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Problem solving and decision making process
A quick guide / process

Problem Solving quick guide

1. Choosing the right problem:

- a. Brainstorm around the problem to zoom on the real thing
- b. What are the benefits of solving it?
- c. Do we have sufficient data available?
- d. Resistance?
- e. Effort and cost?

Design the problem tree
(consequence A > B > etc etc)
Until we reach final consequence

2. Problem definition

- a. Unfreeze the hurt: negative symptoms, present situation
- b. Enhanced by unfreezing the opportunity, the situation where the organization wants to be

Use SMARTO checks
Refer to Data collection (what data you want, what purpose, how to collect, what form)
Refer to tools (Checklist, scorecard, frequency)

Synthesize, don't summarize:

- c. Undesired situation A
- d. Because of consequences B for such and so
- e. Intention to undertake a problem solving project
- f. Resulting in desirable situation C

Always define your object, the problem, where when, how often, how much or how many
Use graph tools (bar, Pie, Line etc)

Contexte/environnement:

- g. Who is involved
- h. Constraints
- i. Scope, Resources, Key timing

Problem Environment (ex. below)

Supplier < ME > Customer

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Line Manager



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Ways to deal with a problem:

Quick and Dirty:

- a. Go on putting out fires
- b. DO what you did before

2. Solution focused approach

- a. Stop doing what does not work
- b. Find out what does work

3. Structured approach

- a. Investigate the problem and its causes

Solution focuses approach:

Brainstorming:

- a. Clearly delimit the subject:
 - i. One suggestion per participant
 - ii. If no suggestion "I pass"
 - iii. No criticism, no comment/discussion of suggestions
 - iv. Exaggeration is acceptable
 - v. Collect/organize ideas

Assignment stakeholder analysis

- b. Individuals that can affect or be affected by your solution
- c. Brainstorm all possible stakeholders, the longer the list the better
- d. Place the stakeholders in the chart, according to their influence on your success and their attitude towards the solution of the problem
- e. Build a chart:

Attitude/Influence	Low	Average	High
Positive			
Neutral			
Negative			



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Relations matrix:

- What is his/her interest in the problem and solution
- What is his/her attitude towards problem and solution
- What is his/her influence on problem and solution
- What is the inherent risk for success of problem solving process
- In which way does he/she want to be involved
- How does he/she wants to be informed
- What will be the approach, how will you involve him/her at what step in the process?

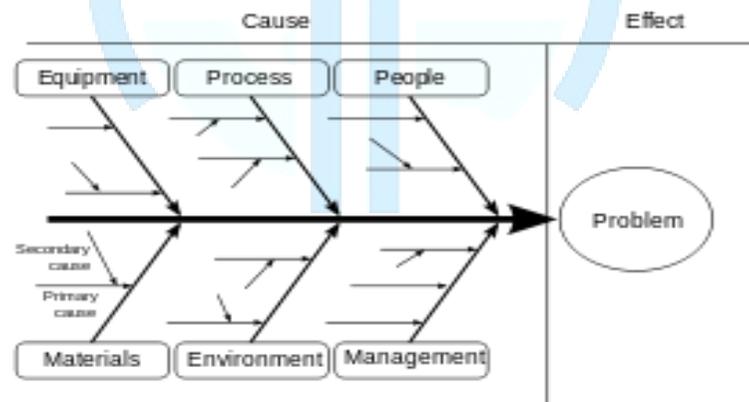
Objectives that work:

Specific, **M**easurable, **A**cceptable, **R**ealistic; Time based, **O**utput oriented

3. Formulation and selection of the cause

5 paths:

- c. Inventory of possible causes Brainstorm, herringbone diagram, analyzing data, root cause (what, then 5 times why, process analysis)
- d. Determine the most likely cause



- e. Find evidence of this cause
- f. Be sure to keep the scope of the problem under scrutiny (for instance by input-output analysis)

Finding causes:

- g. When you look at the result, what are the most likely or interesting causes? Why?
- h. Patterns? Clusters? Causes emerging? (Synthesize, don't summarize)
- i. Formulate the new issue that will replace the problem definition and the basis of your solution finding

Use the Kipling process/questions:

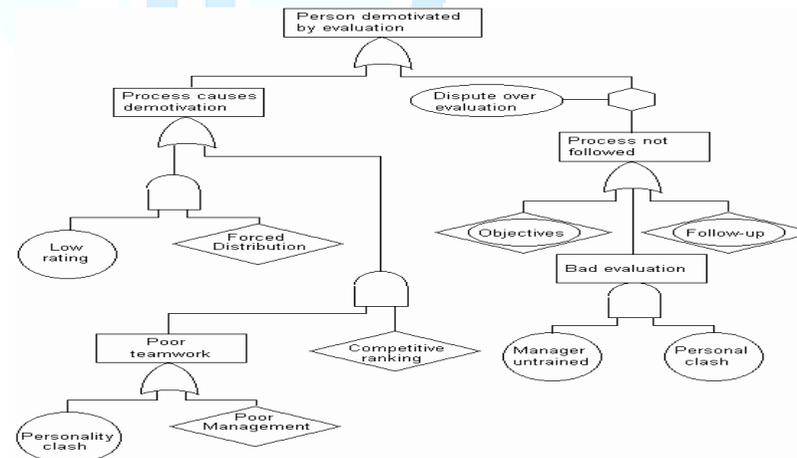
Primary questions

- What is the purpose? Where is it done?
- When is it done? Who does it?
- How is it done?

Secondary questions

- Why is it needed? Why is it done there?
- Why is it done then? why does this person do it?
- Why is it done this way?

The Fault tree



- j. Where do you find the optimal point of intervention

Solutions, generating ideas

- k. Creativity (do not go straight, derail)
- l. Climbing (trace and challenge assumptions)
- m. Floating/distancing: look at the problem sideways and then get above it
- n. Yes and...: diverging, creative, Yes, but: Converging, choosing

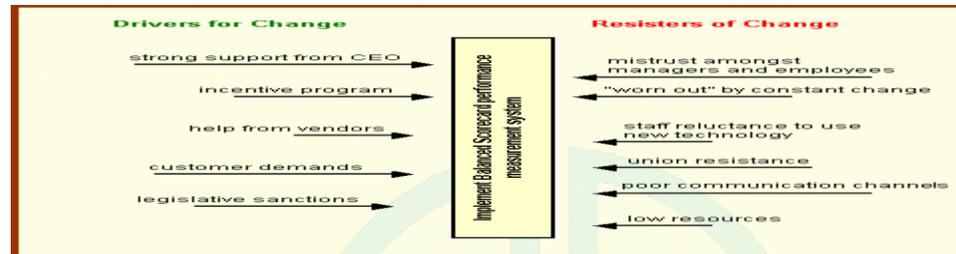
Methods to deal with issues

Method/Measure	Technical	Organizational	Attitude/behavior
Remove cause			
Avoid Problem			
Fight Symptom			

Presenting the solution:

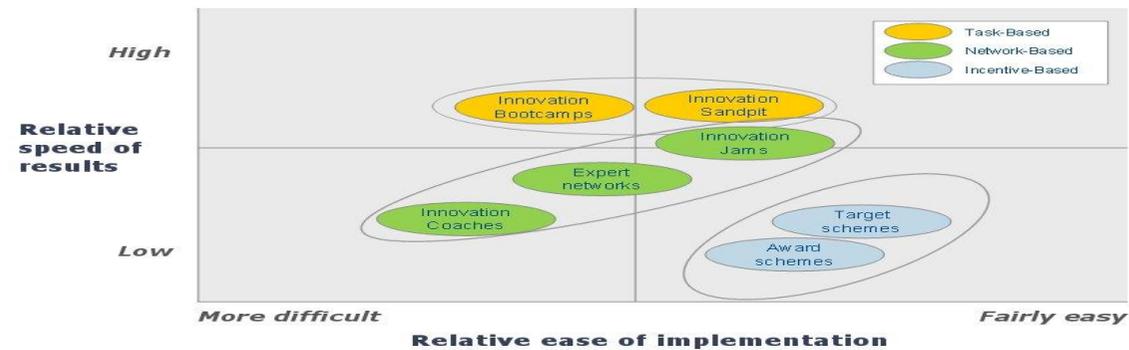
- Bring the message convincingly - Content (what, what for, who, where, how)
- Context (why, what else, what not) Process (who, when, where, how)

