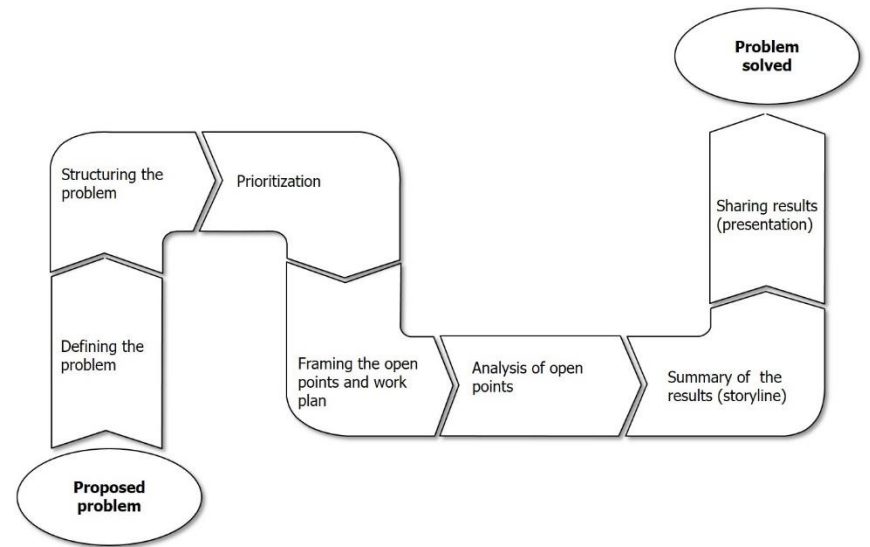


Problem Solving & Effective Communication

Key Frameworks



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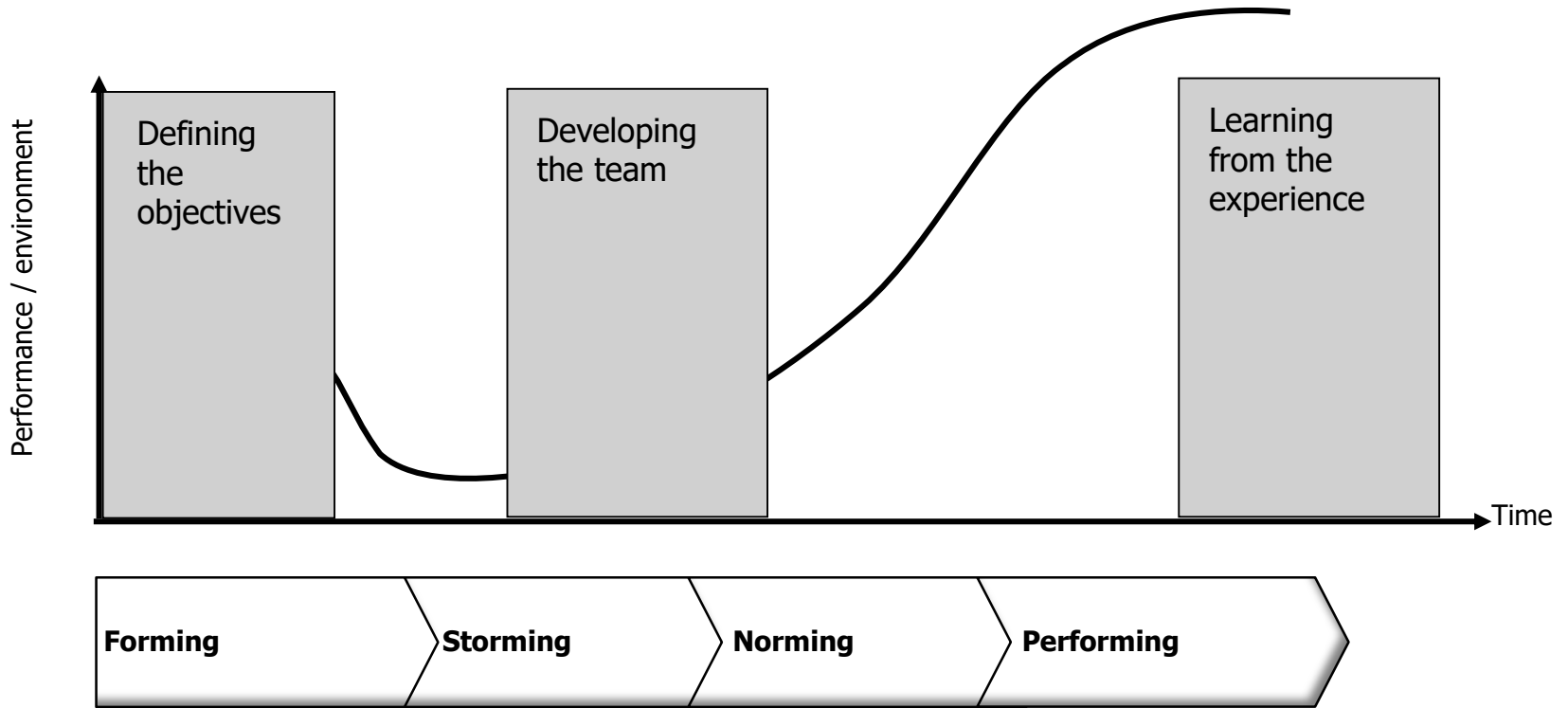
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Team dynamics

The team goes through several phases before becoming steady (Tuckman's model): learning teamwork helps to speed up progress to the "Performing" phase



Main characteristics of each phase

- Team members get to know each other
- Independent behaviour of the subjects
- Rules and responsibilities are not clear

- People open up and compare themselves to the others
- Goals and rules become clearer

- A consensus is reached
- A process and work style is developed
- Rules and responsibilities are clear

- The team is aware of what it has to do, and is focused on its goals
- The Team is autonomous and task-oriented

Useful tools for teamwork – Team chart

Successful teams clarify Objectives, Roles, Working rules in advance

- What are our objectives?
 - Team objectives
 - Individual objectives – personal and professional

SIMPLIFIED

- What do we want to learn by working together?
- In which case can we consider our work to be successful?
- Which obstacles will we have to overcome?

