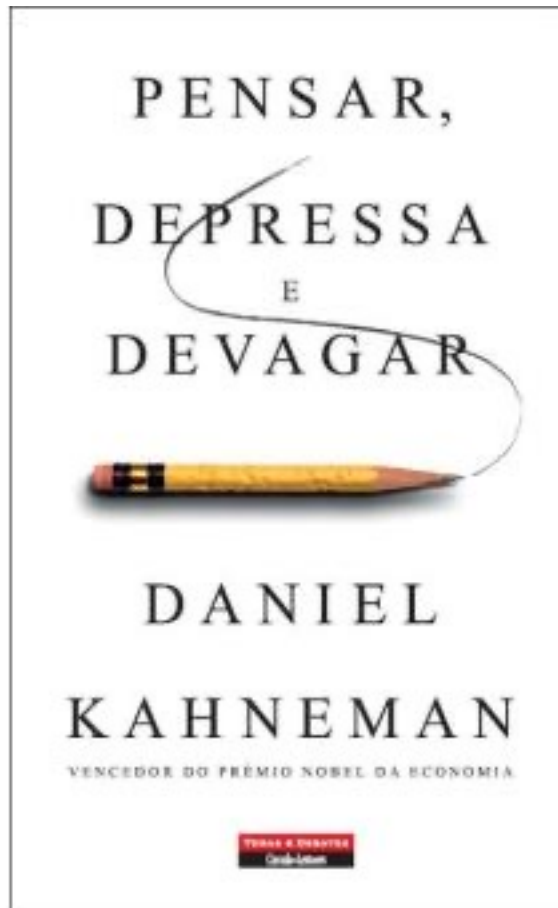# Strategic decision-making

Decision-making is an integral part of any management process.

Project management (IT) is no exception.

Non-decision is worse than a bad decision.

Organizations should work towards creating an organizational environment where fear and risk aversion do not dominate the mindset of decision-makers.
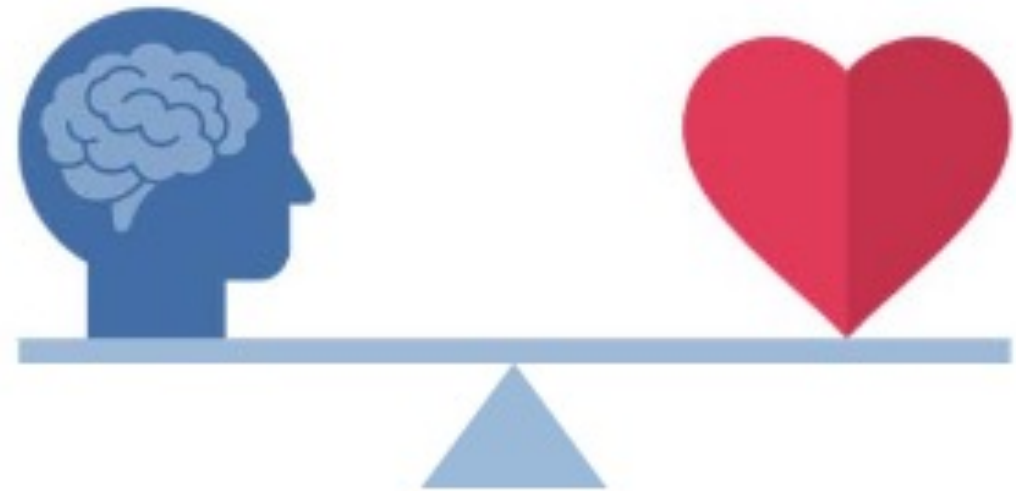
Strategic decision-making

https://www.youtube.com/watch?v=uqXVAo7dVRU

Strategic decision-making

"Decision making Muscles"

