Hawthrone Studies:

This is the most important contribution to the OB field.
A series of studies conducted at Western Electric Company Works in Cicero. These were initially designed by engineers as a scientific management experiment.

These experiment had 2 groups:

1. Control groups → Working under constant intensity.
2. Experimental groups → Being exposed to various lightning intensities.

The individual o/p in experimental group would be directly related to intensity of light.

However they found that, as the level of light was increased in experimental group, o/p for both groups increased.

As the level of light was ↓sed in experimental group, productivity ~~continued~~ to continued to ↑se in both groups. In fact, a productivity decrease was observed in experimental group only when the level of light was reduced. to the moonlit light level.

The engineers were not sure, but concluded that lightning intensity was not directly related to group productivity & that "something else" must have contributed to the results.

From 1927-30, Western Electric engineers & Harvard Professor Elton Mayo, encompassed numerous experiment in redesign of jobs, changes in workday & work-week length, intro to of rest periods, individual v/s group wage
The results indicated that incentive plan had less effect on workers O/P than did group pressure, acceptance & security.

The researchers concluded that social norms & stds were the key determinants of individual work behaviour.

Conclusion of Mayo studies:

a> Peoples behavior & attitudes are closely related.
b> Group factors significantly affect individual behavior.
c> Group stds establish individual worker o/p.
d> Money is less a factor in ~~management of organization~~. determining o/p, than are group stds, group attitudes & security.

These conclusions led to new emphasis on human behavior factor in management of organization.

Today's managers usage of behavioral approach:

- Behavioral approach has largely shaped today's organizations.
- From the way that managers design jobs to the way that they work with employee teams, to the way they communicate., behavioral approach is used.
- The early OB advocates proposed & conclusions have provided the foundation for current theories of motivation, leadership, group behavior & development & other behavioral approaches.

Quantitative approach:

The use of quantitaive techniques to improve decision making is known as Quantitative approach & also known as management science.

It involves applying statistics, optimization models, information models, computer simulations. Linear programming is a technique that managers use to improve resource allocation decisions.

Critical- path scheduling analysis → more efficiently done ~~[illegible]~~ for work scheduling.

Economic order quantity model $\xrightarrow{\text{helps}}$ to determine optimum inventory levels.

Total quality management (or) TQM: management philosophy devoted to continual improvement & responding to customer needs & expectations.

Customer: It includes anyone who interacts with organizations product (or) services internally (or) externally.

It encompasses employees & suppliers as well as ppl who purchase organization's goods (or) services.

1. Intense focus on the customer:

Customers → Outsiders → buy organizations products/ services.
→ internal customers → interact with & serve others in organization.

2. Concern for continual improvement: Quality can always be improved.
3. Process focused: focuses on work processes continually improved.

4. Improvement in the quality of everything the organization does.
   - This relates to → final product → how organization handle deliveries,
     → rapidly it responds to complaints
     → how phones are answered.

5. Accurate measurement:
   Statistic technique refers to measure every critical/variable in organization operations. These are compared against std to identify problems, trace them to their roots & eliminate their cause.

6. Empowerment of employees:

Use of quantitative approach in today's life:

This approach is being applied in queue management. This will translate the sales into strong, hand implementation.

This contributes directly to management decision making in areas of planning & control.

Managers make → Budgeting
→ Queuing.
→ Scheduling
→ Quality control.

They rely on quantitative techniques. Specialized software has made the use of these techniques.

Contemporary approach:

Management researchers began to look at what was happening in the external environment 'outside' the boundaries of organization.

Two contemporary management perspectives for this kind of approach:

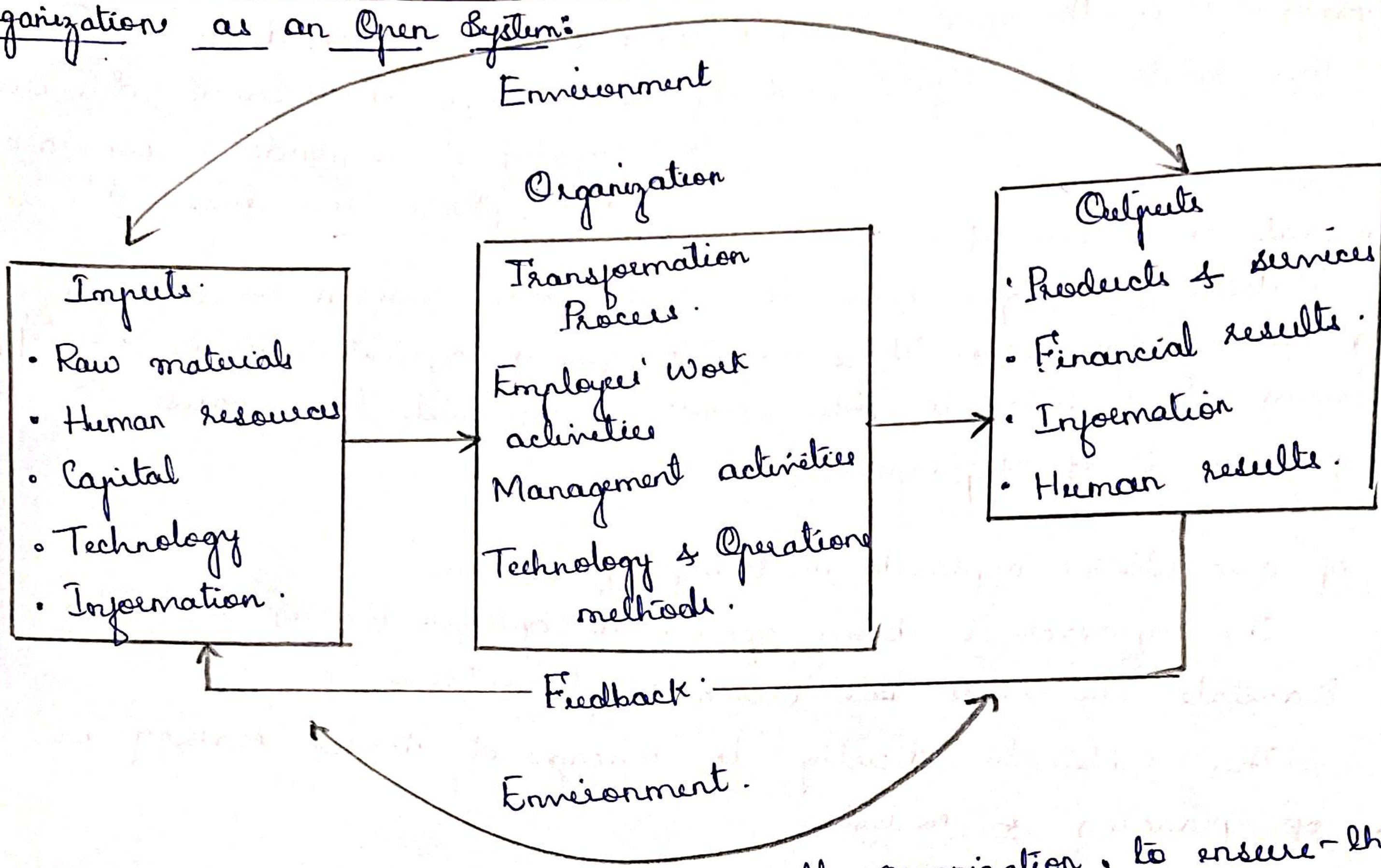
1. Systems
2. Contingency.

A system is a set of inter related & inter dependent parts arranged in a manner that produces a unified whole. The 2 basic types of systems are:

a) Closed system:- are not influenced by & do not interact with their environment.

b) Open system:- are influenced by & do interact with their environment.

Organization as an Open System:



- Managers co-ordinate work activities in the organization, to ensure they all are working together to achieve the goal.
  Eg: Even production team is efficient, the marketing team must anticipate changes & work with product development dept in creating products customers want.
- System approach: implies that the decision & action in one organizational area will affect other areas.
  Eg: If purchasing dept doesnot acquire right quantity & quality of i/p's, the production dept wont be able to do job.
- This approach recognizes that organizations are not self contained.
  a) They rely on environment
  b) They cannot survive if it ignores govt regulations, supplier relations.

Contingency approach:

A management approach that recognizes organizations as different, which means they face different situations (contingencies) & require different ways of managing.