Objectives

- Which are the strengths and weaknesses of our team?
- How can we learn from each other?
- How can we support each other better ?
- Which roles fixed in advance do we need? (e.g., timing control, work coordination, moderator, secretary)
- How will we assign those roles?

Roles

Rules

- How do we have to operate with problem solving in order to make it effective?
- How will we make decisions?
- How can we share feedback?
- How will we manage conflicts?
- How can we optimize breaks?

Useful tools for teamwork – Brainstorming

- Brainstorming is a technique for generating ideas
- Objective:
 - To make choices quickly;
 - To stimulate the whole team;
 - To rid the team of negative thoughts;
 - To develop creativity on a given issue
- Process:
 - The team meeting is made free of pressure
 - Someone is in charge of collecting ideas
 - A subject is defined (and must be respected)
 - Time to think is given
 - Ideas are proposed and collected

Concept rules

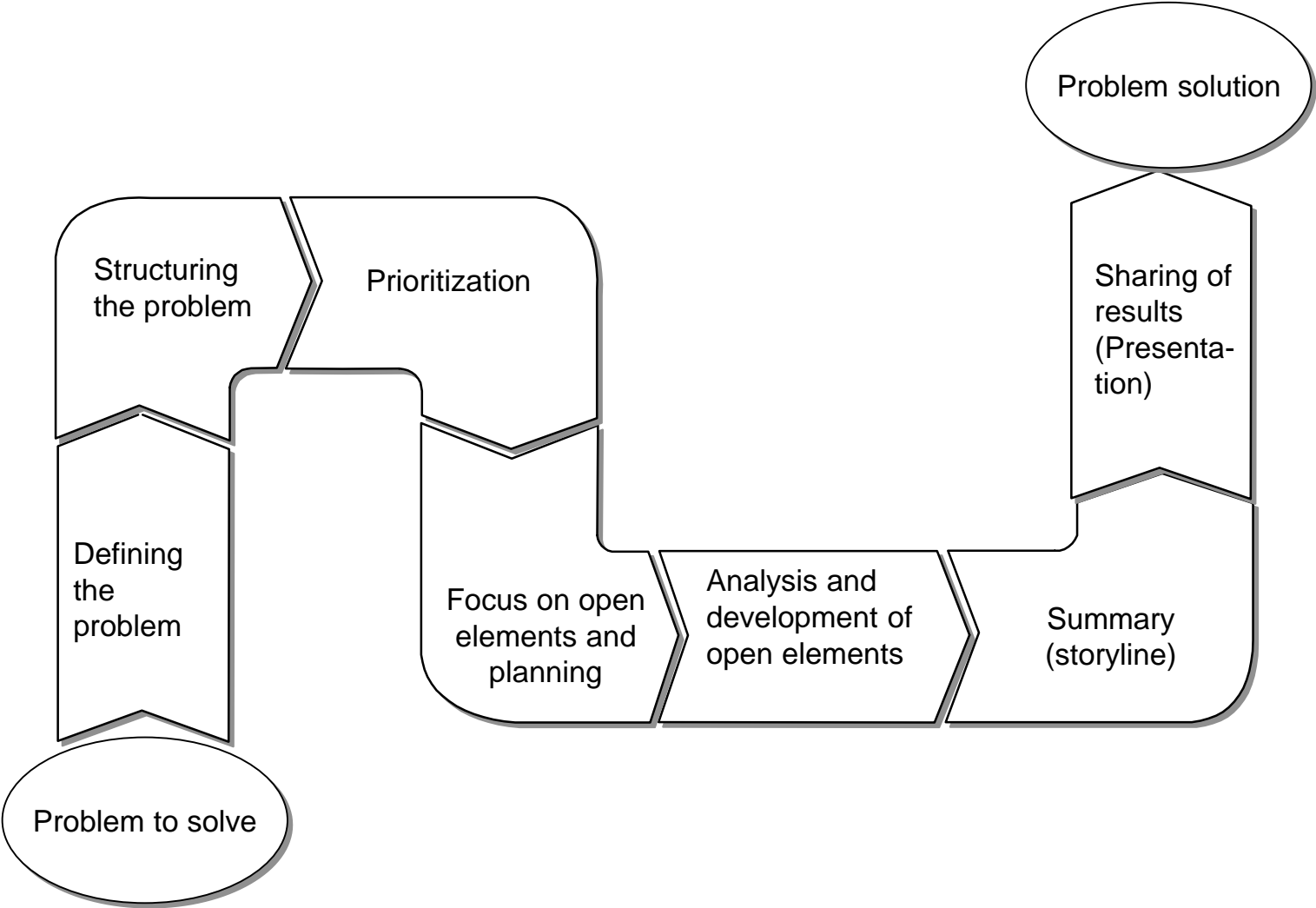
- No criticism or judgement
- Out-of-the-box thinking
- Objective: a lot of ideas in short time (quantity instead of quality)
- Make use of others' ideas

