

TOYOTA 8 STEP PROBLEM SOLVING
Two-day workshop

1. Introduction

Toyota 8 step problem solving training will help all problem-solvers to approach projects with confidence. The 8-step process is highly interactive and collaborative in nature. The objective is to enable the problem solver to 'find a problem, solve a problem and prevent a problem from coming back'. Participants work in teams and concentrate on using lean approaches such as identifying the 7 wastes, and implementing error proofing and standard work to resolve process issues.

The 8 steps are written up or drawn on an A3 size sheet of paper. This encourages brevity and facilitates sharing of information amongst all stakeholders.

2. Agenda

Item	Format
<p>Day 1</p> <p>Introductions</p> <p>Lean principles & A3 problem solving</p> <p>8 step problem solving and A3 example</p> <p>Case study video of process problem</p> <p> Step 1 & 2 - Clarify & breakdown the problem</p> <p> Steps 3 - Set target</p> <p>Review of process problem in the organisation</p>	<p>PowerPoint</p> <p>A3 paper-based review</p> <p>Video</p> <p>Group exercises</p> <p>Gemba walk & A3 on process problem</p>
<p>Day 2</p> <p> Steps 4 & 5- analyse root cause & develop countermeasures</p> <p> Steps 6, 7 – Implement & monitor results</p> <p> Step 8 – Standardise</p> <p>Review of team A3s and approaches to process problem.</p> <p>Review of process problem in the organisation</p> <p>Next steps & close</p>	<p>Group exercise & A3 on process problem</p> <p>Presentation</p> <p>Discussion</p>

The workshops are highly interactive in nature and case study based. A simple fun process will be shown on video at the start of the one-day workshop, and attendees will work in 2 teams, using the Toyota eight step problem solving methodology, to resolve the process problem. Attendees will also relate the techniques to a real-life process problem in the organisation. The management team, attendees and the course facilitators will select the problems to be reviewed at the workshop, in advance.

3. Learning objectives

At the end of the workshops the attendees will

- have a common understanding of lean principles;
- be enabled to use the formal A3 problem solving approach to improve process performance;
- understand the value of cross-functional teamwork, and
- be enthusiastic to use the skills they've learned and eager apply them in the workplace.

Attendees will complete a case study A3 during the workshop. They will also partially complete an A3 on one of the organisation's process problem. This project will be completed after the workshop.

4. Who should Attend?

All employees in a company undergoing lean transformation should attend 8 step problem solving. The learning programme is usually spread out over a 2-year time period. New employees undergo 8 step problem solving training within 6 months of joining the company.

5. Contact

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APPENDIX: TOYOTA 8 STEP PROBLEM SOLVING STEPS

Derived from Ford's 8D problem solving process, the Toyota 8 step problem solving approach will help all problem solvers to approach projects with a new-found confidence. The 8-step process is highly interactive and collaborative in nature. The objective is to enable the problem solver to 'find a problem, solve a problem and prevent a problem from coming back'. Below is a summary of the activities in the 8-step approach.

The 8 steps are written up on an A3 size sheet of paper. This encourages brevity and facilitates sharing of information amongst all stakeholders.

Step and objective	Tools used
Step 1: Clarify the Problem	
Why am I looking at this problem? What is the problem? Who is interested in the problem? What benefit does solving this problem have for me? How does it help to address the goals of the business?	Voice of the customer Stakeholder analysis Is/is not analysis
Step 2: Breakdown the Problem	
What is the size of the problem? What data do I have? What are the component parts of this problem? How much will I address at this point?	SIPOC, spaghetti mapping, data collection, data graphing
Step 3: Set the Target.	
What outcome do I want? Visualise the desired results. Using the data, set a measurable and realistic goal.	Goal setting Agreement with stakeholders on outcome
Step 4: Analyse the Root Cause	
Clarify the root cause. Consider as many potential cause factors as possible.	Interviews, 5 whys, cause and effects analysis
Step 5: Develop Countermeasures	
List as many potential countermeasures as possible. Identify an effective countermeasure that directly addresses the root cause.	Brainstorming, 5S, quick changeover, total productive maintenance Team discussion
Step 6: Pick a Countermeasure and implement	
Select the most practical and effective countermeasure. Create a clear and detailed action plan. Implement quickly.	Action plan Gantt chart
Step 7: Monitor Results & Process	
Monitor progress and report findings to stakeholders. It may require more than one attempt to get the desired result. Mistakes are an important part of the learning process.	Run chart, control chart
Step 8: Standardise & Share Success	
Document the new process and set as new standard. Share the new standard through Horizontal deployment. Reflect and celebrate success. Start the next Improvement!	Standard work