1. Organization size: As size $\uparrow^{ses}$, so the problems of coordination.
2. Routineness of task technology:
   This require organizational structure, leadership style & control systems, that differ from those required by customized / non-routine technologies.
3. Environmental Uncertainity:
   The degree of uncertainty caused by environmental changes influences the management process.
4. Individual Differences: It depends on desire for growth, autonomy, tolerance of ambiguity & expectations.

Managers must look at their situation & determine that "if" this is the way my situation is, "then" this is the best way to manage.

This approach helps us understand management bcs its stresses there are no simplistic or universal rules for managers to follow

Managers as Decision makers:

Organization operate by people making decisions. A manager plans, organize, staffs, leads & control the team by executing decisions. The effectiveness & quality of those decisions determine how successful manager will be. The entire decision making process is dependent upon the right info being available to right person at right times. All managers would like to make good decisions because they are judged on the outcomes of those decision.

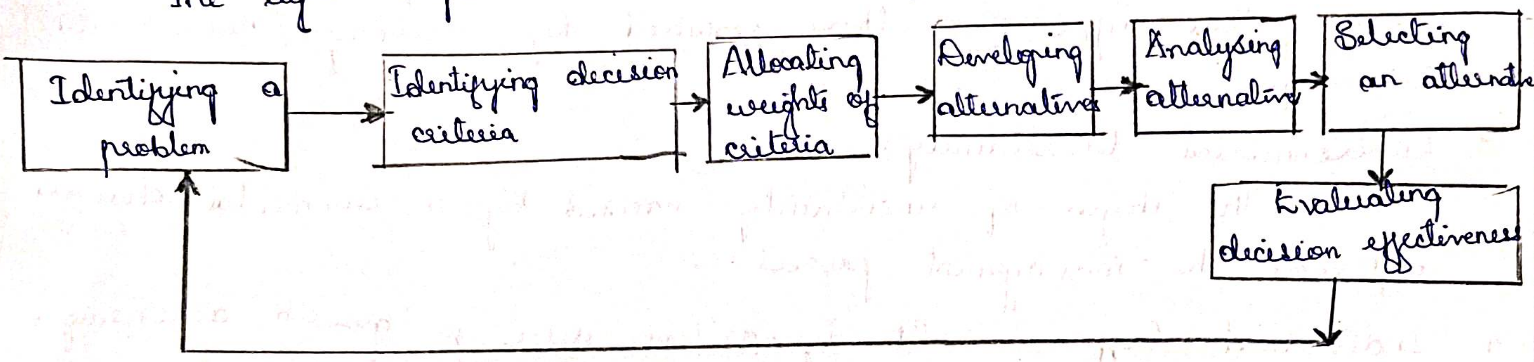
The decision making process:

Managers at all levels & in all areas of organizations make 'decisions'. A choice among 2 (or) more alternatives → Decisions.

Top level managers makes decision about their organization's goals.

Middle level manager about production schedule, product quality problems, pay raises & employee discipline.

The eight steps in decision making process.



Step 1: Identifying a problem:

- Every decision starts with a problem. A problem is an obstacle that makes it difficult to achieve a desired goal (or) purpose.
- Managers also have to be cautious not to confuse problems with symptoms of the problem. Effectively identifying problem is important.
- Problem identifying is subjective.
- A manager who resolves the wrong problem perfectly is likely to perform just as poorly as the manager who doesn't recognize the problem.

Step 2: Identifying decision criteria:

Once a manager identifies the problem, they must identify the decision criteria, which are important / relevant to solving the problem.

Every decision maker has criteria guiding their decisions, even if they are not explicitly stated.

Eg: New laptops for sales rep, the decision criteria include price, display, quality, memory & storage capabilities, battery life, warranty.

Decision Criteria: Criteria that define what's important / relevant to resolving a problem.

Step 3: Allocating weights to the criteria.

The decision maker must weight the items in order to give them the correct priority in the decision. A simple way is to give most important criteria a highest weight & then assign weights to the rest using similar scale.

Eg:

Memory & storage	10
Battery life	8
Carrying weight	6
Warranty	4.
Display quality	3.

Step 4: Developing alternatives:

In the process, the decision maker requires to list viable alternatives that could resolve the problem. In this step, decision maker needs to be creative. Alternatives are only listed, not evaluated.

