

What about critical thinking in the era of information overload?

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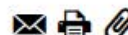
EN TÊTE

OLIVIER SCHMOUKER

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Comment ne plus être victime de la pensée unique?

Publié le 13/05/2019 à 06:06



Le conformisme mène souvent à la catastrophe... (Photo: DR)

One Quick Question

Lequels de ces services aux entrepreneurs associez-vous à BDC?

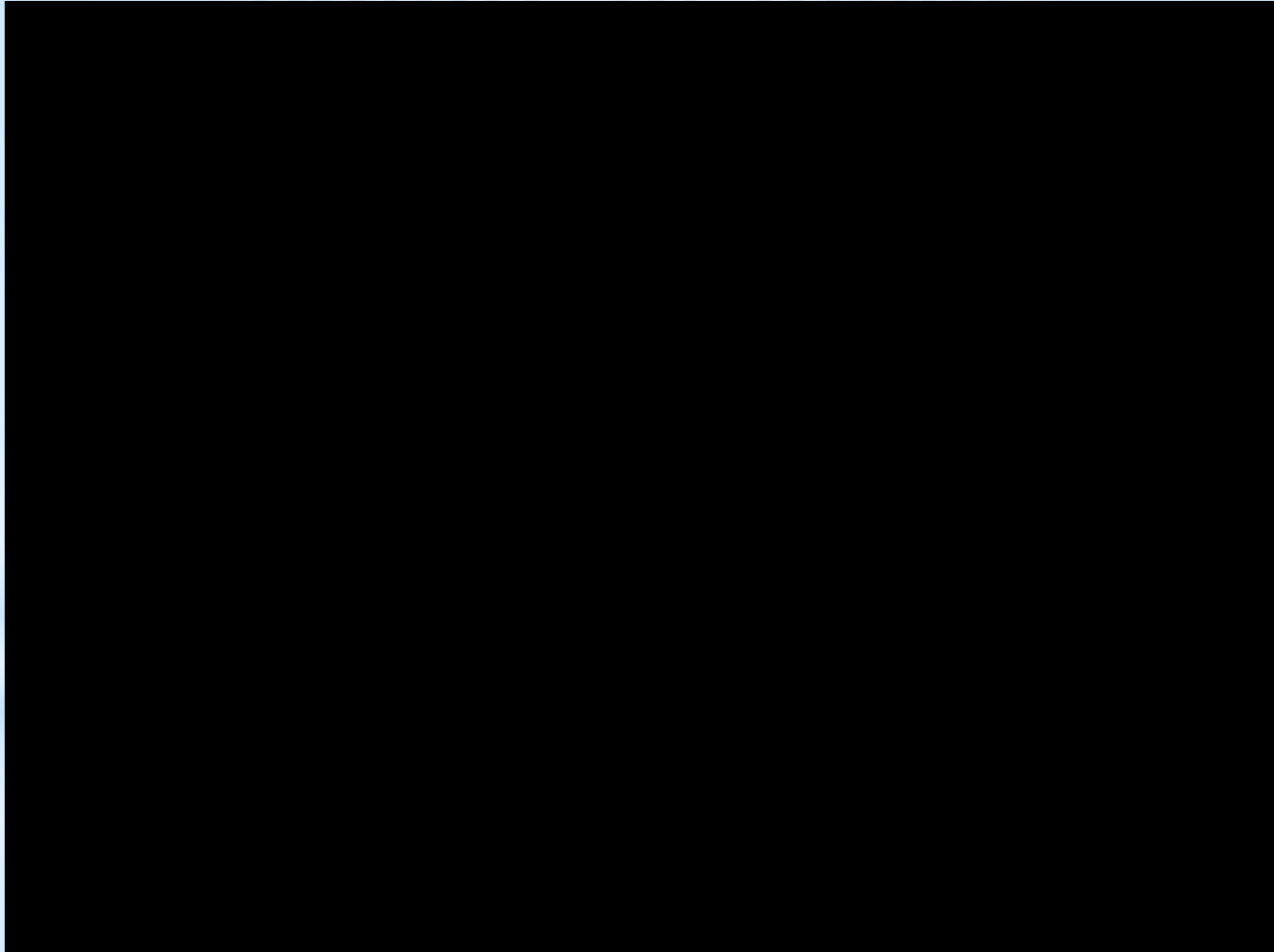
SELECT UP TO 4 ANSWERS

☐ Prêts commerciaux☐ Capital de risque☐ Services-conseils☐ Comptes d'entreprise☐ Aucune de ces réponses[Vote For Results](#)Powered By Nielsen
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What is Critical Thinking?

