Operational excellence

Problem Solving: 8D, A3, 5 Whys, Ishikawa

Two days to take a problem all the way to its root cause and close it with proof of effectiveness. Factual description with the 5W2H and is / is not analysis, cause finding with Ishikawa and 5 whys verified on the shop floor, corrective actions, then formalisation in an 8D or A3 report. Exercises use your own customer complaints, non-conformities and recurring breakdowns.

Duration : 2 days

Objectives

1. Describe a problem factually with the 5W2H and is / is not analysis
2. Contain the problem quickly to protect the customer
3. Identify the root cause with Ishikawa and 5 whys, then verify it on the shop floor
4. Distinguish the occurrence cause from the non-detection cause
5. Define corrective actions and demonstrate their effectiveness before closing
6. Write an 8D or A3 report that a customer or an auditor can follow

Programme

Day 1 — morning

• Why problems come back: actions on symptoms, assumed causes, no verification

• The eight disciplines of 8D and the logic of A3: two formats, one line of reasoning

• Forming the team and describing the problem: 5W2H, data, photos, parts

• Is / is not analysis: where, when, how much, on what the problem appears and does not appear

Day 1 — afternoon

• Containment actions: sorting, blocking, informing the customer, period of validity

• Ishikawa: building the diagram from facts, not opinions

• 5 whys: following the chain to a cause you can act on

• Exercise: description and Ishikawa of a real complaint from your site

Day 2 — morning

• Verifying causes on the shop floor: trials, measurements, reproducing the defect

• Occurrence cause and non-detection cause: two analyses, two action plans

• Permanent corrective actions, error-proofing, updating standards and the FMEA

• Effectiveness check: indicator, observation period, closure criterion

Day 2 — afternoon (workshop)

• Workshop: a complete 8D report on a case from your site

• Summary of the same case on a single A3 sheet

• Cross-review of reports between sub-groups, using the reading grid of a demanding customer

• Capitalising: lessons learned, extension to similar products and lines

• Knowledge test on the 8D approach and root cause tools

Teaching methods

• Real cases brought by the participants: complaints, internal non-conformities, recurring breakdowns
• Cause finding verified on the shop floor or on parts, not only in the classroom
• Cross-review of 8D reports between sub-groups
• 8D and A3 report templates handed to the participants
• Mid-course quiz and final test

Assessment and documents

Mid-course quiz and knowledge test, end-of-course evaluation at D+1. Numbered training certificate verifiable online for each participant; the company receives the training report and the 8D and A3 reports written in the workshop.

Bilingual materials for every participant; each classroom course comes with its digital twin on OmniLearn.

Good to know

To react within the hour to defects in production, see « QRQC: Rapid Response to Quality Problems ». For problems linked to variation, which call for data and statistical tests, the DMAIC approach is taught in « Lean Six Sigma Green Belt ».

Practical information

Duration	2 days
Group size	Groups of 6 to 12 participants, in-company
Format	In-company, face to face on your site
Language	French, Darija or English; bilingual materials
Funding	OFPPT special training contracts (TFP), GIAC, Maroc PME: we prepare the applications with you, at no extra cost.
Programme customisation	Programme adapted to your procedures, your equipment and your audience

Frequently asked questions

When should we use an 8D rather than an A3?
The 8D is often requested by customers, particularly in automotive, to answer a complaint. The A3 is used more internally, to share a problem and its resolution on a single page. The reasoning is the same; the course practises both on the same case.

Can we work on our own complaints?
Yes, and we recommend it. Before the session we ask you for two or three recent cases with their data; they serve as the common thread for the exercises and the day 2 workshop.

What is the difference with a Green Belt project?
The 8D deals with problems whose cause can be found by observation and verification on the shop floor. When the problem comes from the variation of a process and calls for statistical analysis, the Green Belt's DMAIC approach is more suitable.

Who should attend?
The people who lead or write the analyses: quality, production, maintenance and, depending on the case, methods or logistics. Mixing these functions reproduces the make-up of a real 8D team.