Eg:

	Memory & Storage	Battery Life	Carrying Weight	Warranty	Display quality.
HP.	10	3	10	8	5.
Sony.	8	7	7	8	7.
Lenovo.	8	5	7	10	10.

Step 5: Analysing alternatives:

Once alternatives have been identified, a decision maker needs to evaluate each one. The above example shows the assessed values for the alternatives during the research, but not the weighting. When you multiply the each alternative by assigned weighed in step-2 you get the weighed alternative.

The total score for each alternative, is the sum of its weighted criteria.

Eg:

	Memory & storage	Battery Life.	Carrying Weight	Warranty	Display quality.	Total.
HP	100	24	60	32	15	231
Sony	80	56	42	32	21	231
Lenovo.	80	40	42.	40.	80	232.

Step 6: Selecting an Alternative:

Choosing the best alternative (or) the one that generated the highest total in step 5.

Step 7: Implementing the alternative:

The decision will be put into action by conveying it to those affected & getting their commitment to it.

During implementation;

a) the people who must implement, should participate in the process.

b). Managers need to reassess the environment for any changes, if its a long-term decision.

Step 8: Evaluating decision effectiveness:

Last step involves evaluating the outcome of the decision, to see whether the problem is solved (or) not.

If evaluation shows the problem still exists, then manager need to assess what went wrong. The answers might lead to redo an earlier step (or) might even require starting the whole process over.

Managers making decision:

Decision making is particularly important to managers. Managers when they plan, organize, lead & control, they are called as decision makers.

The following 4 perspectives shows how managers make decisions:

1. Making decisions: Rationality: Assumptions of Rationality:

a) A rational decision maker would be fully objective & logical.

b). The problem faced would be clear & unambiguous, & decision maker would have clear & specific goal & know all possible alternatives & consequences.

cr. Making decisions rationally would consistently lead to (1) selecting the alternative that maximizes the likelihood of achieving that goal.

dr. Decisions done by decision managers, must be in best interests of organization. These assumptions are not realistic.

In general, rational decision making describes how the choice that are logical & consistent & maximize value.

Making decisions: Bounded Rationality:

Decision making that's rational, but limited (bounded) by an individuals ability to process information.

As managers can't possibly analyze all info of all alternat-ives they satisfice, rather than maximize.

Satisfice means accept solns that are "good enough".

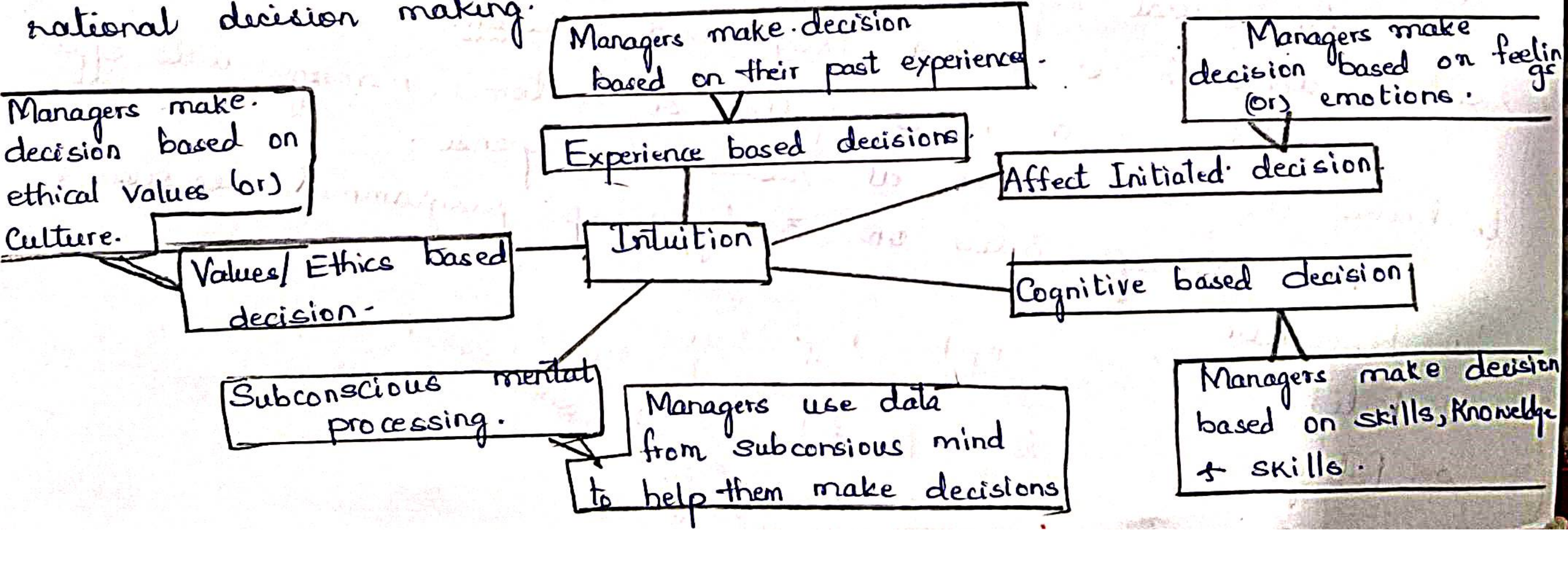
The decision making is also likely influenced by the organization's culture, internal politics, power considerations, & by a phenomenon called "escalation of commitment", i.e., increased commitment to a previous decision despite evidence that it may have been wrong.

