

### **DECISION MAKING**

### Question: It is time to elect a new world leader, and only your vote counts. Here are the facts about the three leading candidates.

- <u>Candidate A</u>: Associates with crooked politicians, and consults with astrologists.He's had two Mistresses. He also chain smokes and drinks 8 to 10 martinis a day.
- <u>Candidate B</u>: He was kicked out of office twice, sleeps until noon, used opium in college and drinks a quart of whiskey every evening.
- <u>Candidate C</u>: He is a decorated war hero. He's a vegetarian, doesn't smoke, drinks an occasional beer and never cheated on his wife.
- Which of these candidates would be your choice?
  - Candidate A is Franklin D. Roosevelt.
  - Candidate B is Winston Churchill.
  - Candidate C is Adolf Hitler.

### **DECISION**



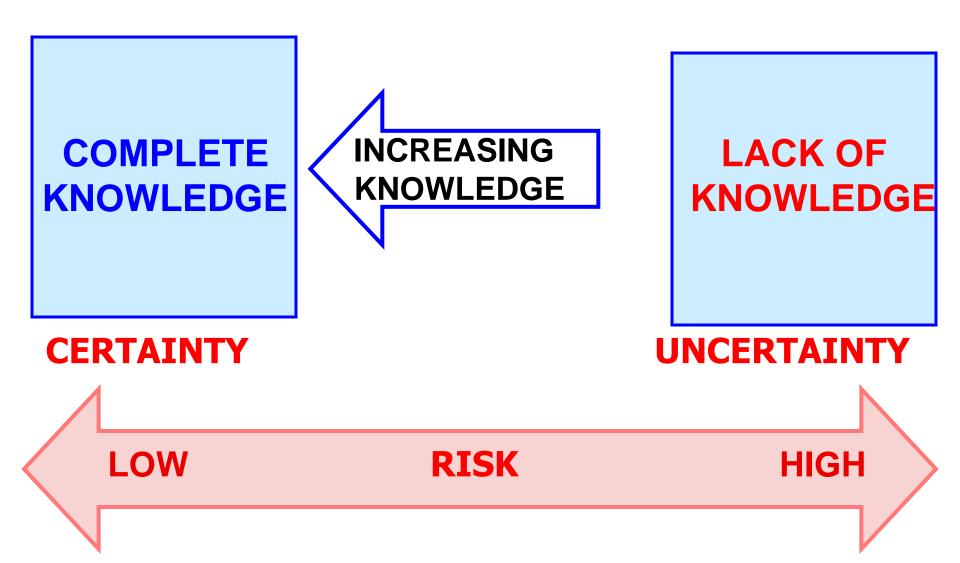
Decision is a course of action consciously chosen from <u>available</u> alternatives for the <u>purpose</u> of achieving a <u>desired</u> result

Decision is action taken in <u>present</u>, based on info of <u>past</u>, for action to take place in <u>future</u>

Interplay of human cognitive, affective and collative process

### **DM - STATES OF NATURE**





### **DECISION MAKING**



#### **JUDGEMENTAL**

#### **ANALYTICAL**

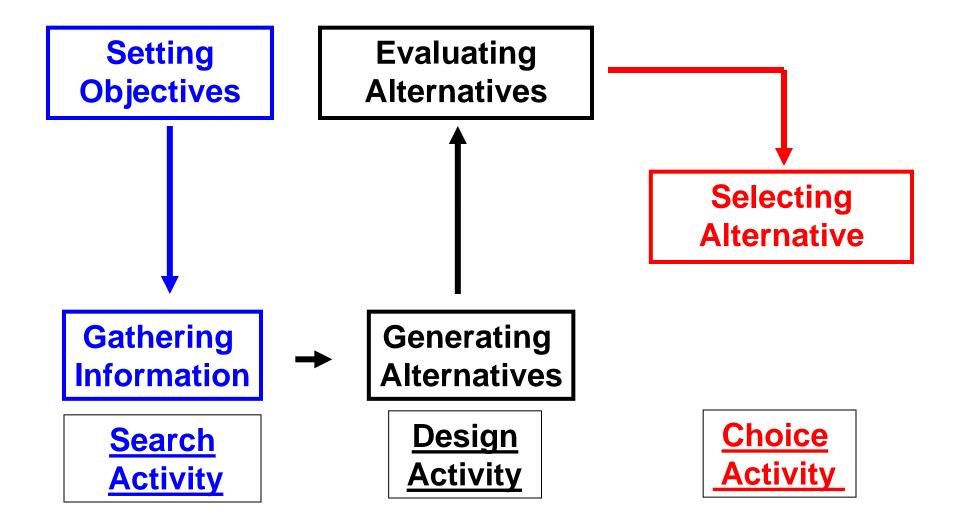


Based purely on knowledge, past experience, wisdom, gut feeling, hunch, impulse or intuition