Practical rules

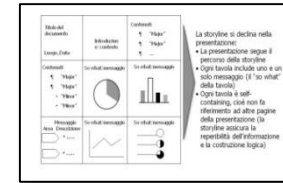
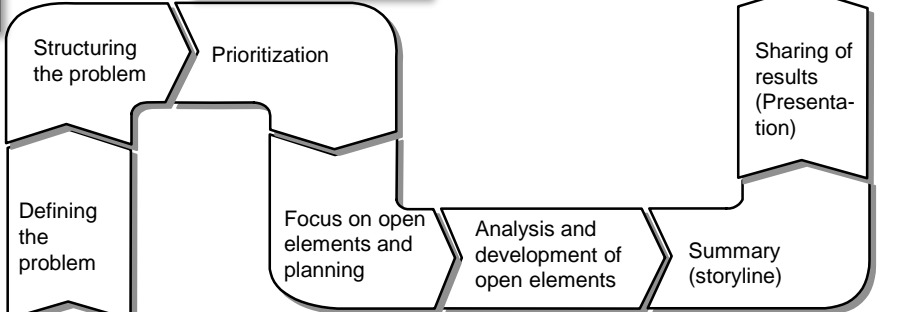
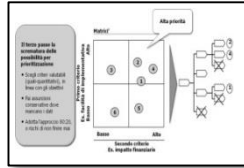
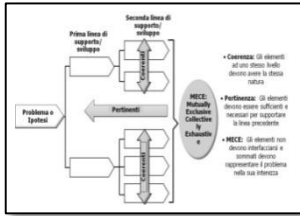
- Make proposals in turn (if someone doesn't take part)
- One idea for each turn (it is possible to jump)
- Do not defend an idea, only make proposals

Problem solving: Problem solving process

The Problem Solving process

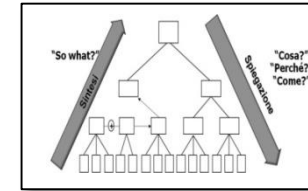
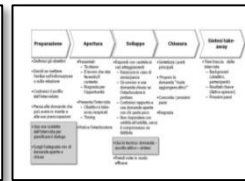
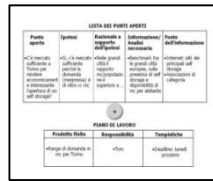


Key take aways of each argument

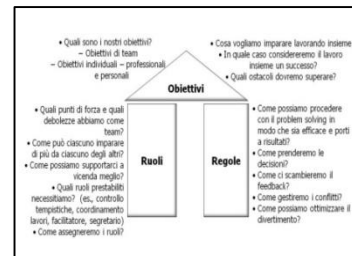
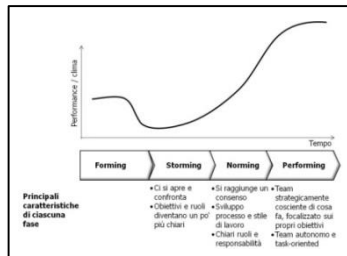


Specific problem to solve	
1 Context	3 Decision makers
	4 Other people/entities (stakeholders) involved
2 Criteria of success	5 Space for solution and limitations

Problem to solve



Team work:



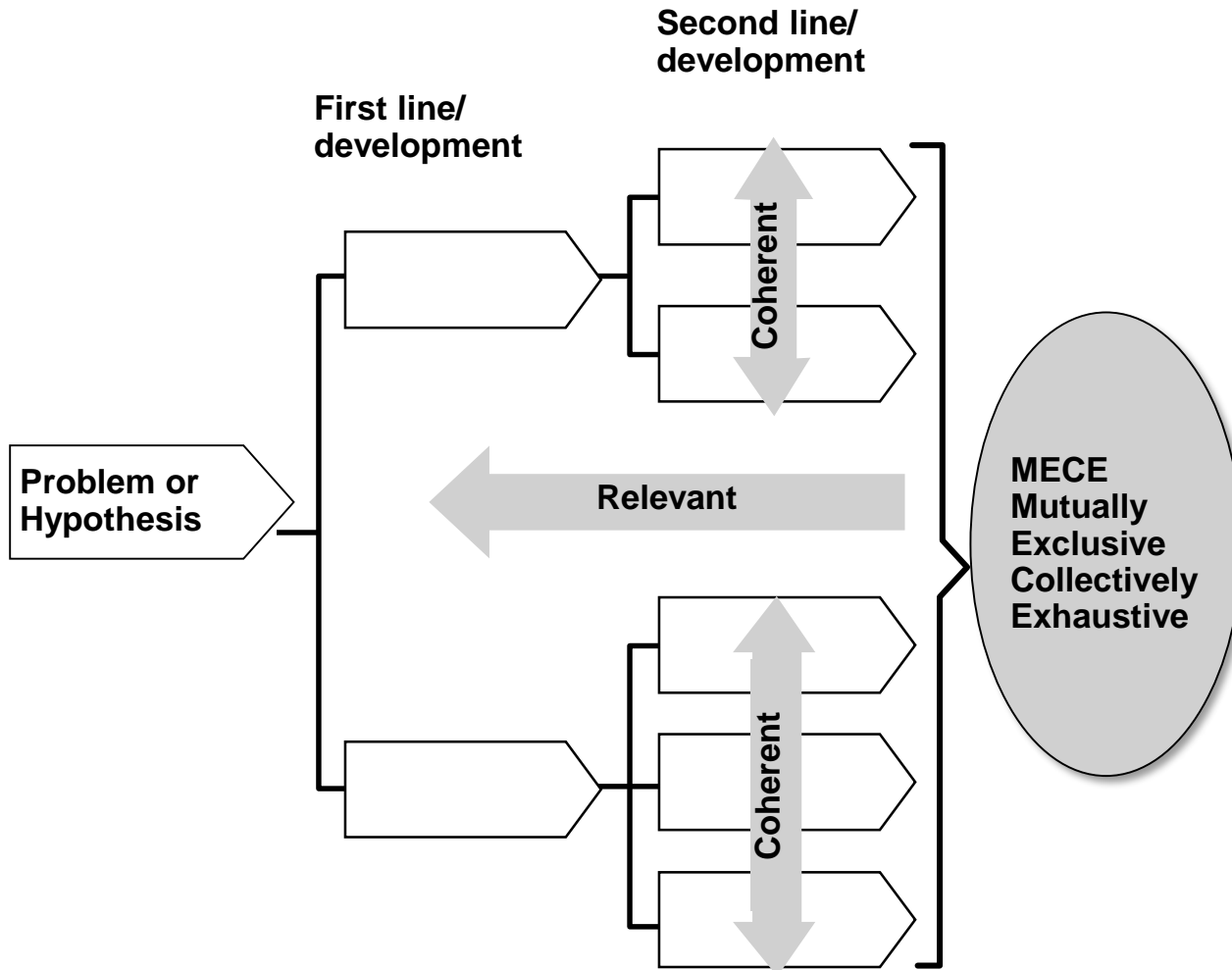
Problem solving: The problem definition

The “contract” for the definition of the problem – it is used to clarify to yourself and share with others the definition of the problem, in order to focus the efforts where they are needed

Specific problem to solve	
1 Context	3 Decision makers
2 Criteria of success	4 Other people/entities (stakeholders) involved
	5 Space for solution and limitations

Problem solving: Logic trees

The logic trees must be built with coherence and attention

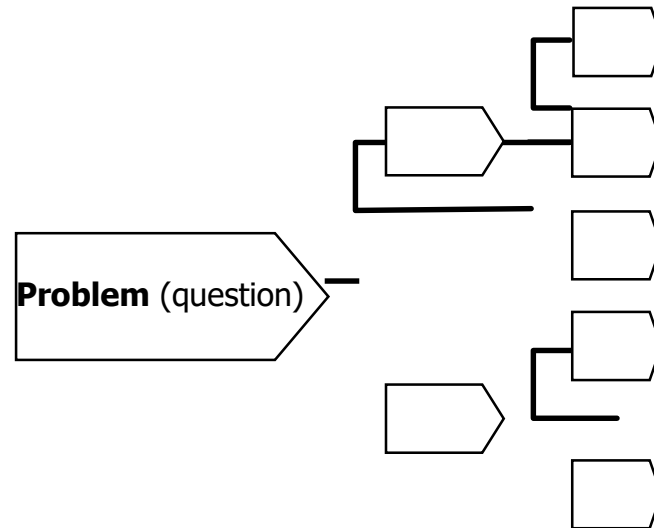


- **Coherence:** Elements of the same level must have the same nature
- **Relevance:** The elements must be sufficient and necessary to support the preceding level
- **MECE:** The elements must be independent and together they must represent the whole problem

Problem structuring – two types of logic trees can help the structuring of the problem

The second step consists in structuring the problem with a logic tree

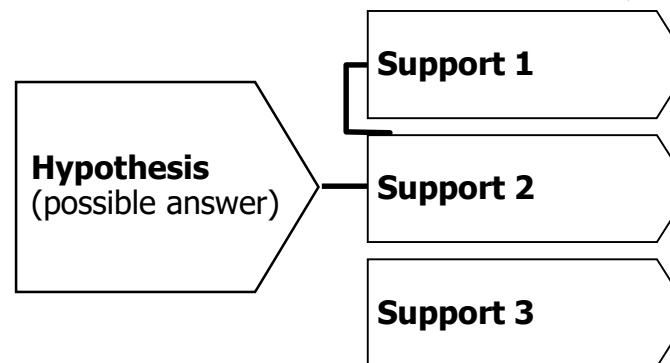
- “MECE” (see next slide)
- Coherent
- Focused on the drivers of the problem
- Appropriate
- Creative



Problem tree

- It allows us to break the problem down
- It must be used when the problem is completely new and we don't have any hypotheses for a solution
- It helps us to develop a hypothesis

“How” or “What?”



Hypothesis-driven tree

- It allows us to analyze a hypothesis by identifying supporting arguments
- It can be used when the experience developed on the problem allows us to propose a solution that only needs to be verified