Eg: The challenger space shuttle.

Making decisions: The role of Intuition:

Making decision on the basis of experience, feelings & accumulated judgement.

Intuitive decision making can complement both rational & bounded rational decision making.



Making decisions: The role of evidence based management: [EBMgt].

The systematic use of the best available evidence to improve management practice.

EBMgt is quite relevant to managerial decision making. The 4 essential elements of EBMgt are:

a) Decision makers expertise & judgement.
b) External evidence that's been evaluated
c) Opinions, preferences, & values of those who have stake in the decisions.
d). Organizational internal factors such as context, circumstances & organizational members.

The key for managers is to recognize & understand the choice, as to which elements are most important & should be emphasized in making a decision.

Types of decisions:

Depending on the nature of the problem, a manager can use one of two different types of decisions.

Structured Problems & programmed decisions:

When the decision makers goal is clear, the problem is familiar, & info about the problem is easily defined & complete. Such situations are called structured problems.

Eg: Customer returning purchased goods/items to a store, when supplier is late with important delivery.

An usual repetitive decision that can be handled by a routine approach is called Programmed decision.

Eg: When a drink is spilled on customer, manager will offer to have the coat cleaned at restaurants expense.

Here manager relies on 3 types of programmed decisions:

1. Procedure.
2. Rule.
3. Policy.

Procedure : A series of sequential steps ~~of~~ a manager uses to respond to a structured problem. The only difficulty is identifying the problem.

Rule : It is an explicit statement that tells a manager what can (or) cannot be done. Rules are frequently used because they're simple to follow ~~&~~ & ensure consistency.

Eg: Rules about lateness & absenteeism permit supervisors to make disciplinary decision rapidly & fairly.

Policy : A guideline for making a decision. A policy establishes general parameters for the decision maker. It contains an ambiguous term that leaves interpretation up to decision maker.

Eg : a) Customer always comes first & should always be satisfied.
b) Employee wages shall be competative within community stds.

Unstructured Problems & Non-programmed decisions :

Problems that are new (or) unusual & for which info is ambiguous (or) incomplete. is defined as Unstructured problems.

Non-programmed decision are unique & non-recurring & involve custom made solns.

	Characteristic	Programmed decision	Unprogrammed decision.
1.	Type of problem.	Structured	Unstructured.
2.	Managerial level	Lower levels	Upper levels.
3.	Frequency	Repetitive, routine	New, Unusual.
4.	Information	Readily available	Ambiguous /incomplete.
5.	Goals.	Clear, specific	Vague.
6.	Time frame for soln.	Short	Relatively long.
7.	Soln relies on	Procedures, rules, policies	Judgement & creativity.

Decision making conditions :
Three different condⁿ, managers need to consider.

a) Certainity :
A situation in which manager can make accurate decision because all outcomes are known.

b) Risk :
A situation in which the decision maker is to estimate the likelihood of certain outcomes.

c) Uncertainity :
A situation in which a decision maker has neither certainity nor reasonable probability estimates available.