Based on numerical data & their analysis

# RATIONAL DECISION MAKING PROCESS



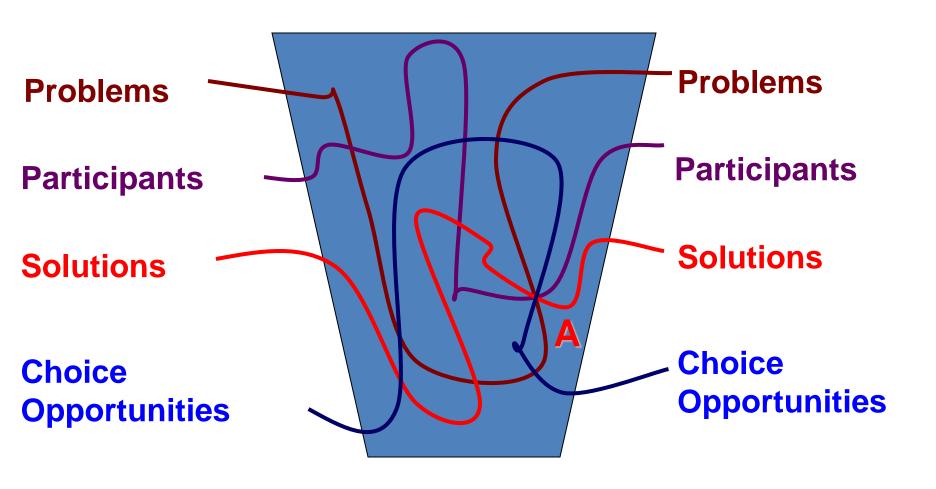


### **GARBAGE CAN MODEL**



- DM in some org appears to be haphazard and unpredictable
- > Decisions are random and unsystematic
- ➤ In this model Problems, Solutions, Participants & Choice Opportunities are floating around randomly
- > If the four factors happen to connect, a decision is made
- > The quality of decision depends on timing
- Under conditions of uncertainty, DM process is chaotic and some decisions appear to happen out of sheer luck

#### **GARBAGE CAN MODEL**





## WHAT IS AN EFFECTIVE DECISION?

#### **AN EFFECTIVE DECISION**



It is the one that fully <u>realises its objective</u> with complete <u>satisfaction</u> of people who are involved in its implementation and execution

The one that achieves the desired result most efficiently

#### **CONSTITUENTS: EFFECTIVE DECISION**



Quality Q  F ( Competence, Mental Attitude & Decision Process )

**Acceptability** 

A

F ( Social & Cultural factors , Motivation, Comn, Understanding )

Practicality

P

- F (Potential to put into operation)

EFFECTIVE DECISION = F [Q x A x P]



### **EX-CAVE RESCUE**

#### **EX- CAVE RESCUE**

- You have been asked to take the role of Head of a research management committee who is funding projects into human behavior in confined spaces
- You have been called to an emergency meeting as one of the experiments has gone badly wrong
- Seven volunteers have been taken into a cave system in a remote part of the country, connected only by a radio link to the research hut at the cave entrance. It was intended that the volunteers would spend four days underground, but they have been trapped by falling rocks and rising water. The only rescue team available tells you that rescue will be extremely difficult and only one person can be brought out each hour with the equipment at their disposal. It is likely that the rapidly rising water will drown some of the volunteers before rescue can be completed



- The volunteers are aware of the dangers of their plight. They have contacted the research hut using the radio link and said that they were unwilling to take a decision as to the sequence by which they will be rescued. By the terms of the Research Project, the responsibility for making this decision now rests with you
- ➤ Life saving equipment will arrive in 20 minutes at the cave entrance and you need to tell rescue team he order for rescue
- ➤ The only information available to you is drawn from the project files and is reproduced below. You may use any criteria as deemed fit to help you make a decision

