and the DMAIC method
- Quickly identify areas where improvements can be made
- Be confident in leading the application of DMAIC and Lean
- Establish customer needs and measure how these are met
- Further develop skills to use analytics, mathematical models and design techniques

**Who should attend?**
- Those who wish to manage complex Lean Six Sigma projects
- Those who wish to manage teams of Green Belts
- Those with some Lean Six Sigma improvement experience

For more information and our list of training dates please visit: bsigroup.ae/training
Incident management and fleet services provider using Lean Six Sigma improves their business to the tune of 800K.

Customer needs
- To increase efficiency
- To stay ahead of the competition
- To improve employee skills
- To measure return on investment for training

Benefits
- Improved customer service and efficiency
- Cost savings and cash flow improvements totalling £800,000 on purchase and sales invoicing project
- Improved business processes

Background
FMG Support is the UK’s largest independent incident prevention and fleet management services provider, with 25 years’ experience under its belt, dealing with over 250,000 incidents a year. The company identifies and corrects the causes of fleet incidents and inefficiencies to increase employee safety and commercial advantage.

FMG Support’s long-standing customers include LeasePlan, GE Capital, DHL, Asda and a number of police constabularies. FMG also works alongside insurance partners like Zurich, QBE, Allianz and Chartis and holds the National Vehicle Recovery Manager contract for the Highways Agency, helping to ensure the safety and efficiency of the country’s strategic road network.

In March 2008, the FMG Support Board secured a multi-million pound investment from private equity firm Aberdeen Asset Management to fund further market growth and innovation.

Needs
Many organizations are looking for ways to make the most of greatly reduced training budgets. Approximately 900 managers surveyed in a report from the Chartered Institute of Personnel Development agreed that even in uncertain financial times the need for a skilled workforce remains a priority. Seven out of ten managers also insist that learning and development is still high on the agenda for them. With budgets being stretched, the sensible training option would be to choose techniques that will generate a higher return on investment, thus making the need for training easier to justify.

Lean Six Sigma training techniques were attractive to FMG Support due to its aim of increasing efficiency and staying one step ahead of its competitors. By collecting data which measures a return on investment, FMG Support is able to see in real terms how the training programme is benefitting the business. This is especially important in the service and public sector industries where there has recently been a lot of interest in Lean Six Sigma.
Organizations need to see that the training schemes they are implementing are having an impact in line with the overall business strategy and with Lean Six Sigma in particular; this is can be easily measured.

Derek Robinson, Business Process Improvement Manager at FMG, completed the five stage improvement process to becoming a certified Lean Six Sigma Black Belt over the course of one year. He is now able to pass on his new skills to other members of the organization. “Lean Six Sigma is a shared learning scheme which enables me to pass on the new skills that I have learned through the programme onto the operational team who can then infiltrate it into the rest of the organization. This ensures that the maximum number of people can benefit from the training”.

**Benefits**

Since completing the Lean Six Sigma training with BSI, Robinson has witnessed many internal and customer related benefits, most notably the cost savings and cash flow improvements totalling £800,000 from a project involving purchase and sales invoicing. Robinson was able to improve the processes in place by bringing in web-based solutions which helped to speed up the process, improve customer service and increase overall efficiency.

Robinson explains: “Several projects we have taken on since being Lean Six Sigma trained have improved significantly. The business processes have become more polished, which in turn has resulted in significant savings for both the organization and our customers. In receiving Lean Six Sigma certification from BSI, we now have something tangible to show our customers which gives them the added confidence in our ability to provide them with best possible service”.

The Lean Six Sigma training programme relates to many business aspects throughout a large number of industry sectors. Once a member of the organization becomes Lean Six Sigma Black Belt trained, they can help to instil the methodology throughout the rest of the organization. This highlights the real value that Lean Six Sigma training can provide; proving that even in the current economic downturn, gaining certification to a targeted training programme can see vast returns on investment and is by no means simply another training ‘fad’.

**BSI’s role**

Derek Robinson decided that the internationally recognised training programme from BSI Training was the most productive route to take by becoming Lean Six Sigma Black Belt trained. By gaining certification from a reputable company like BSI, Robinson also believed that adopting this training approach would give the company a competitive edge whilst enabling it to service its clients to a much higher standard.

“\(\text{I was able to use my new Lean Six Sigma skills and pass this on to the operational team who filtered it through the rest of the organization. This maximized the benefits of my learning back into the organization back into FMG.}\)"

Derek Robinson, Business Process Improvement Manager

Contact us to find out how BSI can help your business make excellence a habit.
Lean Six Sigma Certification

Lean Six Sigma certification is an opportunity to prove that the skills you have developed through completion of your training, project and examination are rewarded with a globally recognized qualification.

The cost of certification with BSI is free with our Green and Black Belt courses and will provide confidence that existing and prospective employees have achieved a high level of expertise in the use of Six Sigma.

The information below will provide further guidance on the certification process with BSI.

How can I promote and use my Lean Six Sigma qualification?
Having achieved BSI Lean Six Sigma certification you will receive a Certificate of Achievement.
You will be able to enhance your personal credentials and use the “Lean Six Sigma Certified” logo above to promote your achievement on your CV and personal stationery.

How long does certification last for?
The certificate does not have an expiry date or require recertification.
It is expected that successful delegates will continue to keep themselves updated through a continuing personal development programme.

Exam requirements
What type of questions will there be?
There will be a mixture of multiple choice and detailed answer questions including interpretation of data.

How long will the exam last?
The examination will last for 2 hours.

Will I be allowed to bring reference material?
This will be an open book examination.

Where will the exam be held?
At a BSI training venue or on your site.

How can I apply for a certification exam?
Application for the certification process and examination entry is available from BSI:
Email: bsi.me@bsigroup.com
Telephone: +971 4 336 4917
Supporting services to make the most of your Lean Six Sigma programme

We have designed a range of services to support your organization’s Lean Six Sigma programme. Our highly skilled BSI Master Black Belts will work in partnership with your business improvement professionals and management team to complement your Lean Six Sigma deployment and help you to reach your business improvement goals.

**These services include:**
- Six Sigma Programme Management
- Planning and Facilitation of Project Implementation
- Business Performance Benchmarking & Process Analysis

To find out more, please contact +971 4 336 4917