An optimistic manager follow a maximax choice (maximizing the maximum possible payoff)

A pessimist will follow a ~~maximax~~ maximin choice (maximizing the min possible payoff).

Decision making styles :

1. Linear - Non-linear thinking style profile:
Linear thinking style is characterized by a persons preferences for using external data & facts, & processing this info thro' rational logical thinking to guide decisions & actions.

Non-linear thinking style is characterized by a preference for internal source of information (feelings & intuition) & processing this info with internal insights, feelings & hunches to guide decisions & actions.

2. Decision - Making Biases & Errors :
When managers making decision, they not only use their own particular style, but they may also use "rules of thumb" (or) heuristics.

Heuristics is rules of thumb that managers use to simplify the decision making. This will help make sense of complex, uncertain & ambiguous info.

When decision makers tend to make decision, they have been identified to make 12 common decision errors & biases:

1. Overconfidence bias:
When managers tend to think they know more than they do (or) hold unrealistically positive views of themselves & their performance.

2. Immediate gratification bias:
Tend to want immediate rewards & to avoid immediate costs. For these individuals, immediate rewards/payoffs are more appealing than those with payoffs in future.

3. Anchoring effect:
This describes how managers fixate on initial info as a starting point & fail to adequately adjust for subsequent info.

4. Selective perception bias:
When managers selectively organize & interpret events based on their biased perceptions. This influences the info they pay attention to, problems they identify & alternatives they develop.

5. Confirmation:
Managers who seek out info that re-affirms their past choices & discount info that contradicts past judgement.

6. Framing bias:
When decision makers tend to select & highlight certain aspects of situation while excluding others. They distort what they see & create incorrect reference points.

7. Availability:
Tend to remember events that are most recent & vivid in their memory. It distorts to recall events in an objective manner & results in distorted judgement.

8. Representation:
When they assess the likelihood of an event based on how closely it resembles other events (or) sets of events.

9. Randomness:

It describes the actions of managers who try to create meaning out of random events.

10. Sunk Costs:

When decision makers forget that current choices cannot correct the past.

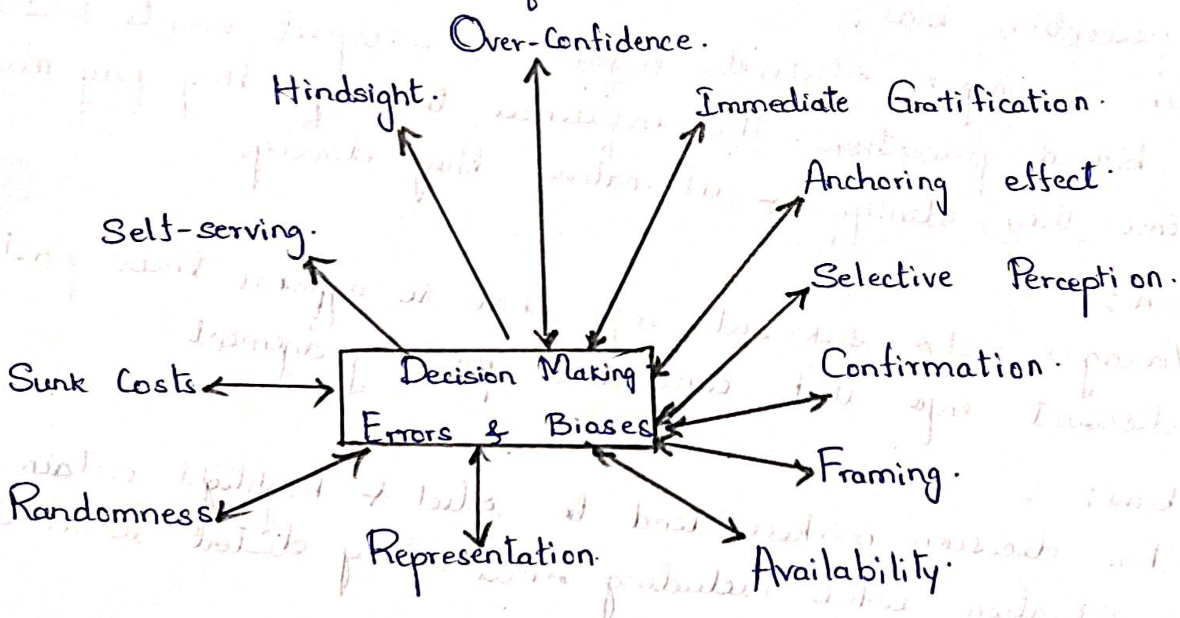
Eg: Fixating the past expenditure of money, time (or) effort in assessing choices rather than on future consequences.