- Heart vs. Brain – System 1
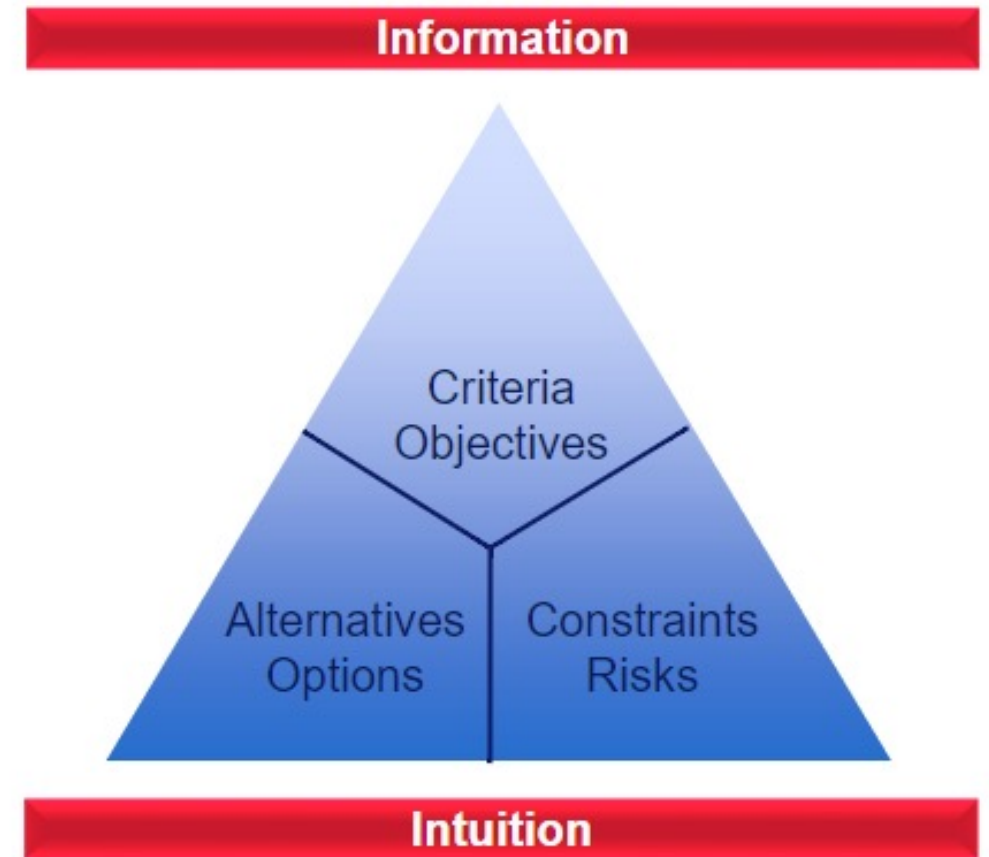
- Intuition vs. Analysis – System 2

Strategic decision-making

Structuring a problem allows for a systematic approach to dealing with it:
- Objectives to achieve with the decision to be made
- Risks and constraints
- Alternatives