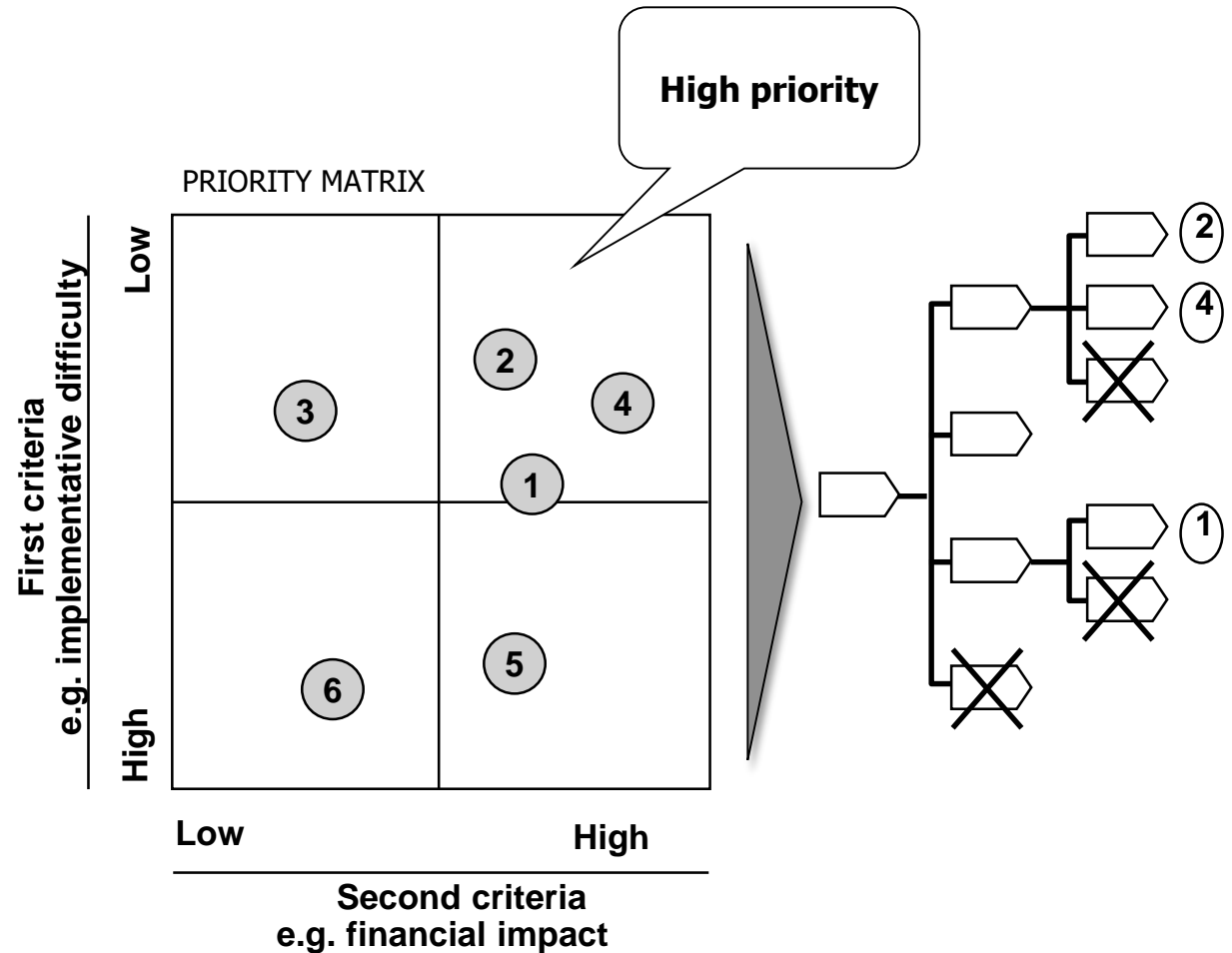
“Why?”

Problem solving: Prioritization

Prioritization – In order to understand which options need to be evaluated in detail, you need to compare/classify all of them according to the objectives

The third step: reducing to a few possibilities in order to prioritize

- Choose valuable criteria (both qualitative and quantitative), according to the objectives
- Make conservative assumptions, where data is missing
- Use the 80:20 approach, otherwise you'll never end!



To prioritize means to analyse the available data, which often is not exhaustive, in order to determine which are the areas that need to be analysed in detail

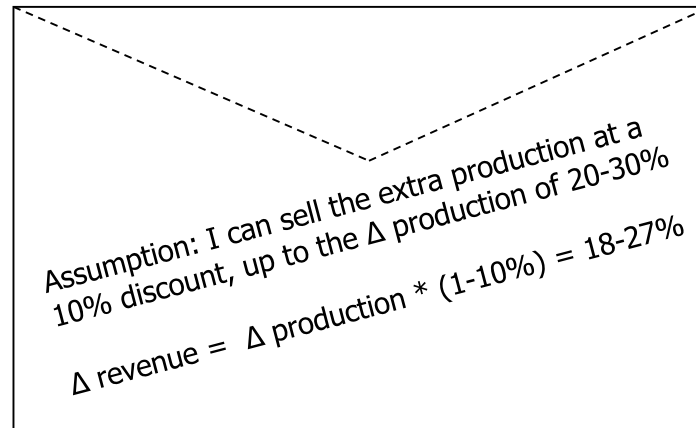
Data is generally incomplete at the moment of the first analysis => you must prioritise by

1. Back-of-the-envelope calculations

- Evaluation of the scale
- Conservative assumptions on missing data
- Use of ranges

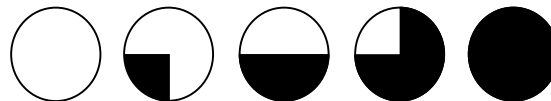
2. Scales for qualitative evaluation (in order to classify)

1. BACK-OF-THE-ENVELOPE CALCULATION



2. SCALES FOR QUALITATIVE EVALUATIONS

“High” – “Medium” – “Low”



- **Prioritization provides a scale order of size and importance**, and not the expected impact or risk value, that needs further analysis
- Prioritization is a critical aspect of the problem solving process, and requires maximum accuracy
 - It tests the outcome using various assumptions (data is missing)
 - It validates the qualitative evaluation with supporting arguments

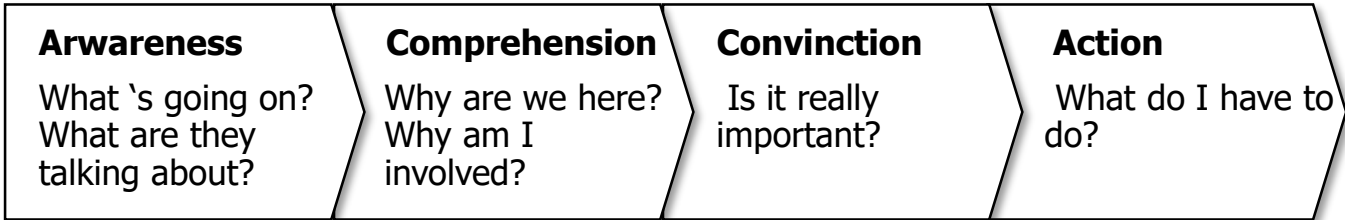
Open Issue Analysis and workplan

Set the presentation considering the level of knowledge of the audience and depending on their commitment

Key question to be considered:

- Where have I arrived?
- What are they thinking? What are their feelings?
- Which message or action can make them go on?
- How do I know if they have reached the next stage?