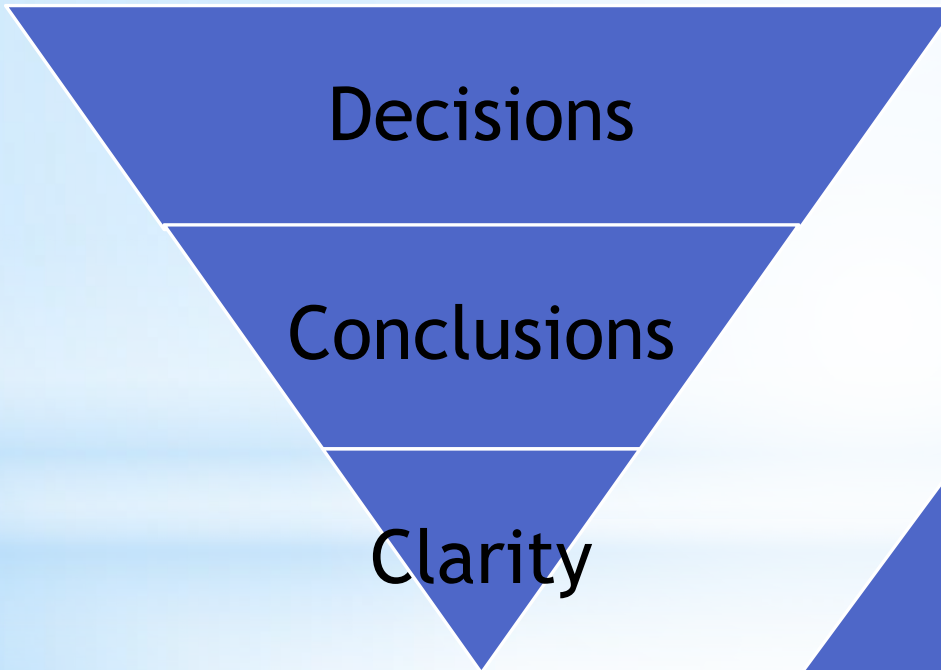
- ✓ Purposeful process that includes being aware of the partiality of our thinking (Kallet, 2014).
- ✓ Is about judgement thus emphasis on questioning and reasoning.
- ✓ \neq To Criticize.

Video - The Guardian's 1986 “Points of view”

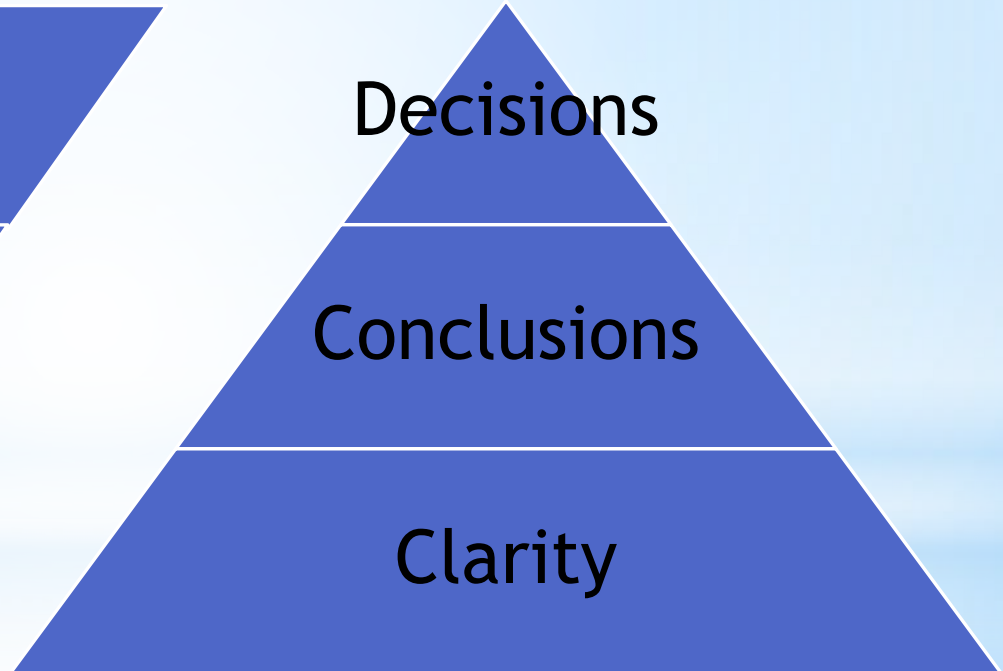


Automatic vs Critical Thinking

Automatic Thinking



Critical Thinking



Automatic Thinking

Examples:

- ✓ When we drive
- ✓ When we read

Try reading this...