"The Decision-Making Triangle"
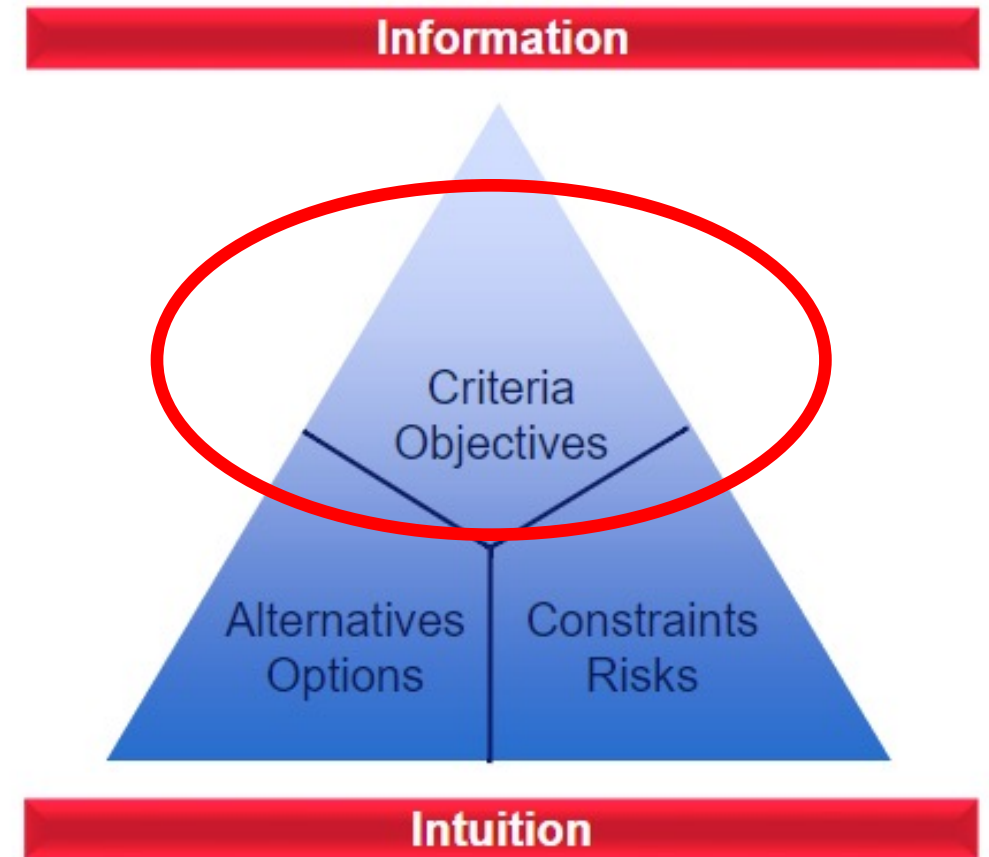
Strategic decision-making

The first step is to clearly understand the problem we are solving!

It's very common for the problem to be presented already in the form of a solution.

Does the person asking the question have the skills and/or know-how to do it this way? If in doubt, ask what problem they are trying to solve.

If you identify multiple objectives to achieve, select one as the main objective. Transfer the rest to constraints.
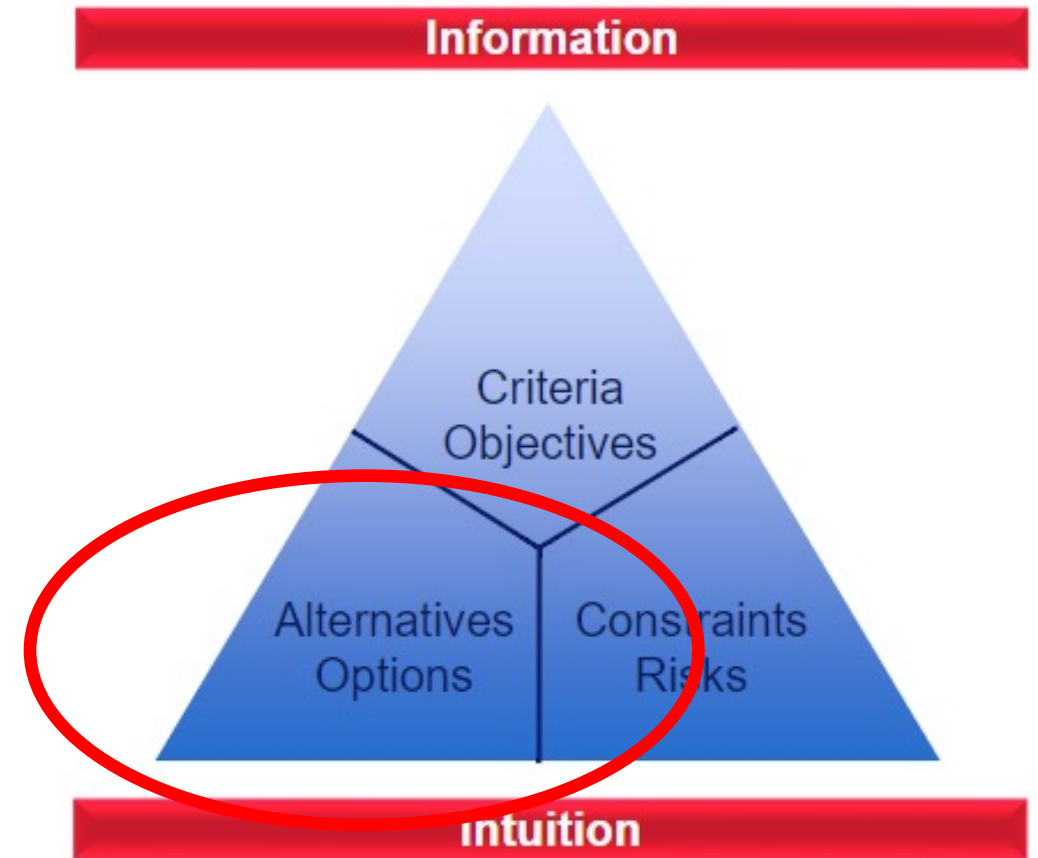
"The Decision-Making Triangle"

