

The Art and Science of Decision Making

By Jonathan Gowins





Kodak

KODAK LENS

'Brownie' Flash B

C A M E R A

MADE IN ENGLAND BY KODAK LIMITED LONDON

“**Bounded rationality** is the idea that in decision making, the rationality of individuals is limited by:

the information they have,
the cognitive limitations of their minds,
and the finite amount of time they have to make a decision.”

Competing Against Luck, Clay Christensen

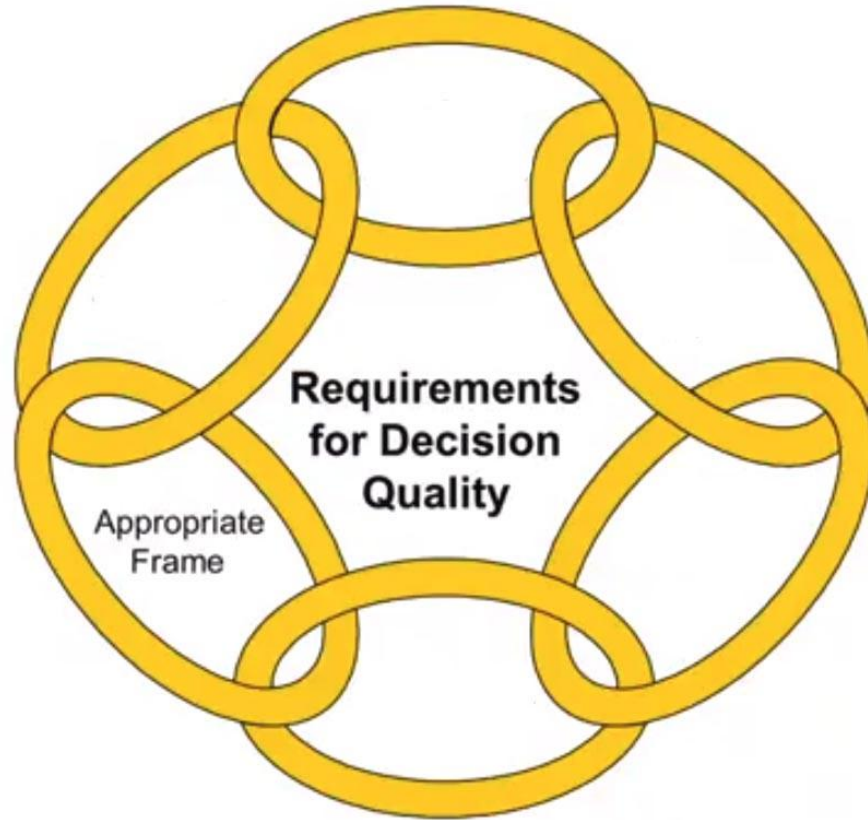
Decision making...

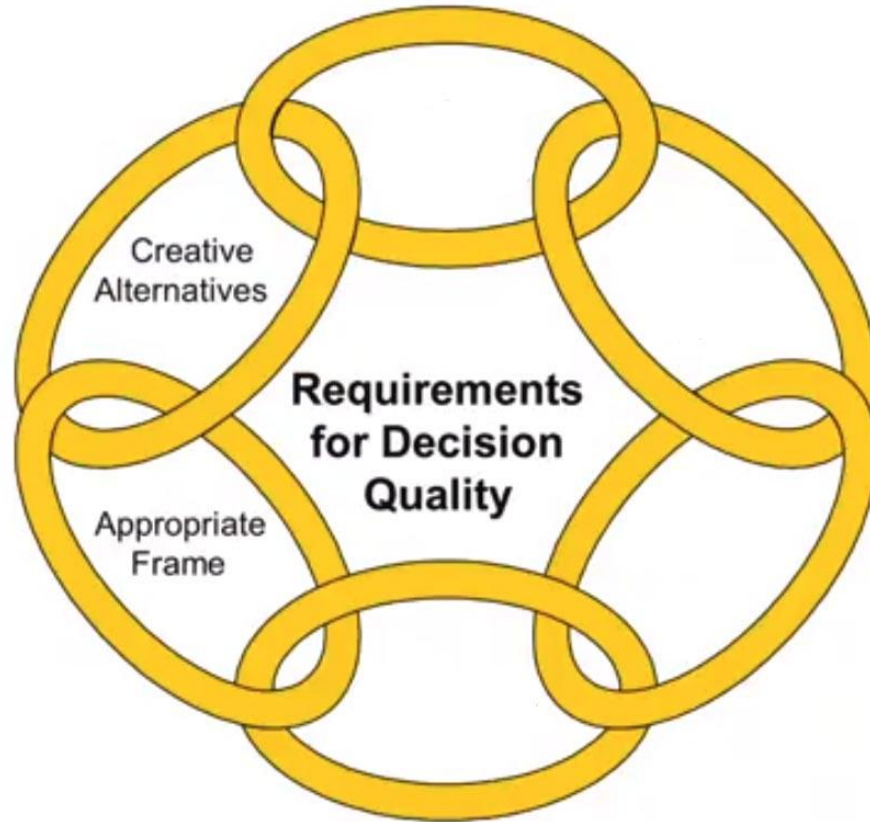
... is the thought process which results in the selection of a belief or a course of action among several possibilities.