You mghit tnihk i'ts aaminzg taht
you can raed tihs with vrlialuty no
diluftficuy even tuohg the ltetres
are mxeid up. It trnus out taht all
you need are the fsrit and lsat
leetrts in the crocert pcale. Tihs is
an eaxplme of yuor barin rnuning in
aoumtatic mdoe.

(Kallet, 2014, chap. 1)

Sli.do - Question #1

How many letter “F” do you see in this sentence?

a) 3

b) 4

c) 5

d) 6

e) 7

f) 8

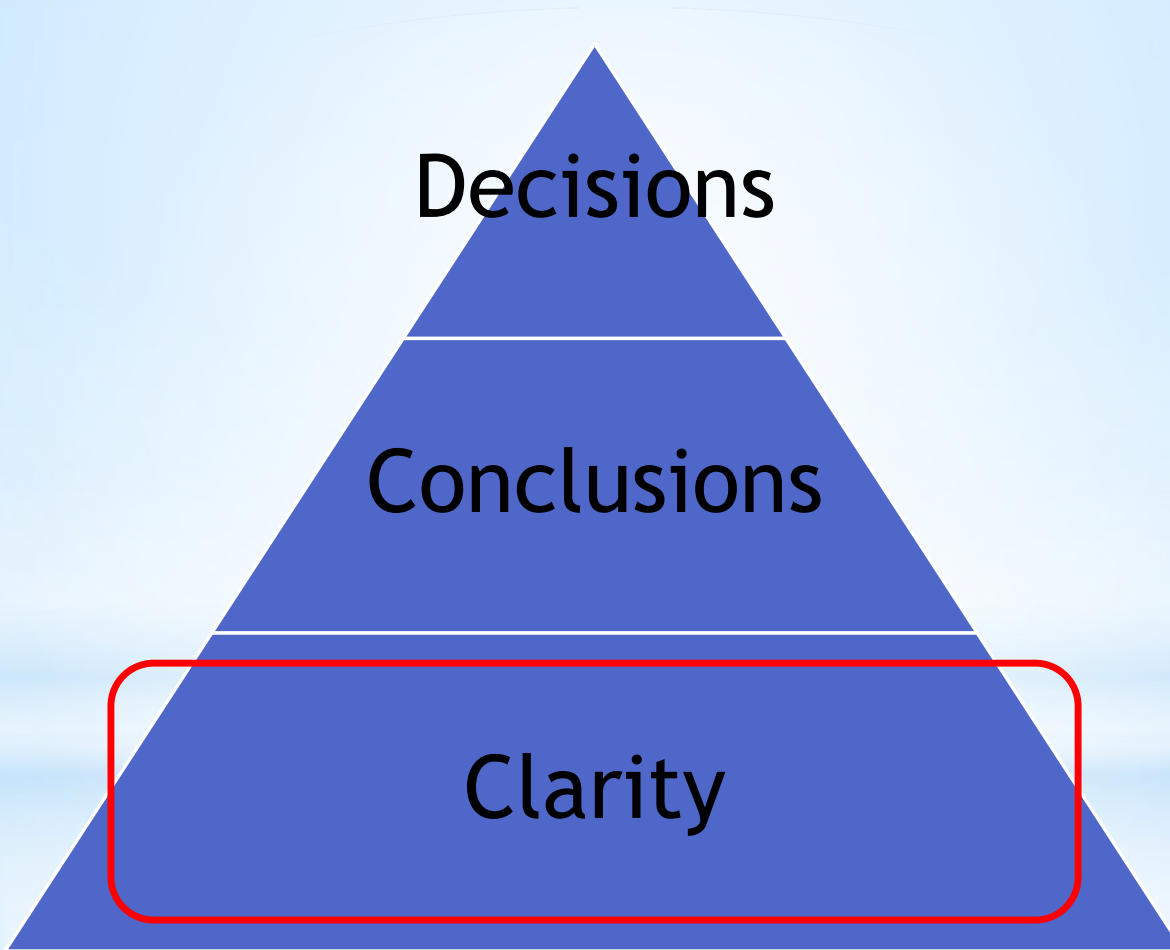
**FINISHED FILES ARE THE
RESULT OF YEARS OF
SCIENTIFIC STUDY
COMBINED WITH THE
EXPERIENCE OF YEARS.**