Strategic decision-making

List the alternatives!

Rarely does a problem have a single solution option. You should list the various existing options.

If, by chance, there are no alternatives, then it's not a decision. It's a fact!

"The Decision-Making Triangle"

Strategic decision-making

For each previously considered alternative:

- Perform a risk analysis:
- Identify the risks
- Response strategy for each risk

It's essential to understand what information is missing for an informed decision.

"The Decision-Making Triangle"
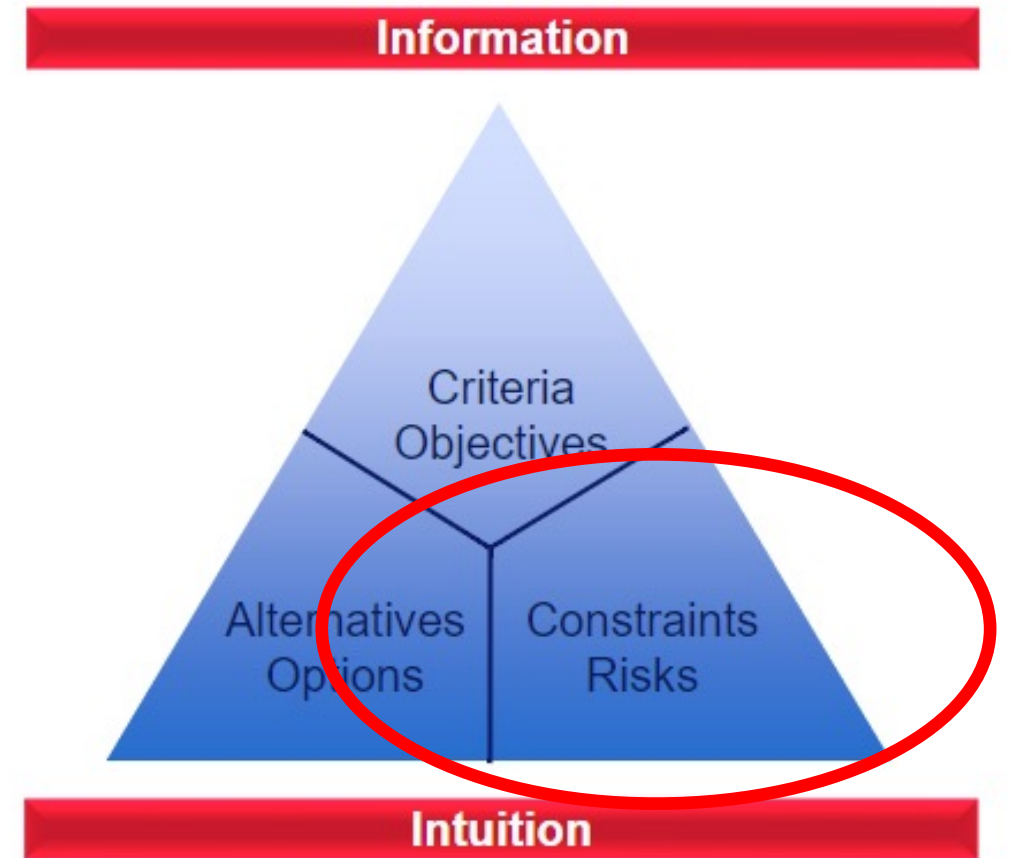
Strategic decision-making

Decisions ≠ Outcomes

Retrospective Valuation of Experienced Outcome

		Outcomes	
		Good	Bad
Decisions	Good	Earned sucess	Bad luck
	Bad	"*Dumb luck*"	Poetic Justice

Strategic decision-making

"Heuristics and biases"

Daniel Kahneman coined the term 'Heuristics and Biases' to describe a set of mental traps associated with the fact that the decision-making process based on intuition uses shortcuts aimed at speeding up and dealing with the limited analytical capacity of the human mind.