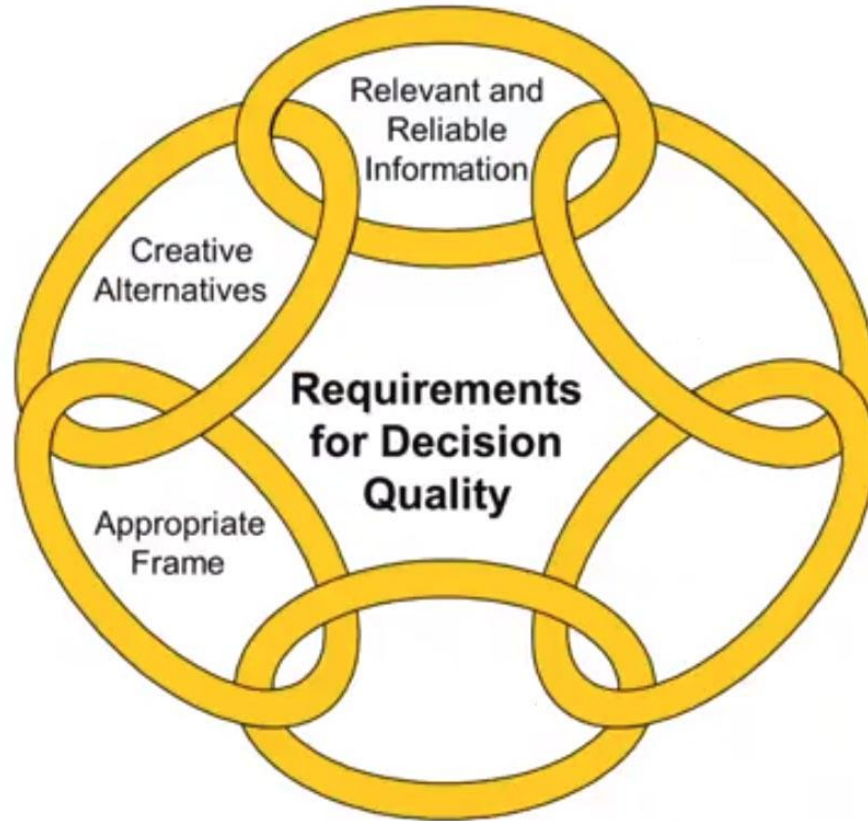
... is about risk reduction.

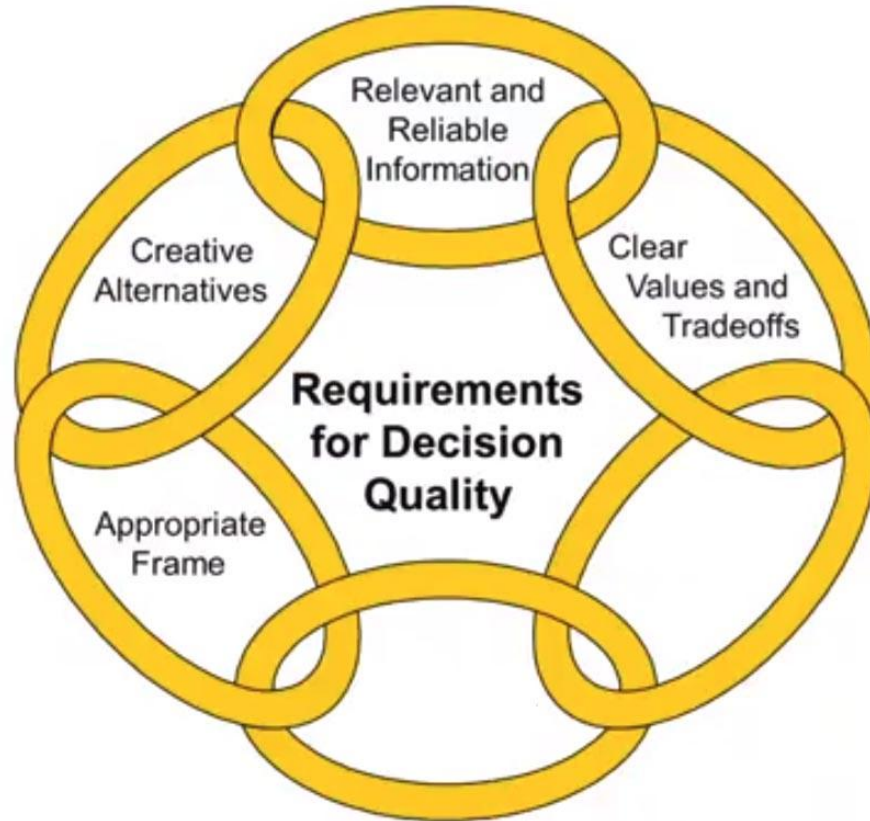
... aims to achieve a specific outcome.

