



BSI Lean Six Sigma

# LEAN SIX SIGMA **THE GUIDE**

*raising standards worldwide™*

# Making Six Sigma work

Understanding SIX SIGMA can be confusing, which is understandable since, unlike any other approach, it can truly affect every person in an organisation. It is also possible to pretend with Six Sigma and take only those pieces of the jigsaw that are appealing or appear easy. The purpose of this document is to show the whole jigsaw and how the various pieces fit together.

## What does 'Six Sigma' mean?

**Six Sigma stands for 'six standard deviations from mean' with sigma the, Greek letter used, to represent standard deviation in statistics.**

Processes that operate with "Six Sigma quality" over the short term are assumed to produce long-term defect levels below 3.4 defects per million opportunities (DPMO). Six Sigma's implicit goal is to improve all processes to that level of quality or better. However, the fact that organizations publicly declare Six Sigma programmes does not necessarily mean that they

are achieving Six Sigma levels of performance. In fact, only very few companies have achieved the Six Sigma target, and only for a few products or processes.

**Central to the operation of Six Sigma improvement are two processes. These are the Improvement Project Process and the Project Management Process.**

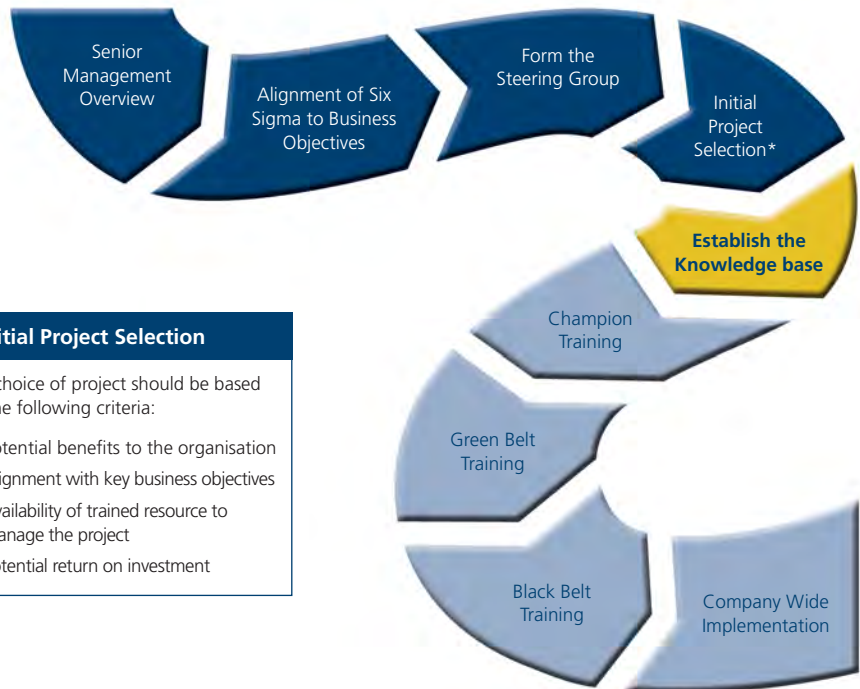
To ensure success, these two processes are mutually supportive as shown below.



# i) Project Management Process

## Setting up a Six Sigma infrastructure

For the philosophy to be effective it is important that it is led from the top with a focus on achieving business goals. Potential project areas may include: cost reduction, cycle time reduction, defect/mistake elimination and customer satisfaction improvement.



### \* Initial Project Selection

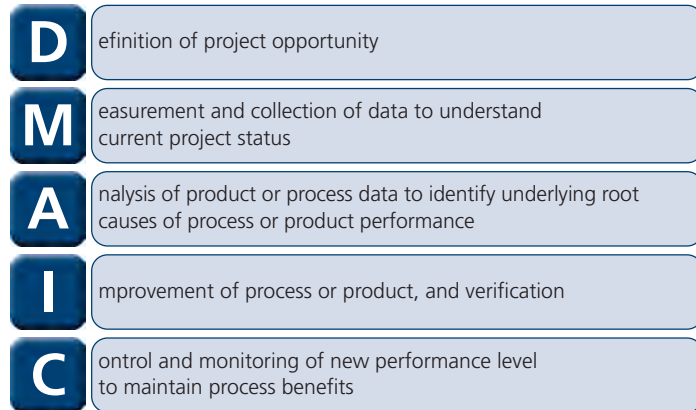
The choice of project should be based on the following criteria:

1. Potential benefits to the organisation
2. Alignment with key business objectives
3. Availability of trained resource to manage the project
4. Potential return on investment

## ii) Improvement Project Process

The project process is a rigorous phased improvement process that takes business opportunities through a series of steps to provide a measurable impact on the business.

The phases are:



The Six Sigma Toolkit shows the techniques which are used during the process.



# Select the teams and individuals to manage the Six Sigma process

A special infrastructure of individuals is required to lead and implement the Six Sigma approach.

## 1. The Steering Group

The Steering Group includes the CEO and other members of top management. They are responsible for setting up a vision for Six Sigma implementation. The initial responsibility of the Steering Group is to oversee the development and implementation of a Six Sigma plan.

## 2. Project Champion/Sponsor

Champions are responsible for Six Sigma implementation across the organisation in an integrated manner. Champions should provide managers with sufficient knowledge to be able to understand and support the programme and are responsible for communicating the following to the organisation.

## 3. Green Belts

Green Belts assist with data collection and analysis for Black Belt projects and are responsible for running projects in their own business area. Green Belts are likely to specialise in the key techniques applicable to their own work environment.

## 4. Black Belts

Black Belts lead problem-solving projects and train and coach project teams. Black Belts will become key catalysts for improvement and require, significant investment in training and development, good technical and interpersonal skills and involvement in the development of other company employees.

Black Belts and Champions ensure that this process is followed in a robust way to deliver the maximum return and improvement for the business

# Understanding Six Sigma

If you are considering introducing a Six Sigma management approach into your organisation, BSI Learning shares some thoughts on industry trends and findings along with tips and advice for businesses to get the most out of the management concept...

- **Top Management support** is essential
- Six Sigma is a **mind-set change** and can take a while to embed and take off (typically 1-2 years)
- Customers benefit as well as **yourselves** (10 x typical return on investment in first year)
- **Projects** generate the **benefits** therefore project selection is key
- **Volunteers** are better than draftees, **selective training** is better than mass-training
- Involve **all functions** in the Six Sigma approach
- Involve **customers** and **suppliers** as appropriate
- **Integrate** management process with other initiatives (or rivalries develop)
- Have a **formal and consistent implementation structure and language** across the business
- Ensure **projects** are aligned to **key business objectives** and **customer requirements**
- Apply to **existing processes first** before using it to design totally new processes



For further information about how Six Sigma can work for your organisation, please call **0845 086 9000** or visit [www.bsigroup.co.uk/learning](http://www.bsigroup.co.uk/learning)



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