Stage
Question the audience



Communication shaped in each stage

Describe the situation/problem

- Give data, information, examples
- Use benchmarks

Give an hypothesis for a solution

- Point out your recommendation
- Point out a different solution
- Compare the options and take off those not available
- Show the ratio

Involve the others

- Remark benefits
- Explain how obstacles may be overcome
- Use different way to influence (eg. Link between values)
- Offer incentives

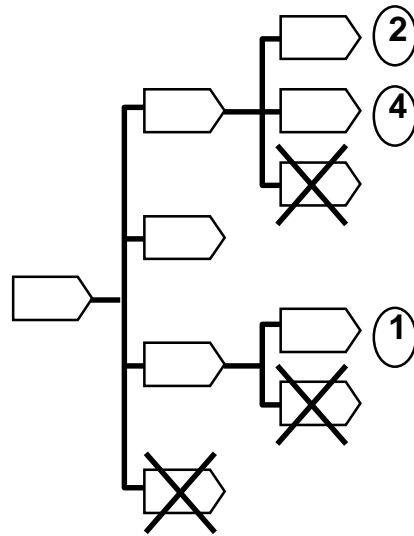
Guide to the action

- Show in detail next steps
- Communicate trust and enthusiasm

Focus on open elements – It's important to plan the analysis well because the solution of open points is the most difficult and time-consuming

The fourth step analyzes in detail the various solutions to the issues

- Identify the information needed and its sources
- Ask for the help of an expert
- Keep an 80:20 approach to respect deadlines



Analysis Workplan

Mon	Tue	Wed	Thu	Fri

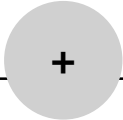
- Branch 1 – you can do it, this result is expected, the guidelines to carry it out are...
- Branch 2 - ...
- Branch 3 - ...

Open elements analysis

The analysis that you have to make must be accurate, i.e. “List of open elements” must match the “Workplan”

LIST OF OPEN ELEMENTS

Open element	Hypothesis	Rationale to support hypothesis	Information/ Analysis needed	Sources of information
Open element or question without answer – requires a yes or no answer and the answer generates a specific action	Statement that represents the probable solution to the open issue; it includes the possibility of answering yes/no	Facts that support hypothesis (necessary and sufficient conditions)	Analysis that must be conducted in order to confirm or deny the hypothesis and solve the open element	Person/place/means from which we expect to receive information