#### **Volunteer 1 : Hema**

➤ Hema is 30 years old and a housewife. She has two children aged 7 months and 6 years. Her hobbies are reading and cooking. She lives in Hyderabad. Hema is known to have developed a covert romantic relationship with another volunteer (Amitabh)

#### **Volunteer 2 : Tanya**

➤ Tanya is 21 years old and a sociology student at Guwahati University. She is the daughter of wealthy Nepalese parents who live in Kolkatta. Her father is an industrialist. Tanya is unmarried and she is *outstandingly attractive*. Tanya spends her time and father's money in social work

#### **Volunteer 3 : Joshi**

Joshi is a man of 40 years and was born in Kenya of Gujarati parents. He comes from a Brahmin family and is well-known astrologer and theologian. He lives in Delhi and his clients include several senior politicians and civil servants. He is quite influential. He has six children between the ages of 2 years to 18 years



#### **Volunteer 4: Amitabh**

Amitabh is an unmarried man of 27 years. As a short service commissioned officer, he spent three years in the Army and was posted in Nagaland. For his work there he received a special commendation in dispatches. Since returning to civilian life, he has established a small scale factory with assistance from financial institutions. He also works as an office bearer in the Youth Congress, devoting much energy to helping young people. He lives in Patna. He likes giving lavish parties and driving sports cars

#### **Volunteer 5 : Paul**

▶ Paul is a man of 42, who has been divorced for six years. He was born in Kerala but now lives in Ranchi. Paul works as a medical research scientist and is recognized as an authority on cancer. He has recently developed a low cost treatment for this dreaded disease. Much of the research data is still in his working notebooks. Unfortunately, Paul has experienced some emotional difficulties in recent years and has been convicted for disorderly behavior. His hobbies are classical music and golf



#### **Volunteer 6 : Ajmer Singh**

➤ Ajmer Singh is a 35 years old man. He was born in Amritsar and studied geology at Dhanbad. He has been engaged in exploration of mineral wealth and has prepared a number of project reports for new deposits. He comes from a middle class family and is a teetotaler. He is married with two children. His wife teaches English literature in women's college

#### **Volunteer 7 : Ahmed**

Ahmed is a man of 59 years, who has lived and worked in Mumbai for most of his life. He is General Manager of a public sector company, producing fertilizers. The factory employs 900 persons. He is prominent in the local community. He is married with three children who have their own families and live independently away from Mumbai. Ahmed has recently returned from Kuwait, where he was personally responsible for negotiating a major contract for import of petroleum products. He intends to write a book about public sector after his retirement

#### **EX CAVE RESCUE**



- V-1. Hema, 30 Yr. 2 Children ,06 yrs & 07 Mths
- V-2. Tanya,21 unmarried ,attractive and of wealthy parents
- V-3. Joshi,40. 6 Children 2-18 yrs
- V-4. Amitabh,27 unmarried. Ex Army ....
- V-5. Paul,42 divorced. Auth on Cancer, devp low cost treatment, research data in notebooks
- V-6. Ajmer,35 married 2 children. Engaged in exploration of mineral wealth. No of project reports for new deposits
- V-7. Ahmed,59. 3 children all married. Responsible for negotiating a major contract for import of oil products

### RESPONSE PATTERN : CAVE RESCUE



	R-1	R-2	R-3	R-4	R-5
V-1. Hema					
V-2. Tanya					
V-3. Joshi					
V-4. Amitabh					
V-5. Paul					
V-6. Ajmer					
V-7. Ahmed					

