

THINKING AND DECISION- MAKING

Thinking:

The function of thinking is to modify the information stored. It helps in:

Analysis - We break down information into lesser parts.

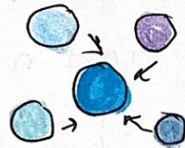
Synthesis - Bring in different pieces of information together.

Categorization - Relate certain pieces of information to certain categories.

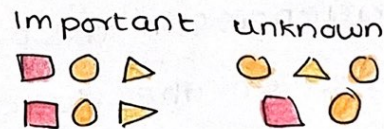
- make conclusions, inferences etc.



Analysis



Synthesis



Categorization

- Thinking produces new information.
- We combine and restructure existing knowledge to generate new knowledge.

Decision Making:

It is a cognitive process that involves selecting one of the possible beliefs or actions or making a choice between some alternatives.



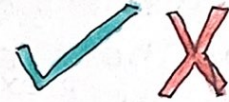
Thinking and decision making models ↴

Normative models

Descriptive models

• Normative models

- Describe the way that thinking should be -
- They define what is right and wrong, correct & incorrect, effective & ineffective.

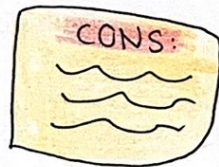


Formal logic:

- Deductive syllogisms - a combination of 2 premises & a conclusion.

Theory of probability:

- Normative way is to analyse the success or failure frequencies in the past and make a decision based on the outcomes of this analysis.



Utility theory:

- It is the normative model for decisions involving uncertainty and trade-offs between alternatives.
- The decision should be based on the utility for each option & choosing the one that maximizes this utility.

Descriptive models:

- show how people actually think and take decisions.
- an accurate description of real-life thinking patterns.

The theory of reasoned action & the theory of planned behaviour.

TRA (Martin Fishbein 1967)

- aims to explain the relationship between attitudes & behaviours when making choices.

main idea

An individual's choice of a particular behaviour is based on the expected outcomes of that behaviour.



If we believe that a particular behaviour will lead to a particular outcome, this creates a predisposition called **behavioural intention**.

Factors determining behavioural intention:

attitudes

individual perception of the behaviour.

subjective norms

the perceived social pressure regarding this behaviour.

I need to study more so that my mom feels happy.

behavioural intention

Not studying is bad for me....

attitude



you need to study hard to get a 99% otherwise you are a loser....



subjective norm

The adaptive decision-maker framework

- includes emotions in the process of decision making.
- made by Payne, Bettman and Johnson, 1993
- people use different strategies while making any decision
- a few of these strategies are:

Weighted additive strategy (WADD).

- normative for multi-attribute problems.
- assign numerical values to attributes
- then calculate the weighted sum of attributes for each alternative.
- The alternative with the highest total will be selected.

Alternatives	Attributes		
	Food ✓	Ambiance	Total
Malaka spice	4 x	5	9
urban foundry	5 ✓	5	10
L'Apicio	4 x	3	7

- selected alternative

Lexicographic strategy (LEX).

- select one attribute that matters the most
- then choose the highest value for that attribute.
- not optimal as it ignores the other attributes
- less efforts.

Satisficing strategy (SAT) Lexic

- determine a cut-off point for every attribute
- eliminate all the options that do not match the cut-off point & select the one with most cuts.
- this way options will get eliminated & if not then relax the cut-off point and then repeat the process.

Food - 5 Ambiance - 4 - cut-offs

Elimination by aspects (EBA) ✓ - selected x - eliminated

- choose the most important attribute and eliminate all the attributes that do not match the cut-offs (requirements).
- continue until one option is left.

WADD and SAT - alternative based
LEX and EBA - attribute based.

→ According to this framework, strategy selection is guided by goals.

- maximizing decision accuracy.
- minimizing the cognitive efforts
- minimizing the experience of negative emotion
- maximizing the ease of justification of a decision.

Theory of planned behaviour

- TRA was extended to make TPB.
- A third factor - perceived behavioural control was added.

perceived behavioural control

- situations in which attitude is positive
- subjective norms do not prevent you from performing the behaviour.
- you do not think you would be able to carry out the action.