

Additional material – Failure in innovation decision making

A general approach to detect and address biases can be summarized with two main questions:

- On what (unspoken) assumptions is our decision-making based on (e.g. continuous development; available resources; commitment of project partners...)?
- What will happen, if one of these assumptions turns out to be completely wrong?

In addition, the following questions can help innovation decision makers to detect potential biases in their decision making processes:

Wishful thinking

- What is the “best case outcome scenario” for our project? (Dreaming)
 - *Follow-Up-Question 1: What must happen in order to receive the “best case outcome”?*
 - *Follow-Up-Question 2: In this scenario, what aspects are under our control?*
- What is a “realistic outcome scenario” for our project? (Realizing)
 - *Follow-Up-Question: **Why** is it realistic?*
- What is the “worst case outcome scenario” for our project? (Grounding)
 - *Follow-Up-Question 1: What must happen in order to receive the worst case outcome?*
 - *Follow-Up-Question 2: In this scenario, what aspects are under our control?*
- What could turn the outcome to be even worse than the expected worst case outcome scenario? (Questioning)
 - *Follow-Up-Question: Are we prepared for that?*

Overconfidence

- What do we know about the idea / project?
- Do we really “know”, what we think we know?
- Would others agree, that we “know”, what we know?

"Not-invented-here" phenomenon

- Did we put enough effort on finding similar / comparable projects that we can learn from?
- How can we get more / more precise information on these projects?
- Do we normally use information on similar / comparable projects for our judgments and decisions? Why? Why not?
- Who has participated in this similar / comparable project we can share experiences with?

Inappropriate project models

- Where are our reference projects normally coming from...
 - a) ...from our own department?
 - b) ...from our own company?
 - c) ...from other companies?
 - d) ...from companies of other industries?
- What do we know about these reference projects?
 - Are they typical?
 - Are they repeatable?
 - Are they comparable to our situation? To which degree?
- What do we *not* know about these reference projects?

Confirmation bias

- On what kind of information is our decision-making based on?
- Where is our information coming from?
- Is it coming from different sources and different directions?
- Who can provide us with a second opinion?
- Who can provide us with a third opinion?
- Who can serve as an advocatus diabolic in assessing these opinions?