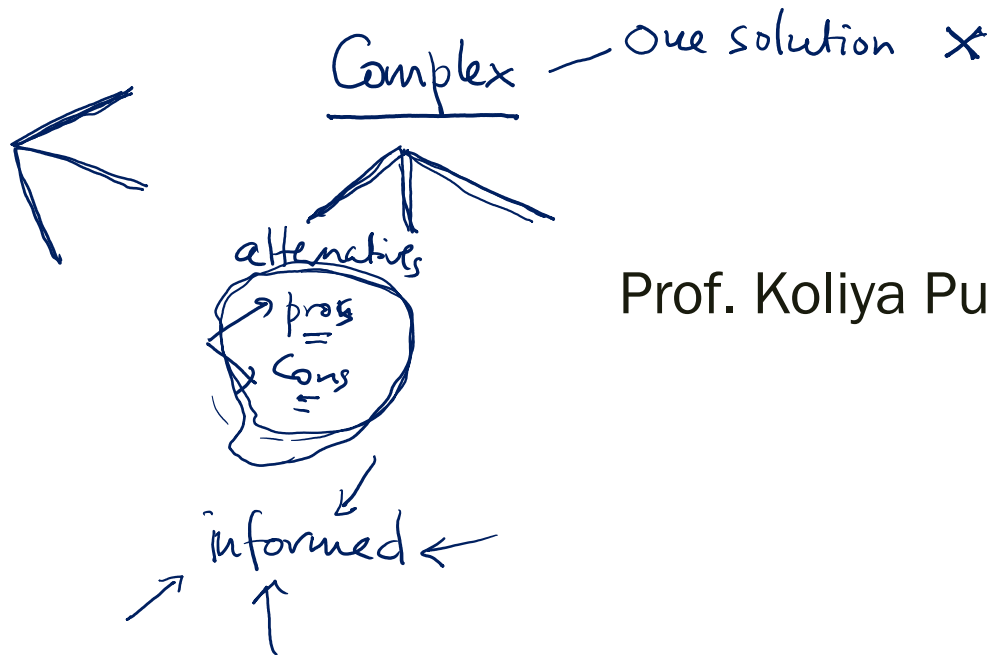




DECISION MAKING



Prof. Koliya Pulasinghe

Aim of the Lecture

What is the aim?

– *Aim of the lecture is*

■ to provide teams with

→ theoretical frameworks,

→ strategies and

→ tools

that they can be used when ^{you} ~~they~~ are making decisions.

Decision

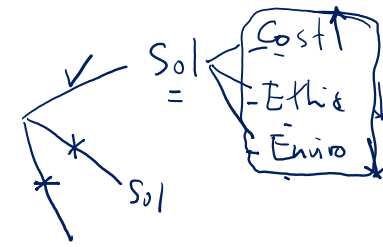
■ Decision –

"the act of making up your **mind** about something, or a position or opinion or judgment reached after consideration"

objectives goals

Decisions

Decision Making



- The cognitive process of reaching a decision.
- A position or opinion or judgment reached after consideration
- Choosing between alternative courses of action using cognitive processes - memory, thinking, evaluation, etc.
- The Process of mapping the likely consequences of decisions, working out the importance of individual factors, and choosing the best course of action to take



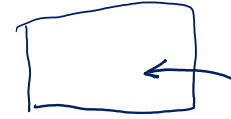
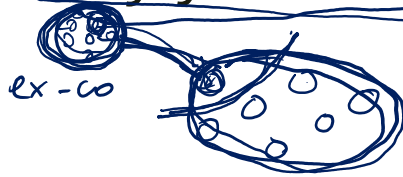
In a Team ;

- Process through which team selecting alternatives which are important for **Team Performance**

Decision Making

Why we need to learn this?

- To make informed choices in team decision making processes
- To get everyone involved in the decision-making process
- To justify your decisions to different audiences



Decision Making is a Logical and Systematic Process

- Create a constructive environment - (Goal/Right People/Opinions)
- Generate good alternatives - (Ideas/Different Perspectives/Organize Ideas)
- Explore these alternatives - (Risks/Impacts/Validations)
- Choose the best alternative - (Grid Analysis/Decision Trees)
- Check your decision.
- Test assumptions & Decisions with own Experience
- Check for Common Decision Making Problems
- Check the Logical Structure of the Decision
- Communicate your decision, and take action



Decision making

Three main areas that support systematic process are:

- *1. Environments for decision making*
- *2. Methods for decision making*
- *3. Tools for decision making*

Environments for Decision Making



Features of a Thinking Environment

1. Attention
- *listening with respect, interest and fascination to your team members*
2. Incisive Questions
- *removing assumptions that limit ideas*
3. Equality
- *treating each team member as a thinking peer*
4. Appreciation
- *practicing a 5:1 ration of appreciation to criticism of your teammates and their ideas*
5. Ease
- *ease creates. Urgency destroys*

Features of a Thinking Environment

6. Encouragement

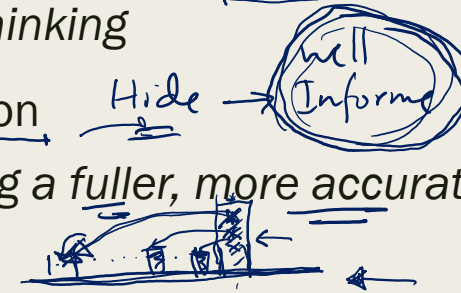
- moving beyond competition with your teammates to collaboration