Handling resistance of change:



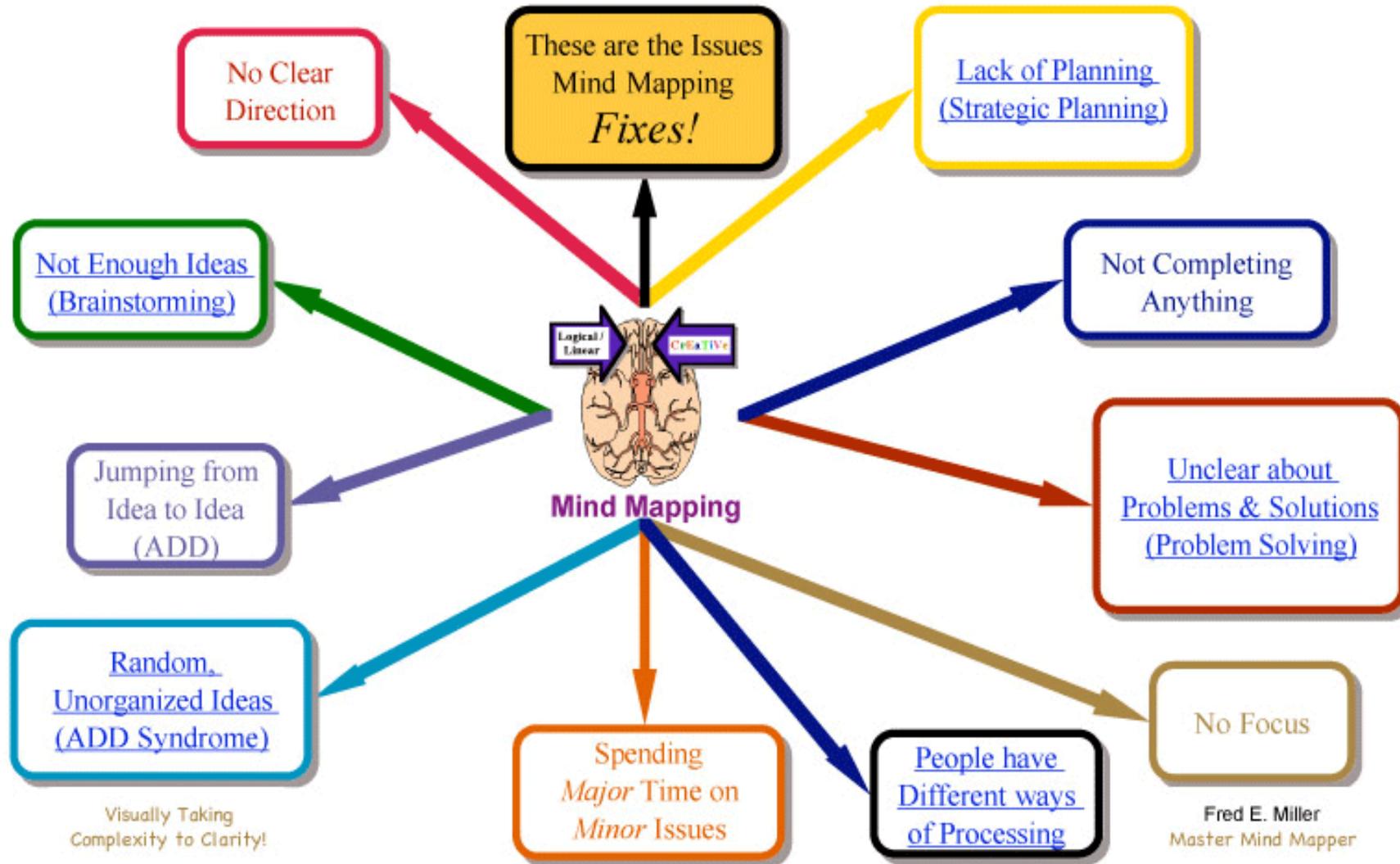
- the way you present strongly affects the resistance you'll encounter, do it one by one,

- Quick wins: A critical factor in the implementation of any improvement project are the striking successes. Visible success is the engine for further effort and investment:





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