(Kallet, 2014, chap. 1)

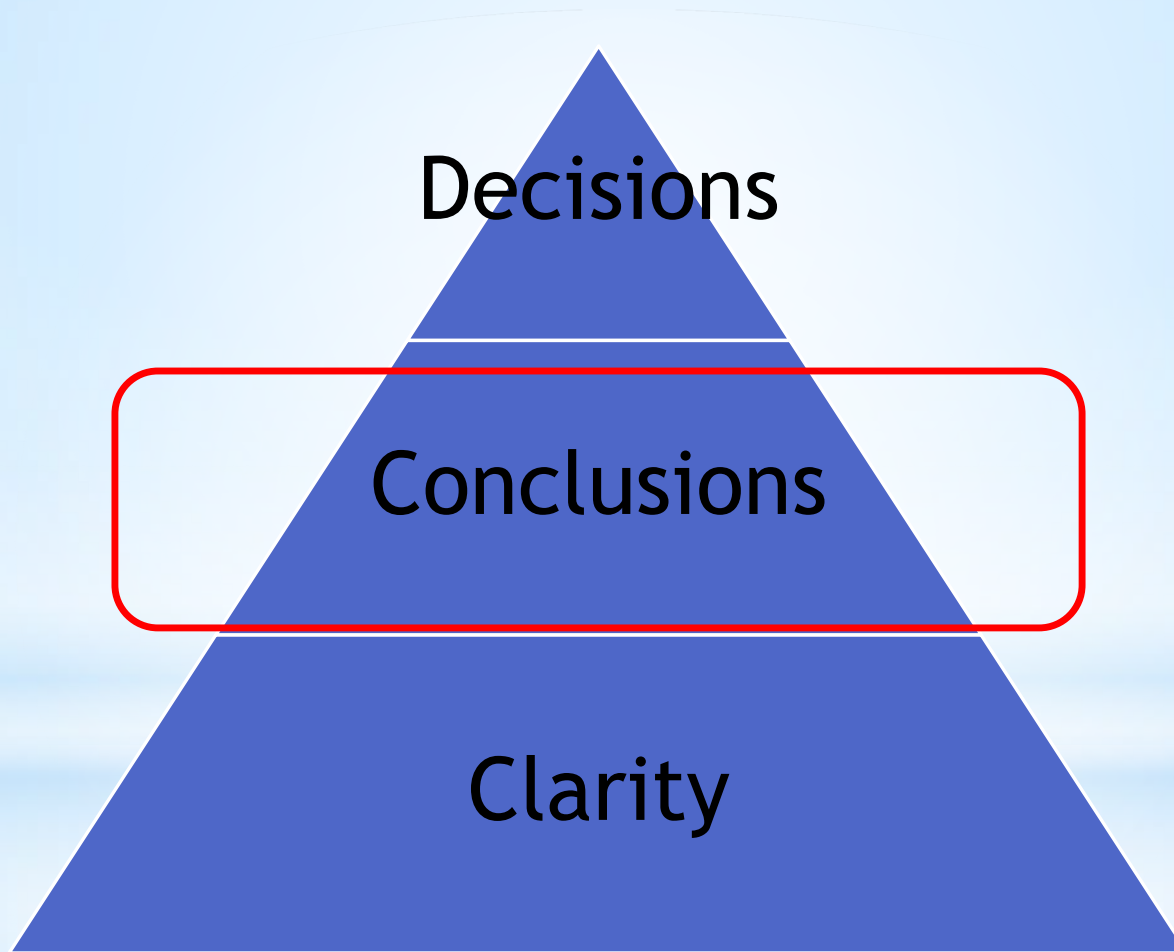
