Soft skills

Solving Complex Problems with Method

One day to deal with problems that keep coming back despite the actions already taken: multiple causes, several departments involved, incomplete data. Participants learn to state the problem before looking for the solution, break it down, check causes against facts, then choose and follow up actions, applying the approach to a real problem at their site.

Duration : 1 day

Objectives

1. Distinguish a simple, complicated and complex problem, and the approach suited to each
2. Describe a problem factually: what, where, when, how much, since when
3. Break a complex problem down into manageable sub-problems
4. Look for causes with suitable tools and verify them with data or on the ground
5. Choose solutions, organise their implementation and check their effectiveness

Programme

Day 1 — morning

• Simple, complicated, complex: why the same method does not fit everywhere

• Stating the problem: gap against the reference, factual description, scope

• Breaking down: problem tree, separating symptoms from causes

• Looking for causes: cause-and-effect diagram, "5 whys", comparing what works with what does not

Day 1 — afternoon (workshop)

• Verifying causes: data, observation on the ground, trial

• Problems with several causes and several departments: loops and delayed effects

• Choosing solutions by expected effect, effort and risk; action plan and verification indicator

• Workshop: a real problem from your site taken from description to planned verification, on an A3 sheet

• Knowledge test and presentation of the A3 sheets

Teaching methods

• Real problems brought by participants: recurring scrap, late deliveries, repeated breakdowns, customer complaints

• Sub-group work bringing several functions together

• Observation on the ground or analysis of real data when the session takes place on site

• A3 problem-solving sheet handed out and used in the workshop

• Presentation of the work to the group and feedback from the trainer

Assessment and documents

Knowledge test and presentation of the A3 sheet produced in the workshop, with a follow-up evaluation at D+1. Numbered training certificate, verifiable online, for each participant; the company receives the training report and the analyses carried out.

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

Good to know

To sharpen the examination of data and arguments, see "Reasoning Rigorously: Critical Thinking and Analysis". To find less obvious solutions once the causes are established, "Generating New Ideas: Team Creativity" complements this day.

Practical information

Duration	1 day
Audience	Managers, engineers, technicians, process owners, continuous improvement facilitators
Prerequisites	No prerequisites
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

How does it differ from handling non-conformities?
Handling non-conformities deals with a defined deviation, often within a standards framework. This day concentrates on problems that resist: multiple causes, several departments, incomplete data, and the way of reasoning that lets you untangle them.

Do I need to bring a problem?
Yes. Each sub-group works on a real problem of the company, chosen before the session with the training manager; the available data is gathered in advance.

Do participants have to be from the same department?
It is not necessary and often not desirable: complex problems cut across departments. A group mixing production, maintenance, quality and logistics sees more causes.

Can we be supported after the training?
Yes. ACG can lead or supervise an improvement project using the Lean Six Sigma DMAIC approach, as part of its diagnostic and transformation work, on quotation.