IT Project Management

Lecture 2-7 – Methods

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Methods

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Definition

- ***Method***: system neutral, more or less systematic procedure to achieve an objective

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Brainstorming

- Brainstorming is a technique to stimulate creativity
- Moderator recommended
- Rules
  - Quantity before quality – the more ideas the better!
  - Use creativity and fantasy – unusual ideas are very much welcomed.
  - Complementing and improving of foreign ideas is allowed.
  - No criticism – criticism and evaluation are done at a later stage.

Brainstorming

- Proceeding
  1. Preparation phase
     - Finding the exact problem
     - Invitation of participants, room reservation
  2. Execution phase
     - Presentation of problem
     - Brainstorming starts: all participants express their ideas for how to solve the problem
     - All ideas are noted
  3. Processing phase
     - Ideas are organized and sorted
     - Evaluation
  4. Closing phase
     - Result list ready for further processing

Brainstorming

- Assessment
  - Standard method to generate spontaneous ideas in a group.
  - Works well for less complex problems and to start a topic.
- **Advantages**
  - lot of ideas with little effort during preparation and execution
- **Disadvantages**
  - limited concerning complex topics.
  - Few individuals might dominate the discussion

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Problem Statement Reversal

- Problem statement reversal technique (Synonym: *brainstorming paradox*)
  - similar to brainstorming, only that the problem is stated in reverse to collect negative and absurd ideas.
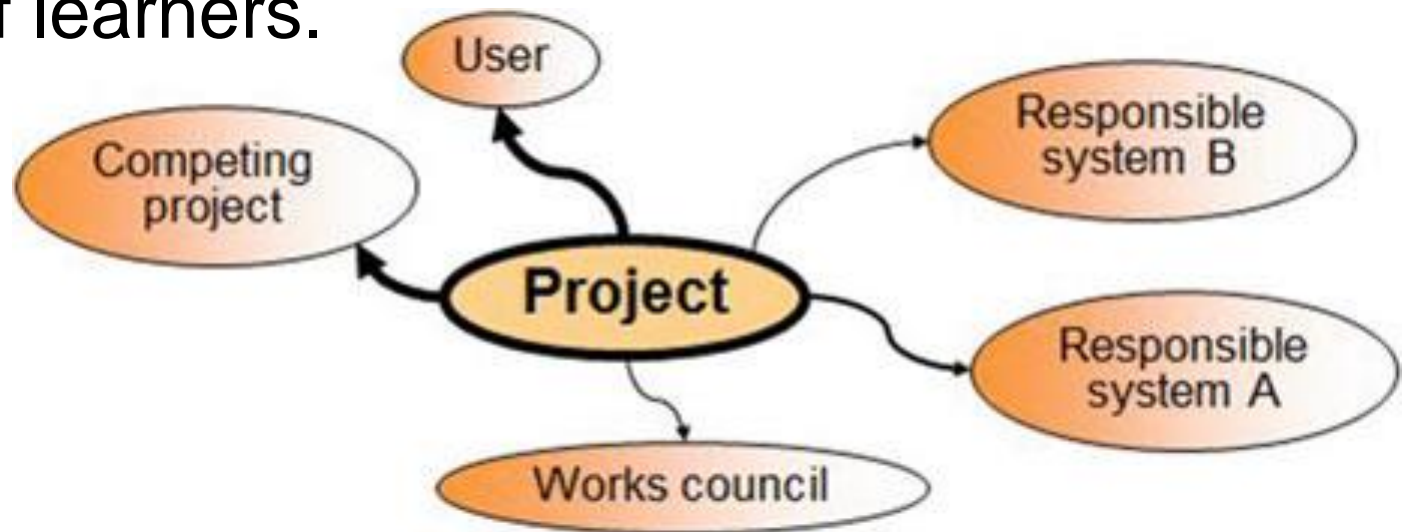
Problem Statement Reversal

- Assessment
  - This method is suitable to identify potential for improvement
- **Advantages**
  - It is easier for participants to find arguments why something will not work.
  - New and different ideas get generated.
- **Disadvantages**
  - The change from destructive to constructive thoughts can be challenging.

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Mind Mapping

- Mind mapping is a creative technique using visual images

- A mind map visualizes and relates thoughts, information, and text and addresses different types of learners.

Mind Mapping

- Assessment
  - Good for individuals and small groups when written records are needed, for instance:
    - ➢ Exploring new topics
    - ➢ Preparation of a talk or for written consumption
- **Advantages**
  - The method facilitates learning and memory
  - A piece of paper is sufficient to practice
- **Disadvantages**
  - If drawn on paper, space becomes a limitation.
  - Using mind mapping software may cause issues with other tools concerning data exchange and further processing.

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Method 635

- Method 635
  - 6 people
  - 3 ideas to be produced per person
  - 5 times to pass (after 5min)
- "brain writing" technique
- Objective: get a large number of ideas and potential solutions for a given problem

Method 635

- Proceeding
  - The problem is described.
  - Each of the 6 participants gets a worksheet with 18 fields: 3 columns for ideas and 6 rows (see example next page).
  - 1st round: each participant writes one idea in each column of the first row, for a total of three ideas.
  - At the end of each round, each person passes his worksheet clockwise to the next person.
  - In each subsequent round, the person reads all ideas on the worksheet he has received and then adds three new or related ideas to the next row on the worksheet.
  - The process ends when each person receives back his original worksheet, now filled with rows of additional ideas.

Method 635

Example for a work sheet for method 635

	Idea 1	Idea 2	Idea 3
6 participants			

(5 x passing)

Rules:

- The participants do not talk with each other during execution.

- Scheduled times have to be met.

- Per field only one idea.
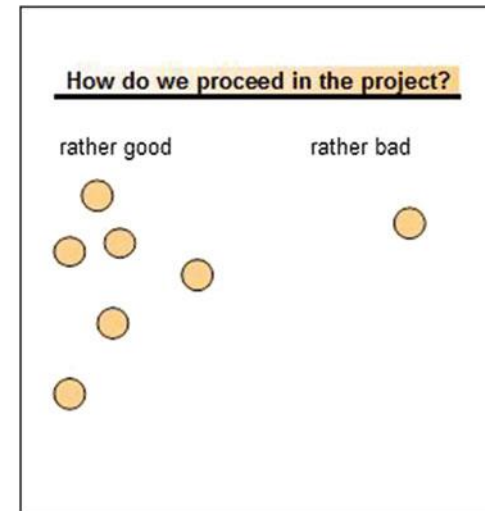
Method 635

- Assessment
  - The method is proper for small working groups and to introduce a less or average complexity topic.

- **Advantages**
  - generates a lot of ideas within a designated time
  - can also be used when the people are spatially distributed.

- **Disadvantages**
  - The time limit can pressure the participants.

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Flashlight

- The flashlight method is suited for a snapshot.
- Answers quickly a closed question
- Options
  - One point inquiry
    The question is written on a flip chart;
    below are two fields outlined,
    representing corresponding statements.
  - Positioning in the room
    The open space of a room is divided into two areas,
    representing possible statements.
    The participants position themselves in the room to
    answer the given question

How do we proceed in the project?

rather good   rather bad

Flashlight

- Assessment
  - The method can be used to get an atmospheric picture of a group.
- **Advantages**
  - simple method; no preparation is required.
  - Group feedback is obtained within a short time.
- **Disadvantages**
  - There is a tendency to follow other group members. Therefore, it can be difficult to get different opinions.

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Summary

- Brainstorming is a simple and effective method that is used throughout the entire project life cycle

- A group status on a closed question can be quickly obtained with a flashlight