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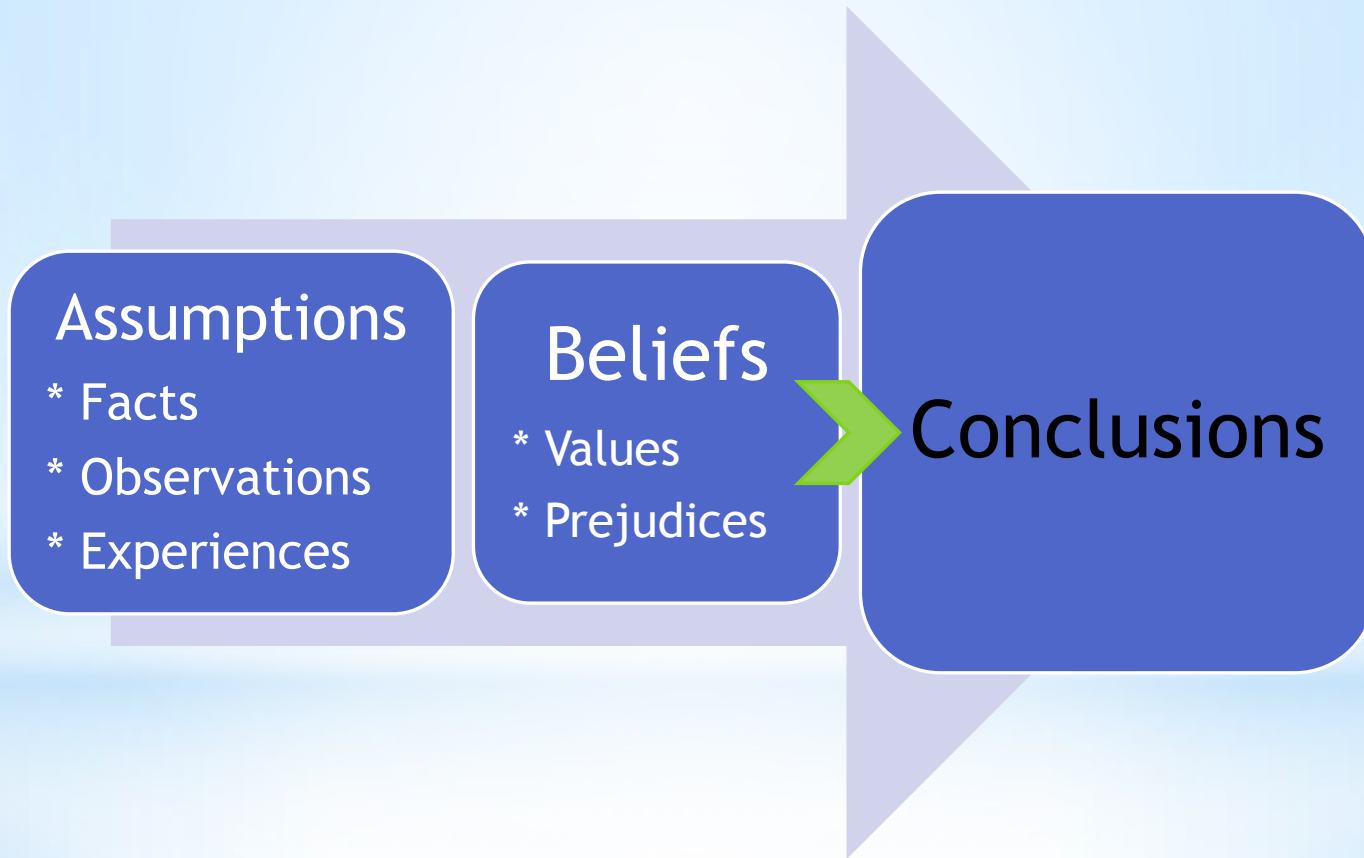
Critical Thinking