A Project Manager should be aware of these pitfalls as a tool to influence the decision-making of others and avoid being influenced against their interests (or the interests of the stakeholders they represent).
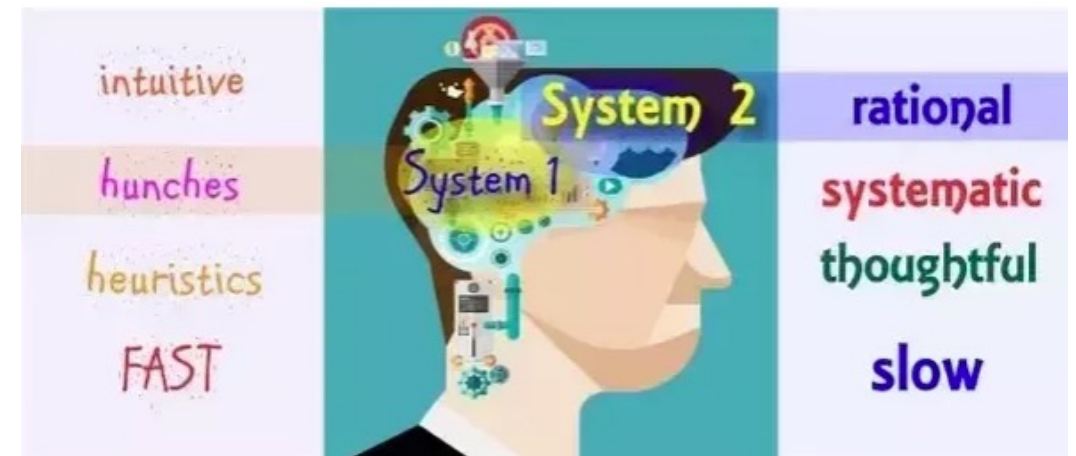
Strategic decision-making

Anchoring: The tendency to be influenced by irrelevant numbers, which become anchors and influence decision-making going forward.

Examples:

What was requested from Group 1	What was requested from Group 2	Tendency of response from Group 1	Tendency of response from Group 2	Correct response (IRRELEVANT)
Perform the multiplication 1x2x3x4x5x6x7x8 in less than 5 seconds.	Perform the multiplication 8x7x6x5x4x3x2x1 in less than 5 seconds.	Average response was 512	Average response was 2250	40320
How many African countries are represented in the UN? Is it more or less than 10? What is the percentage in global terms?	How many African countries are represented in the UN? Is it more or less than 65? What is the percentage in global terms?	Average response was 25%	Average response was 45%	54 countries being 28% of the total
Mahatma Gandhi died before or after 9 years of age?	Mahatma Gandhi died before or after 140 years of age?	Average response was 50 years	Average response was 67 years	Gandhi died at 78 years old

Strategic decision-making

***Anchoring*:**

- People are influenced by external suggestions.
- When we provide data, people will use them.

How to avoid:
- Analyze the problem from different perspectives (Alternatives in the decision triangle).
- In a negotiation process, minimize sharing our point of view/opinion to prevent the other party from anchoring us.
- Prepare thoroughly on the subject before initiating an initial process.

How it can be used:
- It is a technique typically used in negotiation processes, for example, to set a starting point in price (example: price targets in a market consultation process. See slides from lesson 6).

Strategic decision-making

Loss aversion: The tendency to prefer preventing losses rather than attempting to obtain equivalent gains.

Examples:

A company in the automotive industry experienced record-breaking sales declines, putting 600 jobs at risk. The board created 2 alternative plans.

For Group 1, the two alternatives were presented as follows:
- If plan A is chosen, 200 jobs will be saved.
- If plan B is chosen, there is a 1/3 probability that 600 jobs will be saved and a 2/3 probability that none will be saved.