# CHARACTERISTICS OF A DECISION SIT



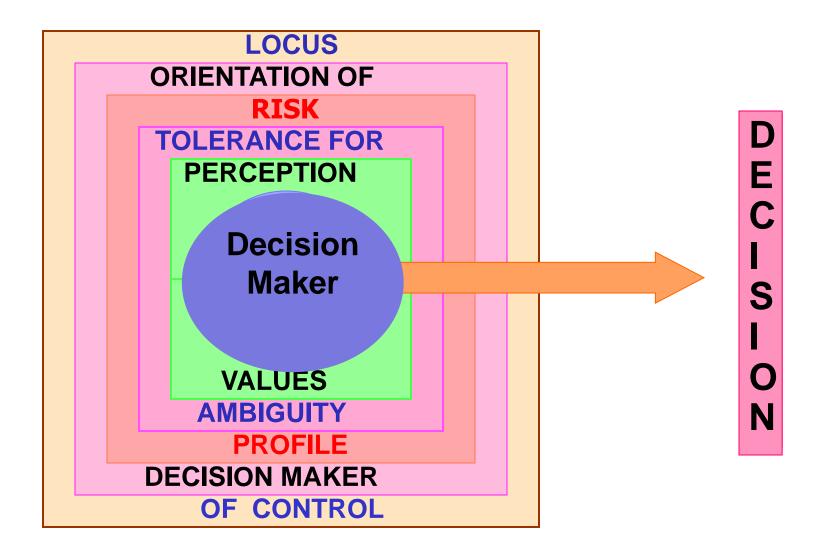
- Ambiguous and uncertain
- Fraught with risk
- Have a sense of urgency
- Involves anxiety, fear, hope and expectation of people
- ➤ No of alternatives each with its own pros / cons
- Involves interplay of intellectual and emotional aspects of decision maker