Critical Thinking

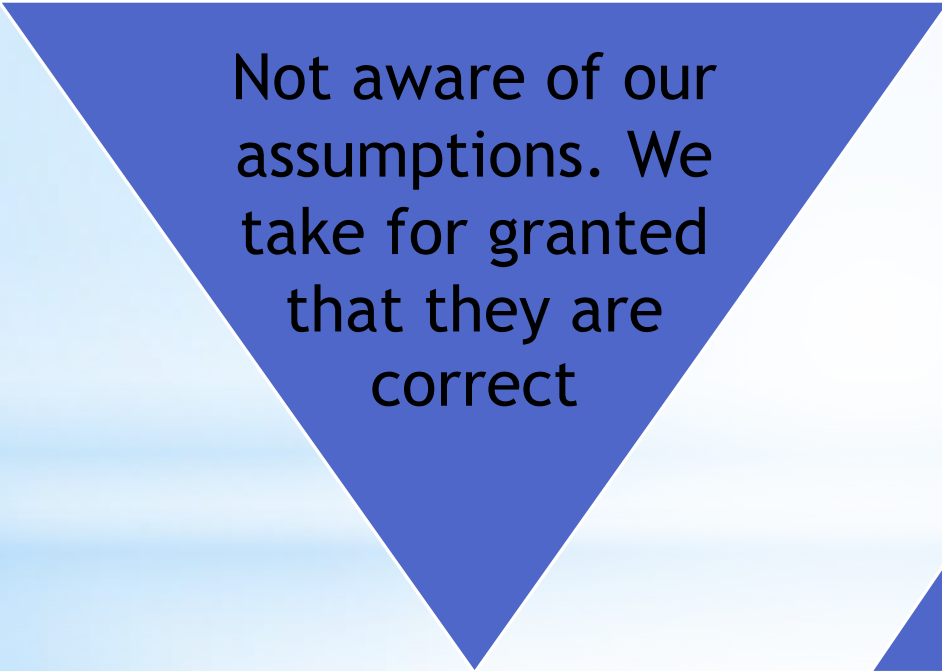


Conclusion Process



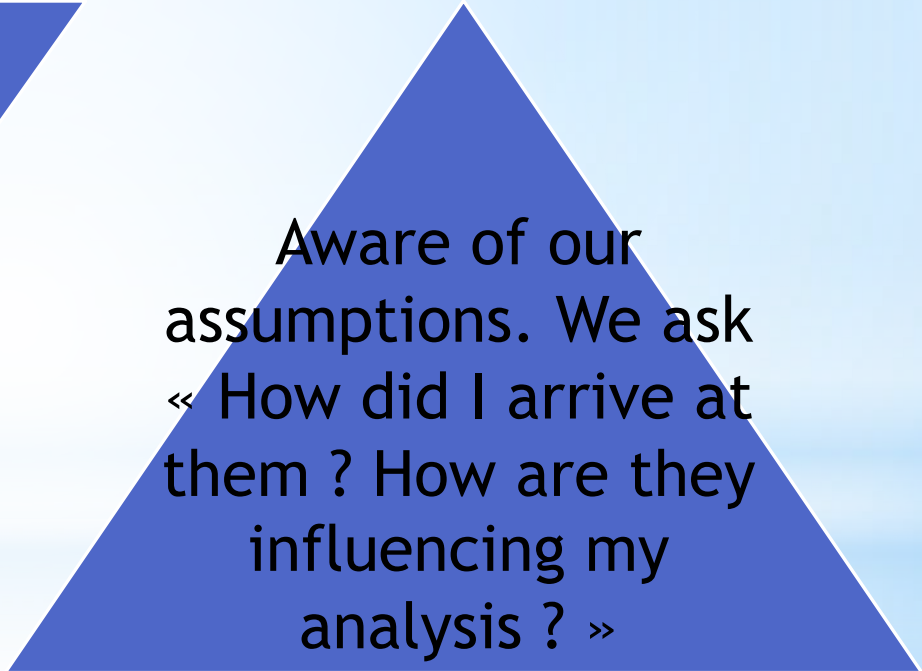
Automatic vs Critical Thinking

Automatic Thinking



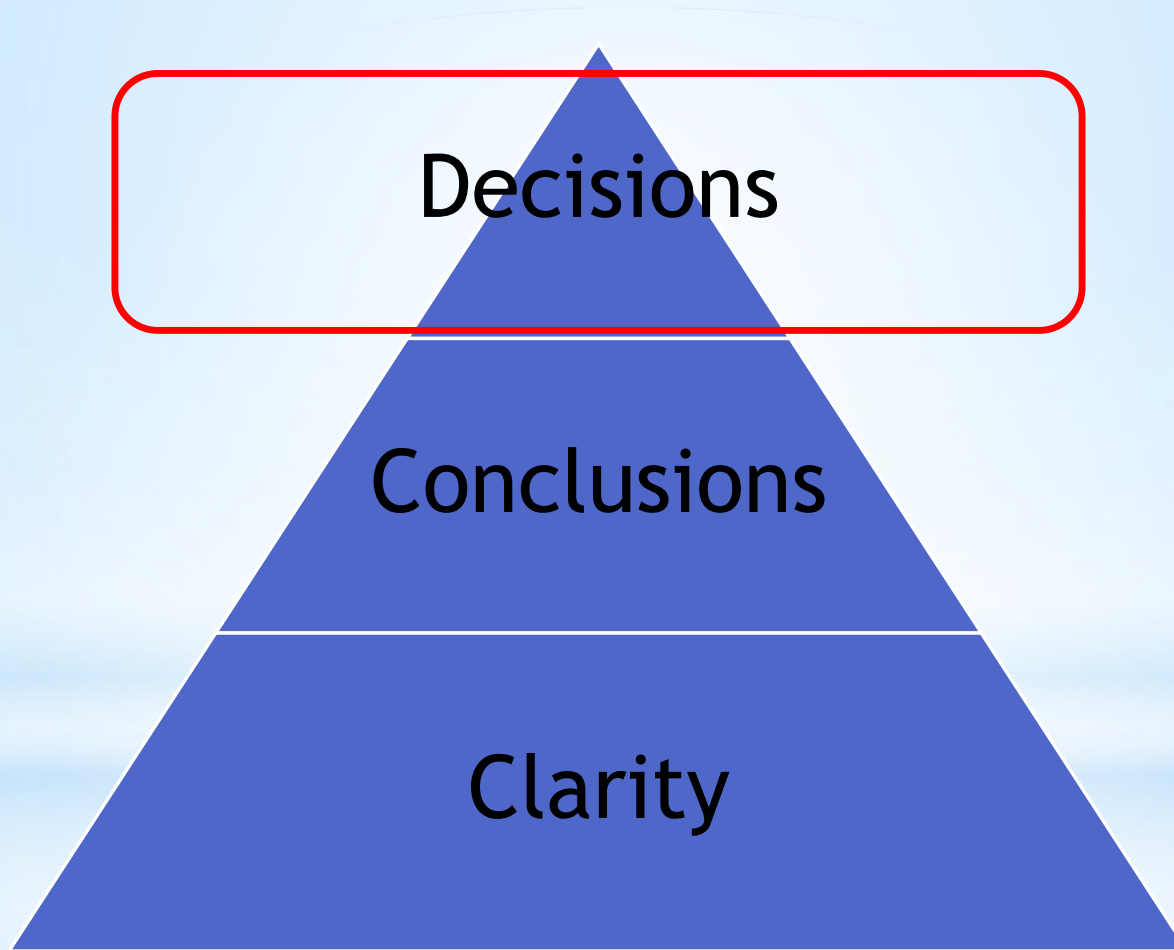
Not aware of our assumptions. We take for granted that they are correct

Critical Thinking



Aware of our assumptions. We ask « How did I arrive at them ? How are they influencing my analysis ? »

Critical Thinking



Barriers to Critical Thinking

- ✓ Time
- ✓ Information
- ✓ Experience
- ✓ Openness of the work environment
- ✓ Others

Time

- ✓ Need time to clarify the question [clarity];
- ✓ Need time to explore options, solutions and recommendations [conclusion];
- ✓ Need time to identify criteria to make a [decision];

*** What is considered « productive » time in your organisation/department?

Information

- ✓ The quantity
- ✓ The quality
- ✓ The analysis (including analytics models and algorithms)