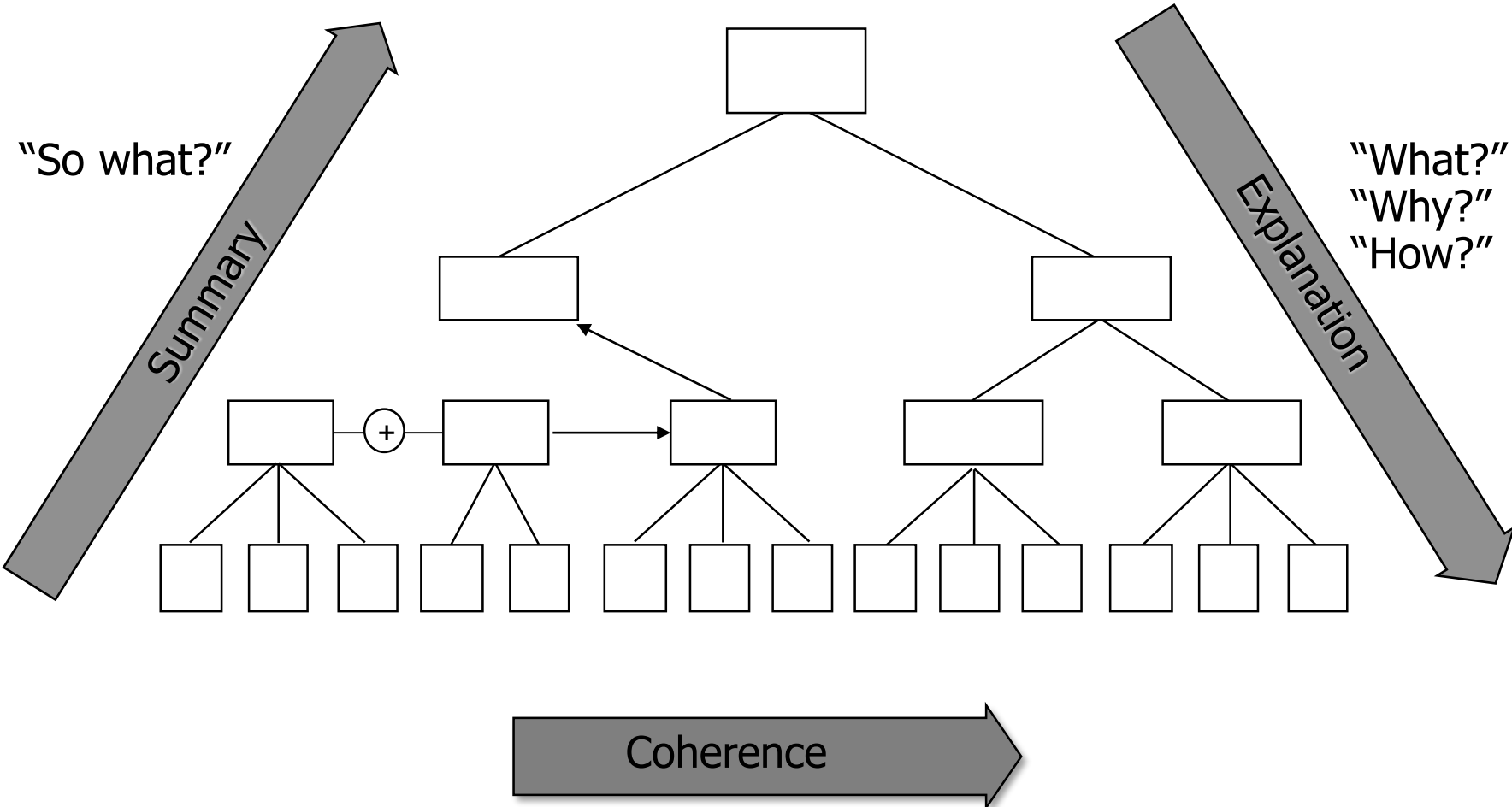


WORKPLAN

End product	Responsibility	Timing
Expected output of the analysis	Person responsible for the suitable analysis	Deadline for the delivery of the analysis

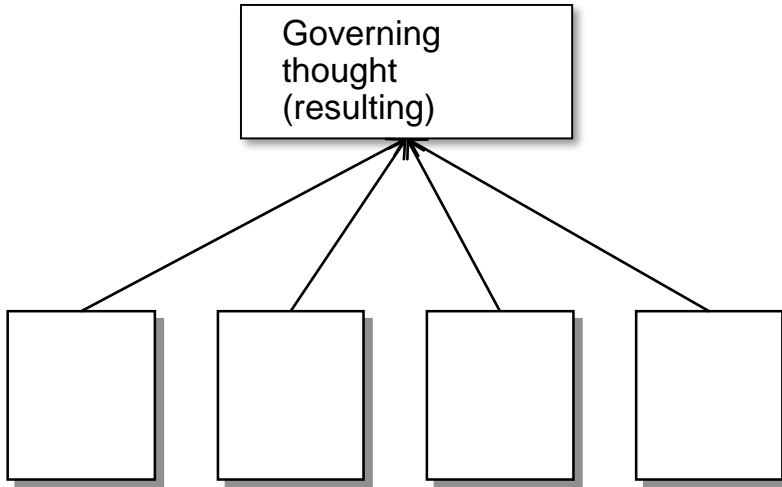
**From Problem solving to communication:
From synthesize to storyline**

The basic principle of a good and clear presentation is the pyramid structure



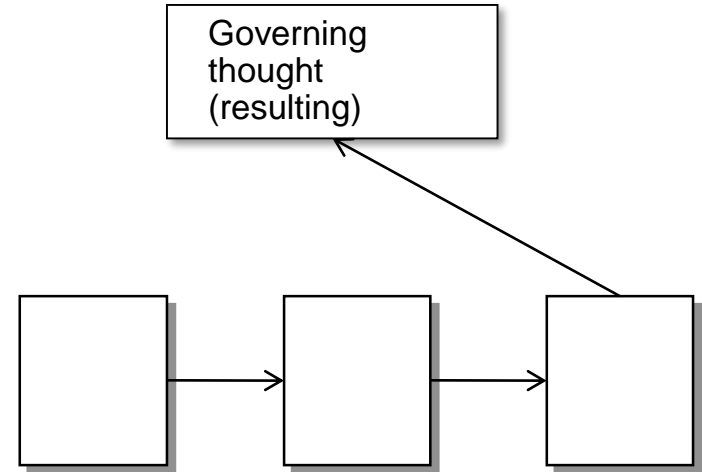
The pyramid structure can be built using two basic structures

Grouping structure



- Governing thought supported by separated but coherent ideas (i.e. reasons, actions)
- Groups of ideas that are akin or belong to same category
- No horizontal link among ideas that belong to same group (unless one clearly defines chronological order, order of importance, etc.)
- Direct link with governing thought
- To be used with a receptive audience

Deductive structure



- Governing thought supported by a progression of ideas (assertion, comments, implication)
- To be used with a reluctant audience

Communication: Audience analysis

Analyze the audience

1. Nature of relationship

Formal

Informal

2. General attitude of audience versus us

Friendly

Neutral

Hostile

Unknown

3. Preparation/attitude of audience towards what is being communicated

A. Knowledge of topic

Good

Limited

None

B. Level of interest

Very interested

Partly interested

Not interested at all

C. Tendency to reach an agreement

Highly probable

Some resistance

Determined not to reach
any agreement

Communication: Strategies for the meeting

How to manage a meeting –“guide to the presentation”

Aims of the meeting

Objectives: _____

Expected Products/decisions: _____

Audience

Participant (name & role)	Information about the participant (opinions, history)	Possible questions	Implications (what to say and do and what not to say and do)

