

World's biggest problems: Introduction to the case study

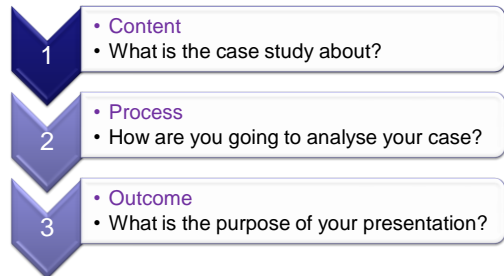
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Cost IC0602 International Doctoral School
Applying Decision Analysis to Real Problems
University of Manchester

10 -13 April 2011

Overview



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Case study

Based on a book entitled: "Solutions for the World's Biggest Problems. Costs and Benefits" edited by: Bjørn Lomborg

- Top economists were invited to present a number of global problems and sketch out solutions...

Decision Analysis: "The main aim is to help decision makers learn about the decision problem, their own and others values and judgements and through organisation, synthesis and appropriate presentation of information to guide them in identifying, often through extensive discussion, a preferred course of action"

(Borch & Stewart, 2002)

- What recommendations can you provide by applying decision analysis?
- What insights can you offer?

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Global crises – global solutions

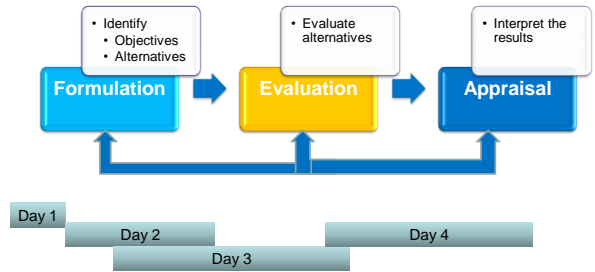
- The world has many pressing problems such as
 - Air pollution (Group 1)
 - Deforestation (Group 2)
 - Land degradation (Group 3)
 - Biodiversity loss (Group 4)
 - Vulnerability to natural disasters (Group 5)
 - Education (Group 6)



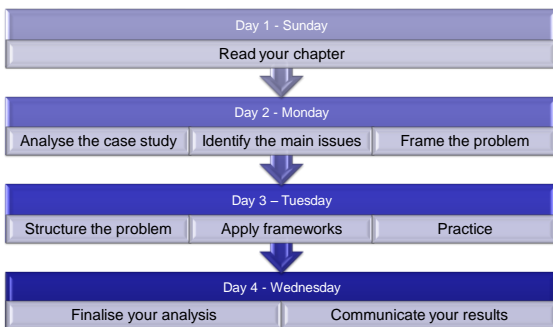
Role Play Exercise

- Six groups assigned to six global problems
- **Setting:** *The European Union (EU) is going to declare 2016 'The Year of X'*
- **Task:** Explain to EU officials why your assigned topic is an area of great interest and what they should do about it
- **Process:** Apply the tools, techniques and methodologies that will be taught during the programme
- **Values:** Build a value tree to represent the objectives that the EU might have in tackling a global problem
- **Alternatives:** Evaluate courses of action
- **Action plan:** Offer suggestions the EU should implement
- **Note:** Do not worry about detailed costs but explore general feasibility and broad costings.

The decision analysis process

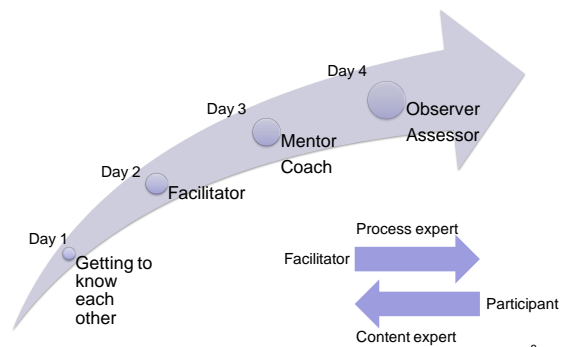


Time plan



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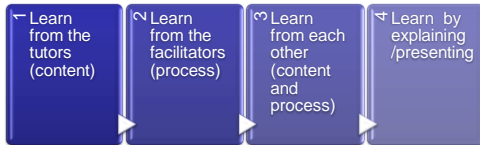
The role of the facilitator



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The Manchester Method

- Learning by doing in groups



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Where is the emphasis?
Where should it be?

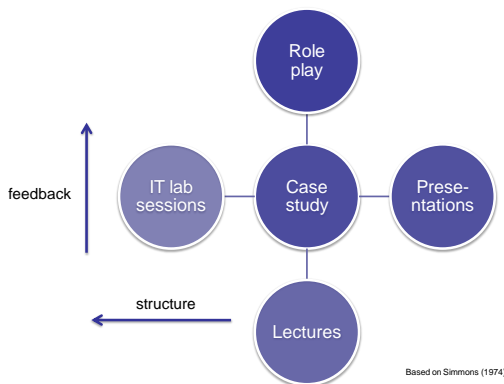
Applied Decision Analysis

Applied Decision Analysis

Applying Decision Analysis to Real Problems

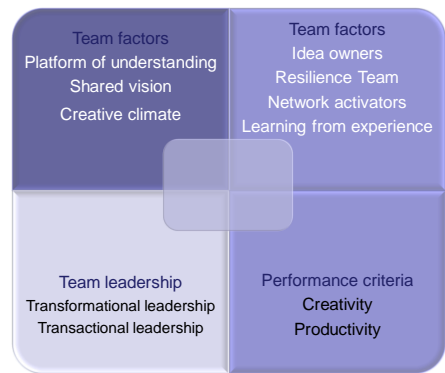
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Forms of learning sessions



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Self-Report Instrument for Exploring Team Factor, Leadership and Performance Relationships



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Group exercise session 1

- What is the problem here?
- How do you feel about...?
- What do you notice about ...?
- What other examples are there of...?
- How do you think of X felt in this situation?
- What might be done to..? Anything else?
- Would you do that?
- What would be the cost or benefit of doing that?
- What would you do in this situation?
- How do you feel about another team member's suggestion/assessment/attitude?
- Can you develop a team member's idea a little bit more?

(Heath, 2002)

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Final thoughts

- Cases - complex problems
- Experts of the world's biggest problems vs. experts of the decision analysis process
- Breadth vs. depth
- You are in charge of the learning experience! Enjoy!!!

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