For Group 2, it was presented as follows:
- If plan X is chosen, 400 jobs will be eliminated.
- If plan Y is chosen, there is a 1/3 probability of no layoffs and a 2/3 probability that 600 jobs will be eliminated.

Strategic decision-making

Examples with the provided choices for each group:

Group 1:
- If plan A is chosen, 200 jobs will be saved.
- If plan B is chosen, there is a 1/3 probability that 600 jobs will be saved and a 2/3 probability that none will be saved.

Group 2:
- If plan X is chosen, 400 jobs will be eliminated.
- If plan Y is chosen, there is a 1/3 probability of no layoffs and a 2/3 probability that 600 jobs will be eliminated.

But B = Y!!!!!!

It was loss aversion at play. The mind tends to prefer avoiding certain losses over potential gains.

Strategic decision-making

Loss Aversion:

Influencing Others:
- If you want to influence others to accept high-risk projects, frame them as losses.
- If you want to influence others not to accept high-risk projects, frame them as gains.
- During negotiation moments, break and deliver good news in small portions and focus on delivering bad news.

How it can be used:
In marketing, it is used EXTENSIVELY to promote impulse buying due to the fear of missing out on an opportunity:
- Last Chance!
- Last Units Available!
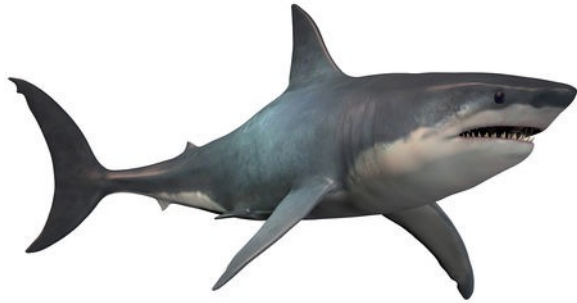- Limited Offer!
- Countdowns
- etc.

Strategic decision-making

Availability: A mental shortcut that heavily relies on information easily retrieved from memory. Humans resort to memory to make decisions, and negative, extreme, or shocking information is more easily retrievable from memory.
Example:

"What is the deadliest animal to humans?

The shark   or the horse?

Strategic decision-making

Availability

In the USA between 2000 and 2009, 9 people died from shark attacks, and 215 in horse accidents!

However, shark attacks are typically reported, but horse accidents not so much.

How it can be used:
- If there are continuous complaints about a supplier and/or team (whether justified or not), availability bias will influence future situations.
- Similarly, promoting successes or achievements in a corporate environment will bring advantages.

How it can be avoided:
- Validate your sources of information… they could be fake news.

Strategic decision-making

Sunk Costs fallacy – throw good money after bad: It refers to irreversible costs that cannot be recovered in the future. The fallacy occurs when an individual continues a behavior or effort simply because there have been past investments (typically financial), leading to a sense of loss or waste. This biased decision-making is related to loss aversion.

Examples:
- Buying tickets for a movie, not liking it, and staying until the end.
- Buying sweets, deciding to diet, but only starting the diet after finishing the sweets.

More serious examples:
- Continuing a project that is not yielding expected results. If the results are below the break-even, sunk costs should be considered.
- Proceeding with a project just because there were previous investments in Proof Of Concept, market studies, benchmarks, etc.
- Keeping an underperforming employee only because significant investments were made in previous training.

Strategic decision-making

Sunk Costs fallacy

Key point:
In financial project analysis, only future costs and benefits should be considered. Sunk costs are costs from previous exercises and, as such, should not influence future decisions.

Sunk Costs Hall of Fame

DHL writes off €345m as it abandons troubled IT project

02 / 11 / 2015

Lidl cancels SAP introduction having sunk €500 million into it

Strategic decision-making

Conclusions:

Decision-making is an integral part of a Project Manager's life.
The decision-making process should be systematized (framework) to find a balance between Intuition and Analysis. The decision triangle should be used.

Understanding cognitive heuristics is crucial not only to influence others but also to avoid being manipulated:
• Anchoring
• Loss aversion
• Availability
• Sunk Costs fallacy
• and others.