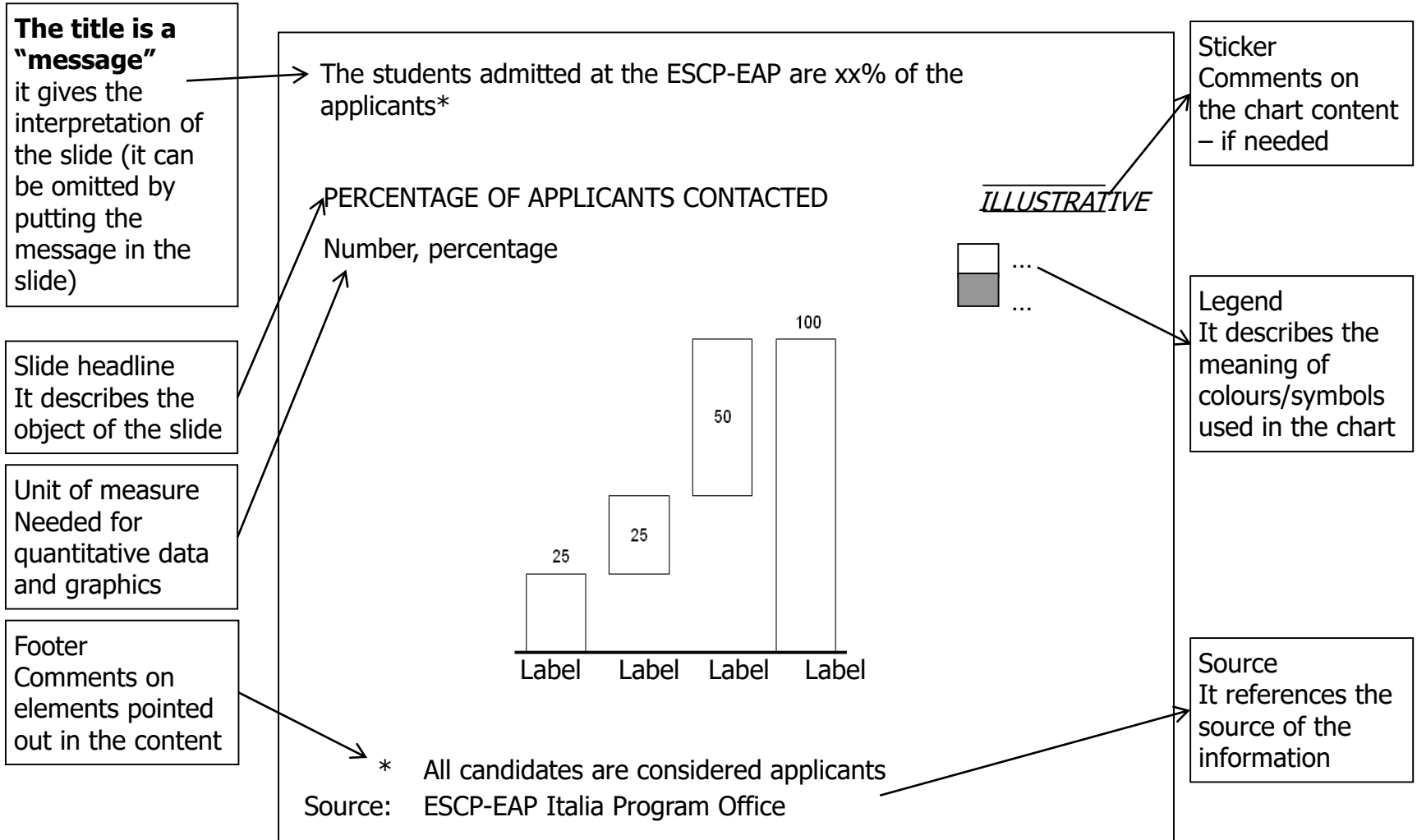
Preparation of material (available spaces, material to be projected, copies of some documents...)

Agenda and time

Hour	Time (minutes)	What? (content)	How? (process)

Communication: Slides' structure

Basic structure of slides - ESCP-EAP Italia standard



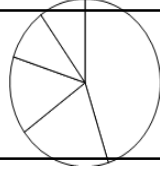


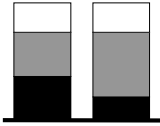
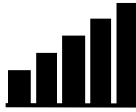
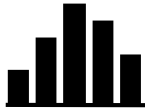
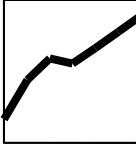
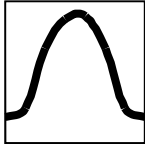
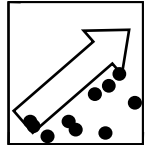
Each graphic is suggested for a particular type of comparison

COMPARISON FEATURES

1. Analyse data and determine the proper message

2. Express through comparison

3. Choose the chart feature

		COMPARISON FEATURES				
		Element	Ranking	Timing series	Distribution of frequency	Correlation
Representation feature	Pie					
	Clustered bar					
	Clustered column					
	Scatter					
	Scatter					

Feedback

Feedback is effective if it's fact-based, instructive, constructive, sincere and taken well

Give feedback in three steps

Fact-based

Instructive

Constructive

Sincere

1. Refer directly to the person and describe an action/behaviour, not a general attitude
2. Explain to the other person what you felt and perceived as a consequence of his action/behaviour
3. Give useful suggestions for the future

Give both positive and negative feedback!

Receive feedback in four steps

1. Listen carefully, don't interrupt and don't act in a self-defensive manner
2. Don't defend yourself by justifying your behaviour and don't explain the reasons for your behaviour in that situation
3. Ask for explanations if you have any doubt on the feedback
4. Think about the feedback and evaluate its truthfulness; thank who has given it to you

Remember, feedback is just the opinion of one person, but behind all feedback there is often a little truth!