A3 Practical Problem Solving

Principle Document

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A3 Problem Solving

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Problem Solving has four defence layers for protecting the margin and the company’s reputation.

**3Cs  First Line of Defence** - rapid problem solving at all levels of the business. An agility to escalate the problem to the appropriate level but, more importantly, a method for engaging all employees in problem solving.


**Storyboard  Third Line of Defence** - a method for dealing with cross functional, complex problems

**Six Sigma  Fourth Line of Defence** - a methodology for complex, chronic problems
Goal

Everyone involved in problem solving using a standard method to embed the thinking way.

Purpose of A3 PPS

- Enable teams to work on and solve the root causes of problems
- Provide leaders with the opportunity to coach their teams in problem solving
- Develop the thinking way in all team members

Benefits

- Practical form of mentorship and knowledge transfer for values, principles and problem solving
- Common language for problem solving
- Sharing experience and countermeasures through PPS is rapid and promotes best practice

Role of a leader

- Protect the margin through problem solving to root cause
- Develop and embed a culture of employee engagement and empowerment
- Develop the PDCA thinking way in all employees
- Support the common language of A3 PPS problem solving
- Ensure the A3 PPS is functioning as part of the defined operating system
- Ensure the 5 Guiding Principles are demonstrated throughout each step of the process

**Process**

A3 PPS enables problem solvers to capture all the relevant information on one page. It is purposefully designed to ensure the approach is concise. If it cannot be conveyed on one page of A3 the solution is likely to be unclear.

The A3 PPS is deployed when the direct cause is unclear or a repeat concern has occurred with a 3C.

The A3 PPS follows the PDCA (Plan-Do-Check-Act) method.

**Eight Steps to A3 PPS**

1. Initial Problem Perception
2. Clarify the Problem
3. Locate the Point of Cause
4. Containment
5. Cause Analysis
6. Cause Investigation
7. Countermeasures
8. Share
**Initial Problem Perception**

A statement which describes the impact (specific and quantifiable) on deviation from a set target.

**Clarify the Problem**

Identify the main contributing factor to the deviation from target.

Check the existing standard for what should have happened. What is the standard? Was it followed? Is it adequate?

Agree the target condition in relation to the initial problem perception.
Locate the Point of Cause

Validation of where the problem is occurring in the sequence of the process.

Go Look See

Containment

A temporary measure to contain the problem at source and stabilise the process.

Maintain the flow of the process and protect the margin.

Cause Analysis

Potential direct causes categorised and ranked.

Likely direct causes identified
The direct cause is identified and proven with data and testing of the hypothesis.

The root cause is identified and validated with data. Verified with 5 Why process and validated and agreement that the target set in Step 2 will be achieved.

Countermeasures

Countermeasures are deployed - physical changes (a permanent fix) to the process.

This leads to the creation of a new standard or the modification of an existing standard.

Share

Share the outcomes across the organisation where applicable.

Celebrate success with the teams.

Review problem solving capability in the team.
Lesson learned shared with the organisation.

Review the target is being achieved and countermeasures are effective. Is the margin being protected?
Contact Us

This document was written by Mark Radley with the support of Chris Jones, Roger Bent, Gary Sermon, Mike Slinger, Andrew Hemingway and Tim King.

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