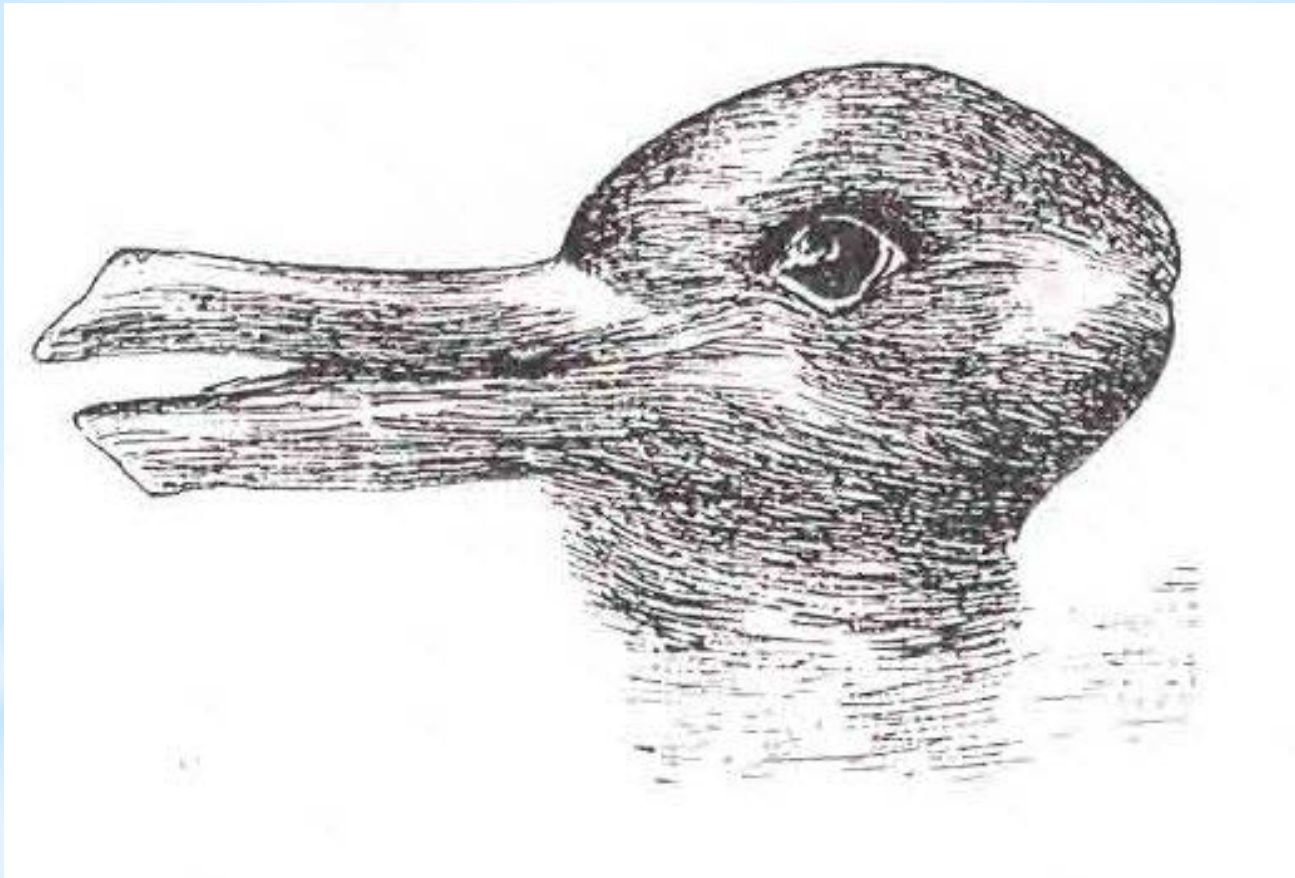
“Big Data: 20 Mind-Boggling Facts Everyone Must Read”

“1) ... more data has been created in the past two years than in the entire previous history of the human race.

2) Data is growing faster than ever before and by the year 2020, about 1.7 megabytes of new information will be created every second for every human being on the planet.

20) [In 2015] Less than 0.5% of all data is ever analyzed and used.”

Same Data Different Conclusion



Sli.do - Question #2

Which image did you see first?

a) Bird (seagull)

b) Rabbit

Many Analysts, One Data Set: Making Transparent How Variations in Analytic Choices Affect Results



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Experience

- ✓ Years or type of experience
- ✓ Openness to try « new ideas »

Openness of the Work Environment

- ✓ To have people:
 - ask difficult, unsettling or unwelcomed questions;
 - state their opinion even if it “goes against the grain” (nonconformity);
- ✓ To have processes examined and revisited;
- ✓ To have “unproductive” thinking time.

Others

- ✓ Egocentrism (or self-interested thinking);
- ✓ Sociocentrism (or group-centered thinking) pressures;
- ✓ Lack of objectivity (for example due to emotions)
- ✓ ...

Closing Remarks - Sli.do - Question #3

In light of the information presented, what would be the most important barrier that would prevent you from using critical thinking at work?

- a) Time
- b) Information
- c) Experience
- d) Openness of the work environment
- e) Other

References:

Kallet, M. (2014). *Think Smarter: Critical Thinking to Improve Problem-Solving and Decision Making Skills*. John Wiley & Sons.

Marr, B. (2015, September 30). Big Data: 20 mind-boggling facts everyone must read. *Forbes*.
<https://www.forbes.com/sites/bernardmarr/2015/09/30/big-data-20-mind-boggling-facts-everyone-must-read/#27526a717b1e>

Schmouker, O. (2019, May 13). Comment ne plus être victime de la pensée unique? *Les Affaires*.
<https://www.lesaffaires.com/blogues/olivier-schmouker/comment-ne-plus-etre-victime-de-la-pensee-unique/610169>

Silberzahn et al. (2018). Many Analysts, One Data Set: Making Transparent How Variations in Analytic Choices affect Results. *Advances in Methods and Practices in Psychological Science*, 1(3), 337-356.