

# Structured Approaches to Problem Solving



Lean Thinking



Six Sigma

## What are they?

Structured Approaches to Problem Solving are step by step, fact-based processes to identify, understand and resolve situations that are preventing performance improvement.

## What are they used for?

They are used by teams, ranging from natural work groups to specially convened project experts, to manage performance improvement activity. They provide a context in which formal problem solving tools are used.

## What are the benefits?

Using a Structured Approach to Problem Solving optimises the time and resources spent on improvement activities. They leverage the knowledge and experience of the team involved, build ownership of the outcomes amongst the stakeholders and generate more sustainable solutions.

## How do they work?

As well as using the Structured Approaches to Problem Solving we also develop problem solving in teams by teaching these approaches and tools. This means they can then be deployed according to the nature of the problem, the scope of the team and resources available.

Problem solving approaches include:

### Plan, Do, Check, Act

- A straightforward process, incorporating factual and intuitive information.
- Usually used by a natural work group, initially led by a facilitator until the group gains confidence and capability.
- Used to address a broad range of day-to-day problems such as getting a process right or removing surface waste.
- Will involve the use of some basic tools (e.g. brainstorming, root cause analysis, cost benefit case etc.)

### Define, Measure, Analyse, Improve, Control, Transfer

- A phased, rigorous and quantitative improvement process that incorporates monitoring and review mechanisms.
- Usually project based, led by senior management champions and involving dedicated full time and part time staff, some of whom will be formally certified practitioners.
- Used to reduce variation in processes, so works best with repeatable processes that have a high degree of frequency and lend themselves to statistical analysis.
- May result in step change to end-to-end processes.
- Uses both basic and more advanced data analysis tools at each phase of the process.