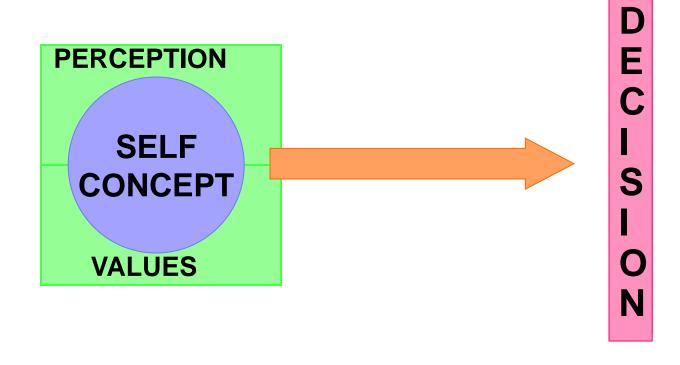
# HUMAN FACTORS IN DECISION MAKING

PSYCHOLOGICAL DIMENSIONS

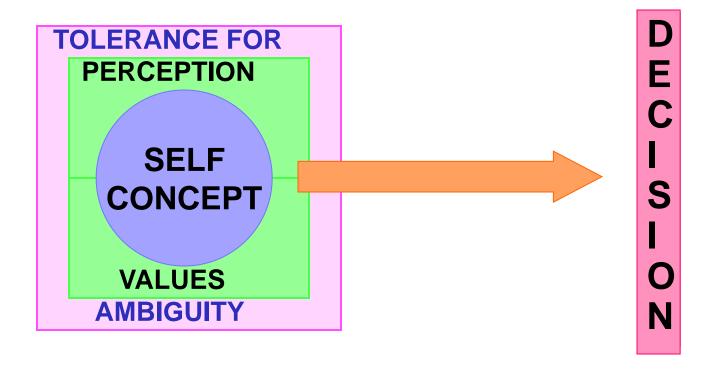




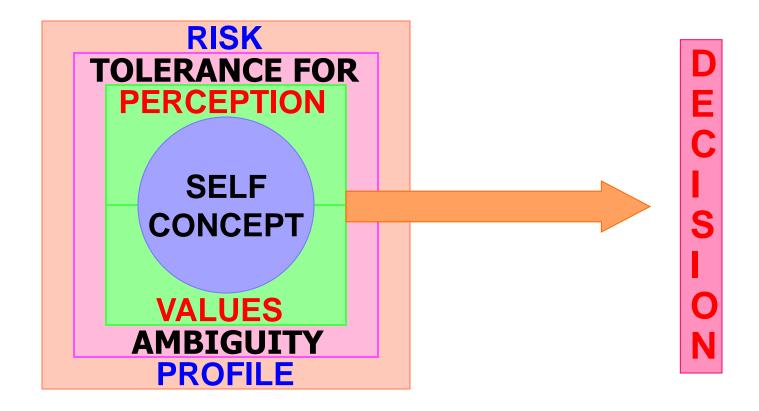










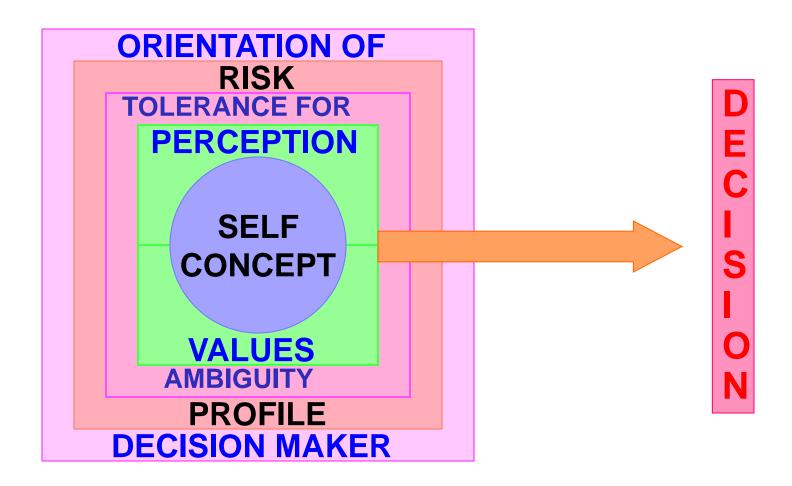


### **RISK PROFILE**

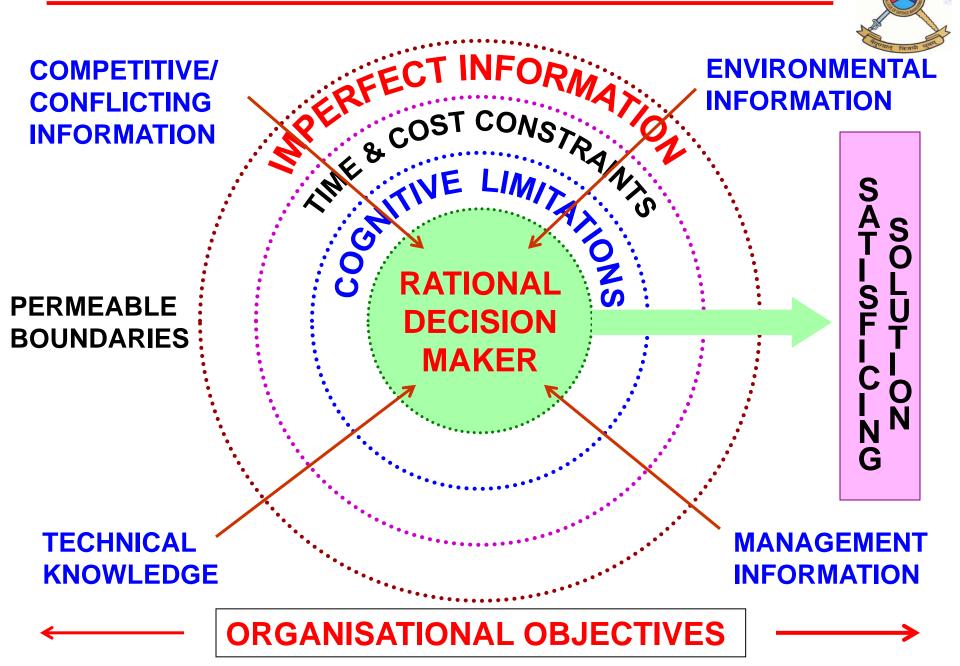


- > Propensity for accepting risk
- > Loss/Gain sense-subjective utility
- Subjective expected utility
  - Hope of Success (HoS)
  - Fear of Failure (FoF)