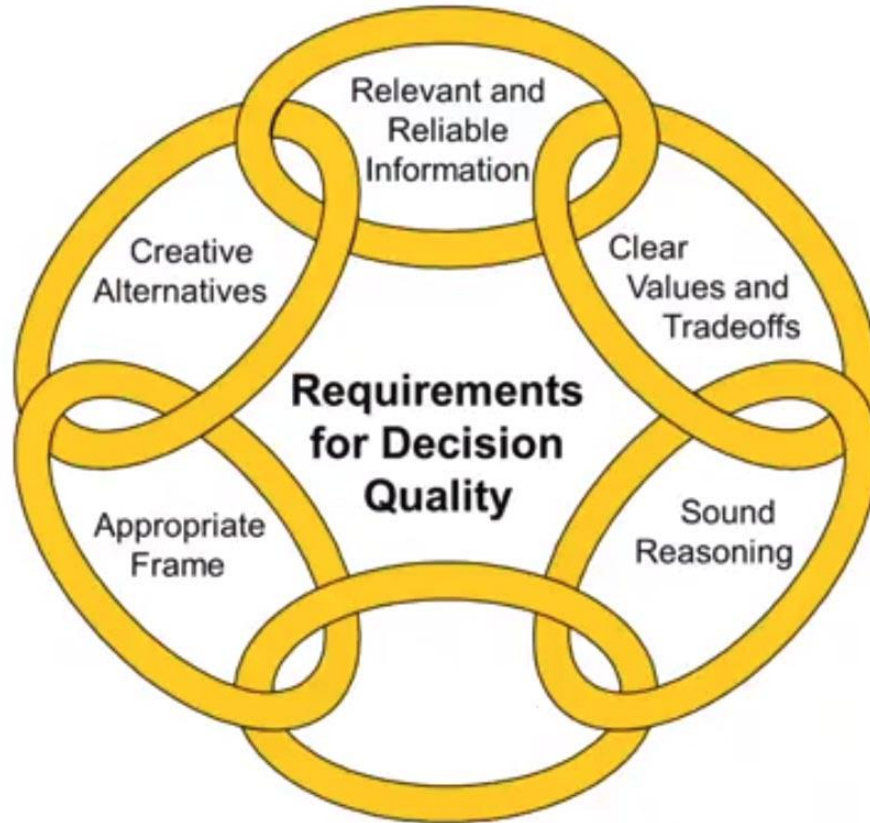
... should be judged by quality, not outcome.













Setting the right frame

“The right stakeholders, working on the right problem.”

What is it I am deciding?

Ford



“The question that the executive faced (should I invest in Ford stock?) was difficult, but the answer to an easier and related question (do I like Ford cars?) came readily to his mind and determined his choice... when faced with a difficult question, we often answer an easier one instead, usually without noticing the substitution.”

Daniel Kahneman, Thinking; Fast and Slow

What's the best frame?

- 1) Do I like Ford cars?
- 2) Should I invest in Ford stock?

Reasoning from first principles

"[With first principles] you boil things down to the most fundamental truths ... and then reason up from there."

Elon Musk

The image features the SpaceX logo centered over a dramatic rocket launch at night. The rocket is ascending vertically, leaving a bright, glowing trail of fire and smoke that extends from the launch site to the top of the frame. The launch site is visible at the bottom, with silhouettes of service towers and other structures. The sky is dark, and the overall scene is illuminated by the intense light of the rocket's engines. The SpaceX logo, consisting of the word "SPACEX" in white capital letters followed by an orange swoosh, is superimposed over the middle of the image.

SPACEX

What's the best frame?

- 1) Do I like Ford cars?
- 2) Should I invest in Ford stock?
- 3) **Where's the best place to invest my money?**

An agile example

- 1) How do we implement SAE?
- 2) Which agile methodology is best for our situation?
- 3) What's the most efficient way to communicate requirements to the dev team?

Considering feasible alternatives

“A decision cannot be better than the best reasonable alternative.”