11. Self-serving bias:

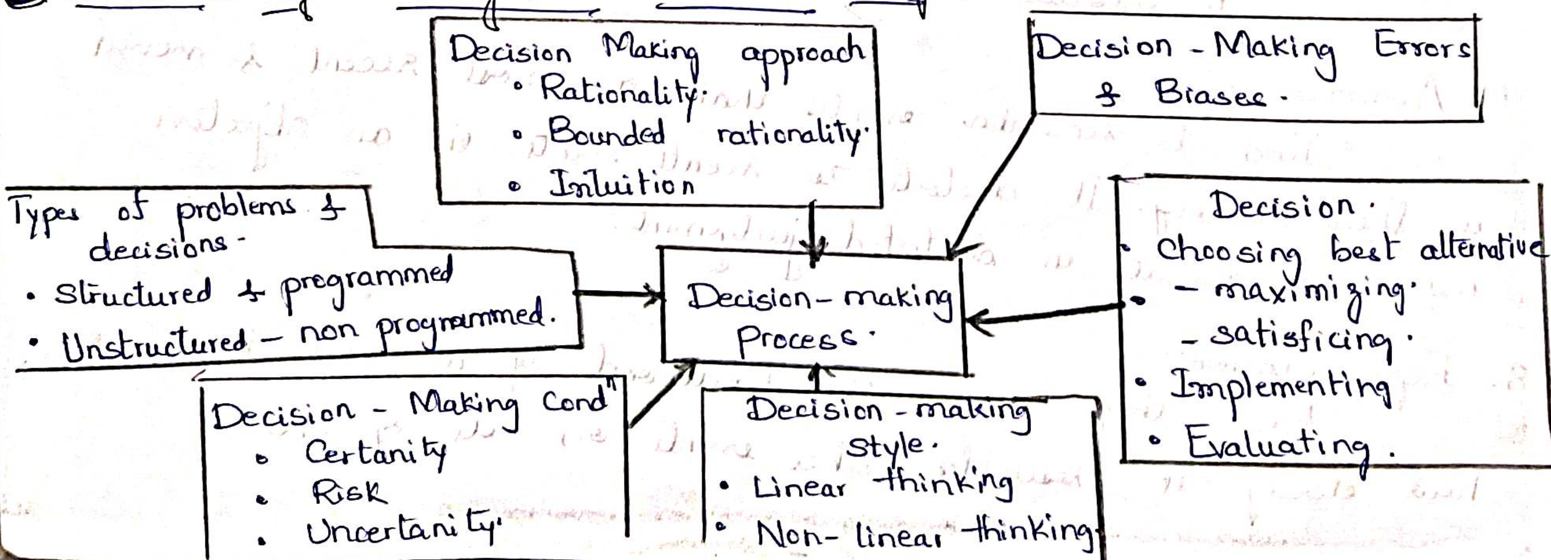
Managers who are quick to take credit for their success & to blame failure on outside factors.

12. Hindsight:

Tendency to falsely believe that they they have accurately predicted the outcome of an event



- Overview of Managerial decision making:



Effective decision making in Today's world:

Todays business revolve around making decisions, often risky ones, usually incomplete (or) inadequate info, & under intense time pressure. Some guidelines followed to make effective decisions are:

1. Understand cultural differences:
2. Know when its time to call it quit.
3. Use an effective decision making process
4. Build an organization that can spot the unexpected & quickly adapt to the changed environment.
   a) They are not kicked by their success
   b) They defer to the experts on the front line.
   c) They let the unexpected circumstances provide the sol^n.
   d) They embrace complexity.
   e) They anticipate but also recognize their limits.

3. a) focuses on whats important.
   b) is logical & consistent.
   c) acknowledge both subjective & objective thinking & blends both analytical & intuitive approaches.
   d) requires only "enough" info as necessary to solve the problem.
   e) encourages & guides relevant info & informed opinions.
   f) Straighforward, reliable, easy to use & flexible.