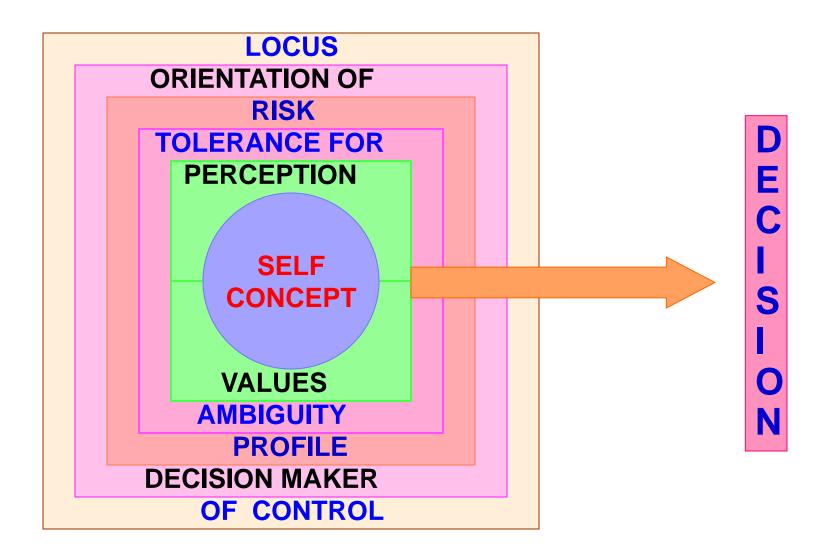




#### THE CONCEPT OF BOUNDED RATIONALITY







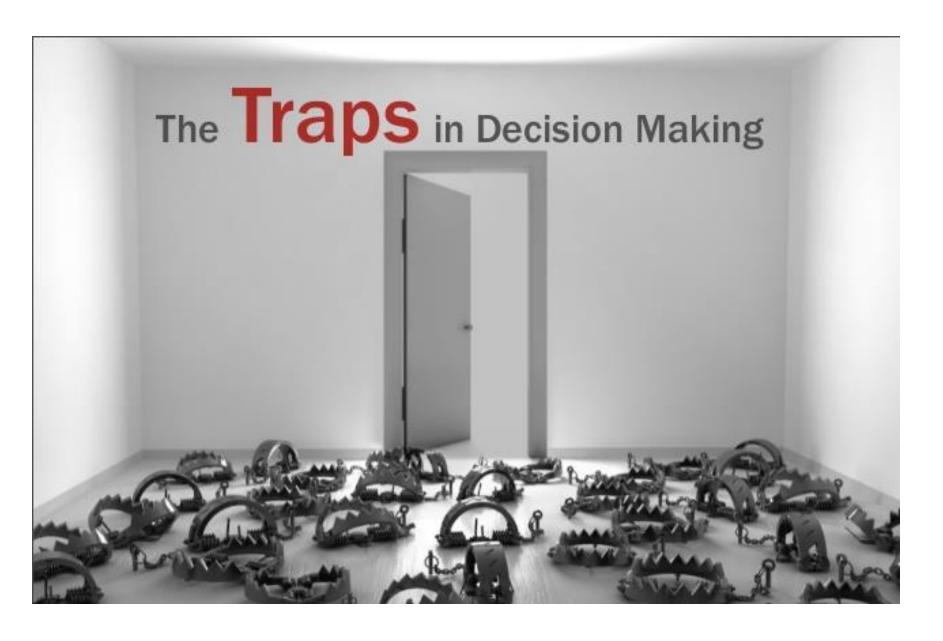
#### LOCUS OF CONTROL



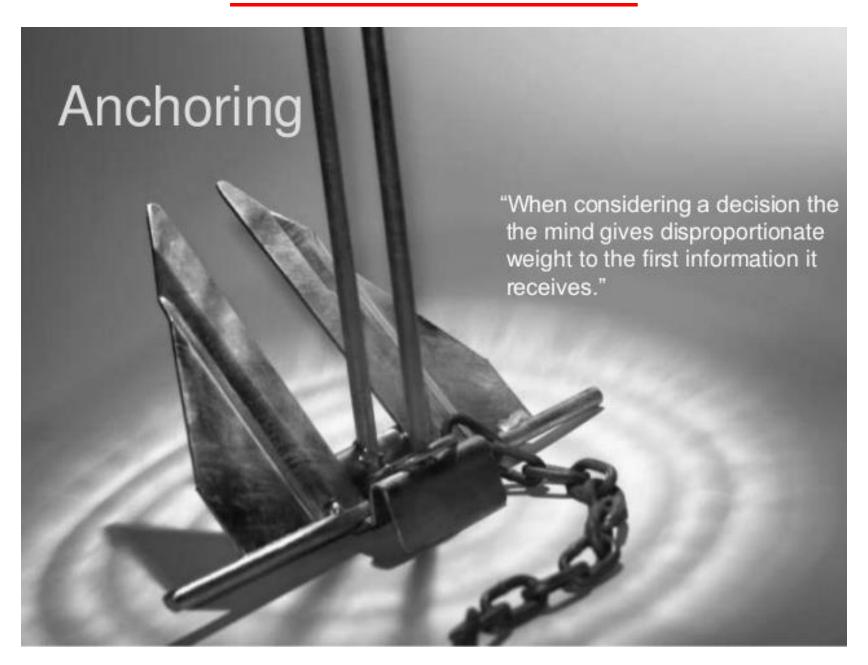
The probability attached by the decision maker that the outcome of a decision is determined by self effort (internal control like own behaviour ,choosing own course of action) or outside agency (external control like fate, luck, chance or other people)