What are my choices?

IT'S A TRAP!

Satisficing:

The tendency to search for alternatives only until one is found that reaches a minimal level of satisfaction.

What are my alternatives?

1. Waterfall
2. SAFe
3. Scrum
4. Kanban
5. Home grown

Gather meaningful information

“Any decision is limited by the quality of the information used to inform the decision.”

What do I know and what am I uncertain of?

“Concentration—that is, the courage to impose on time and events his own decision as to what really matters and comes first—is the executive’s only hope of **becoming the master of time and events** instead of their whipping boy.”

- The Effective Executive, Peter Drucker

Clarify values and trade-offs

“Identify the value(s) you hope to obtain, and the trade-offs you will face.”

What is most important to me, and what are the opportunity costs?

Values

Scalability?

Predictability?

Efficiency?

Employee satisfaction?

Tradeoffs

Autonomy

Time, Employee satisfaction

Lack of predictability

Control

Logically sound reasoning

“Reason is slave to emotion. Quality will be impacted by the ability to use objective logic and analysis.”

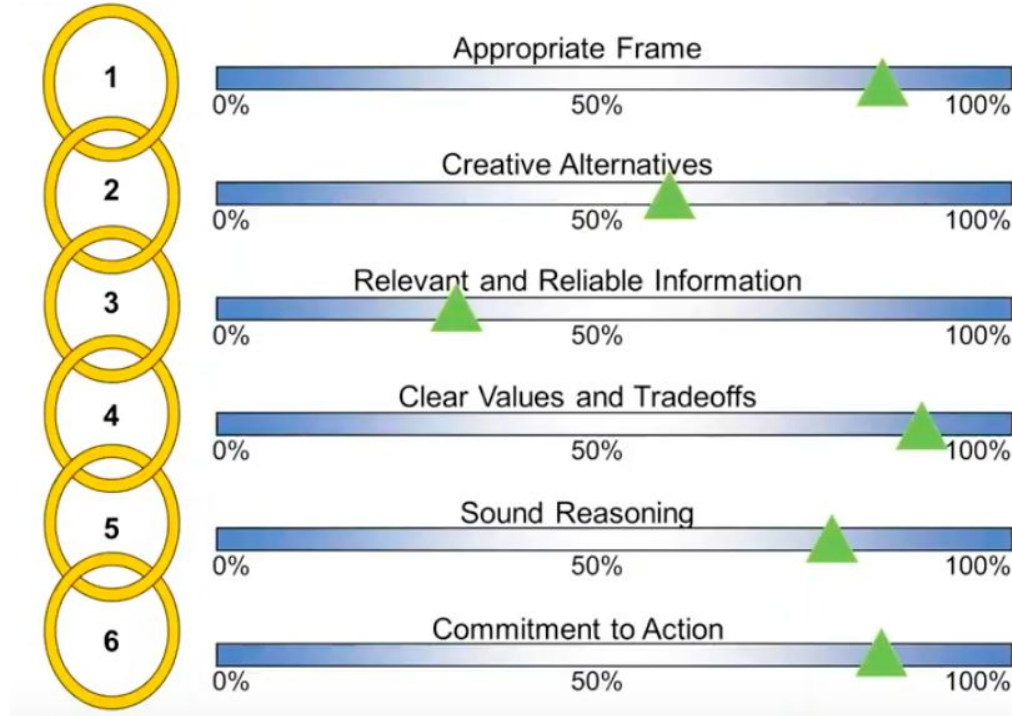
The goal is clarity of choice: What’s the best option (*alternatives*), given what we know (*information*), in order to obtain what we want (*values*)?



“We can be blind to the obvious, and we are also blind to our blindness.”

Daniel Kahneman, Thinking; Fast and Slow

Remember: A decision has quality at the time it is made.



Committing to action

“Stakeholders are bought-in and the organization is ready to commit resources and execute.”

Is everyone united and confident in the decision?

Tips for committing to action...

- Make sure all conflict is resolved
- Validate all the implementers are taking appropriate ownership
- Define clear next steps and/or a critical path

In summary...

Decision quality is the goal.

You're a lazy, hangry, rushed, irrational creature trusted with making major decisions.

- Manage your time and blood sugar.
- Reason from principles where possible.

1. Frame the decision
2. Identify alternatives
3. Obtain information
4. List values/trade-offs
5. Reason logically
6. Commit to action

Grateful credit to...

- Special thanks to Dr. Brad Powley
- Strategic Decision Group (<https://www.sdg.com/>)
- <https://jamesclear.com/first-principles>
- Thinking; Fast and Slow by Daniel Kahneman
- Competing Against Lucky by Clay Christensen
- https://en.wikipedia.org/wiki/Decision_quality