#### **DECISION MAKING Technical Side Human Side** Self Risk **System** Concept **Stats Taking Analysis Tolerance** Locus **Operations** Work for of Research **Study Ambiguity** Control

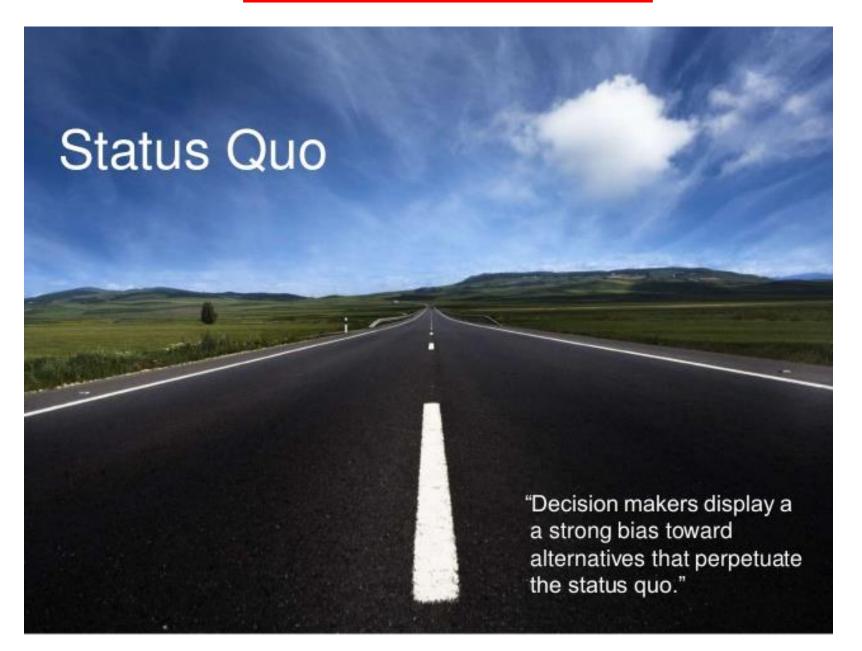
#### **PSYCHOLOGICAL TRAPS**



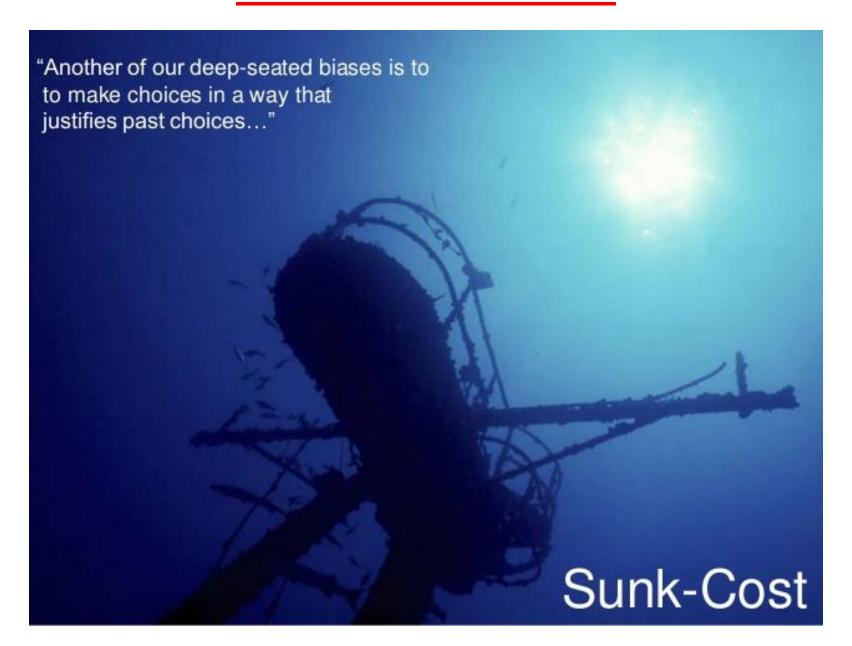
#### **ANCHORING TRAP**



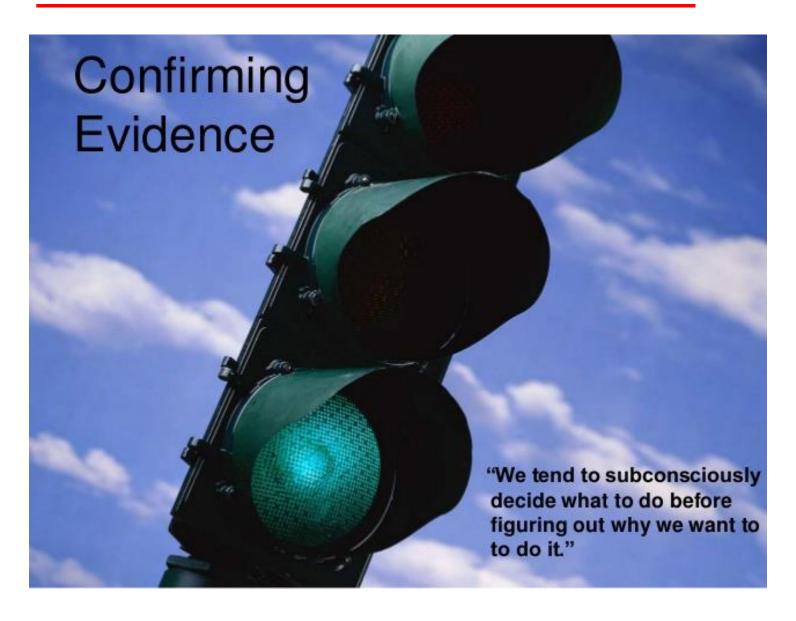
### **STATUS QUO TRAP**



### **SUNK COST TRAP**



#### **CONFIRMING EVIDENCE TRAP**



#### **FRAMING TRAP**



#### **OVERCONFIDENCE TRAP**



## **AUTHORITY BIAS**



Avoid the tendency to inflict own biases on the decisions you make and be aware of others biases influencing your own

#### TO IMPROVE DECISION MAKING

- > Combine rational analysis & intuition
- > Look for novel solution to problems & enhance creativity
- Adjust your DM style with the culture of the org
- Be aware of your biases & avoid psychological traps

#### RISKY SHIFT PHENOMENON

Abundant evidence to support that groups make risker decisions than individuals

- ➤ Risk takers persuasive in getting more cautious companions to shift position
- > As memebrs familiarise with issues, they feel confident about taking risk
- > Responsibility for decision making gets diffused
- > People do not like to appear cautious in public

## **GROUPTHINK**

A high degree of loyalty among group members that makes them reluctant to do or say anything that might 'Rock the Boat.'

A mode of thinking that people engage in when they are deeply involved in a cohesive group, when the members strivings for unanimity override their motivation to realistically appraise alternative courses of action

- Irving Janis



### **SYMPTOMS: GROUPTHINK**

- Illusion of invulnerability- Ignoring obvious danger, taking risk
- Collective rationalisation –Ignoring contrary warning
- Unquestioned morality- Believing gp posn ethical & moral .All others are inherently evil
- Excessive negative stereotyping-Viewing opposing side negative
- > Strong conformity pressure-Discourage dissent opinion
- > Self censorship of dissenting ideas-Withholding dissenting ideas
- Illusion of unanimity-Believing that everyone in gp agrees
- Self appointed mind guards- Protect the gp from (-) & threatening info

#### PREVENTING GROUPTHINK

- Effective leadership
- Balanced composition of the group
- Promoting open inquiry
- Encouraging critical analysis
- Use of devil's advocate within the group
- > Invite qualified outsiders to challenge group views
- Use of multiple groups or sub-groups within the group

# **ABILENE PARADOX Jerry B Harvey (1974)**

- A group collectively decides on a COA that is counter to the preferences of many or all members
- Inability to manage agreement
- Different from Group think as members acting contrary to their preferences – support plans they really do not believe in, leading to meaningless, costly outcomes!

# For every complex problem there is one simple, obvious solution





# Thank You