7. Feelings

- allowing sufficient emotional release to restore thinking

8. Information

- providing a fuller, more accurate picture of reality



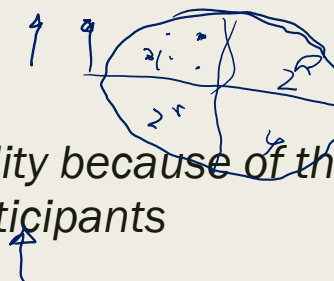
9. Place

- creating a physical environment that says 'You matter'



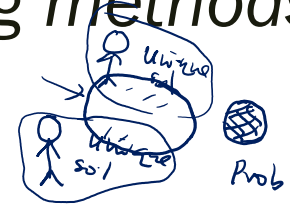
10. Diversity

- adding quality because of the differences between participants



Methods for Decision Making

- *Understanding the decision-making methods will help you to make the best decision available.*



- *Best Decision*

1. *would not have been thought of by an individual alone* ←
2. *a sound solution to the problem*
3. *a decision based upon input, as unbiased as possible, from each team member*
objectively taken
4. *addresses the team's goal for the decision-making process.*

- *Methods describe how we work, how they affect and manipulate the team decision making process in productive ways.*

Methods of Decision Making

1. Decision by consensus

Time available allows a consensus to be reached; the team is sufficiently skilled to reach a consensus; the team commitment required to implement the decision is high.

2. Decision by majority vote

Time constraints require decision; group consensus supporting voting process; team commitment required to implement decision is moderately high.

3. Decision by minority vote (EXCO)

Limited time prevents convening entire team; clear choice of minority group; team commitment required to implement the decision is moderately low

Methods of Decision Making

4. Decision made by authority after group discussion

Available time allows team interaction but not agreement; clear consensus on authority; team commitment required to implement decision is moderately low.

5. Decision by averaging individuals' opinions

Time available for decision is limited; team participation is required, but lengthy interaction is undesirable; team commitment required to implement the decision is low.

6. Decision by expert



Highly dependent on specific expertise, clear choice for expert

7. Decision made by authority without group discussion

Simple, routine, administrative decisions; little time available to make decision;

Tools for Decision Making

- Why we need tools?

In addition to creating an environment for effective decision making and using methods for making decisions as a team, tools can assist teams in formulating and reaching decisions.



Tools to assist teams for Decision Making

- Brainstorming
- Brainstorming is a group **creativity technique** by which efforts are made to find a conclusion for a specific problem by gathering a **list of ideas spontaneously contributed** by its members

Objectives/Goals.

Wikipedia



Tools to assist teams for Decision Making

- Affinity Grouping
- Grouping unstructured ideas (Generated from Brainstorming) based on their natural relationship



Tools to assist teams for Decision Making

- Multi-voting
- The multi-voting technique holds an answer to your problems when decision making becomes tough, because of too many options/alternatives.
- Process: Each member is given many votes (Ex: 1/3 of the options), Run it many rounds.

Multivoting Example	
First Vote Tally	
A. No agenda	I. Problems not mentioned
B. No clear objectives	J. Interrupted by phone calls
C. Going off on tangents	K. Few meaningful metrics
D. Extraneous topics	L. Interrupted by visitors
E. Too many "sea stories"	M. No administrative support
F. Vital members missing from meeting	N. Meetings extended beyond allotted time
G. Not enough preparation for meetings	O. Members distracted by pressing operations
H. Too much "dog and pony"	P. Unclear charts

Lack of Meeting Productivity

Tools to assist teams for Decision Making

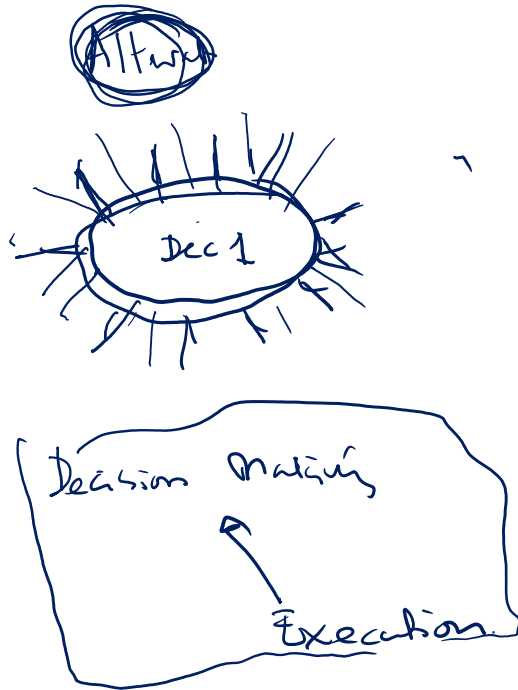
- Criteria Matrix
- A decision matrix is a list of values in rows and columns that allows an analyst to systematically identify, analyze, and rate the performance of relationships between sets of values and information. Elements of a decision matrix show decisions based on certain decision criteria.

Wikipedia

Weighted Decision Matrix							
Criteria	Weighting	OPTIONS					
		Option 1 JS		Option 2 PHP		Option 3 L	
		Score	Total	Score	Total	Score	Total
Envir	Criteria 1	1	1	5	5	5	5
ethical	Criteria 2	2	4	4	8	5	10
Cost	Criteria 3	3	9	3	9	5	15
Easier	Criteria 4	4	16	2	8	5	20
	Criteria 5	5	25	1	5	5	25
	TOTAL:		55		35		75


Tools to assist teams for Decision Making

- Six Thinking Hats:
- Looking at a decision from a range of different perspectives




Important issues of Decisions

Every Decision must address two issues:

1. Merit Dimension –  Merits of the decision in some quantitative way
2. Acceptance Dimension – People affected by the decision will accept it

DM in Project Teams (continue...)

Advantages of Team Decision Making

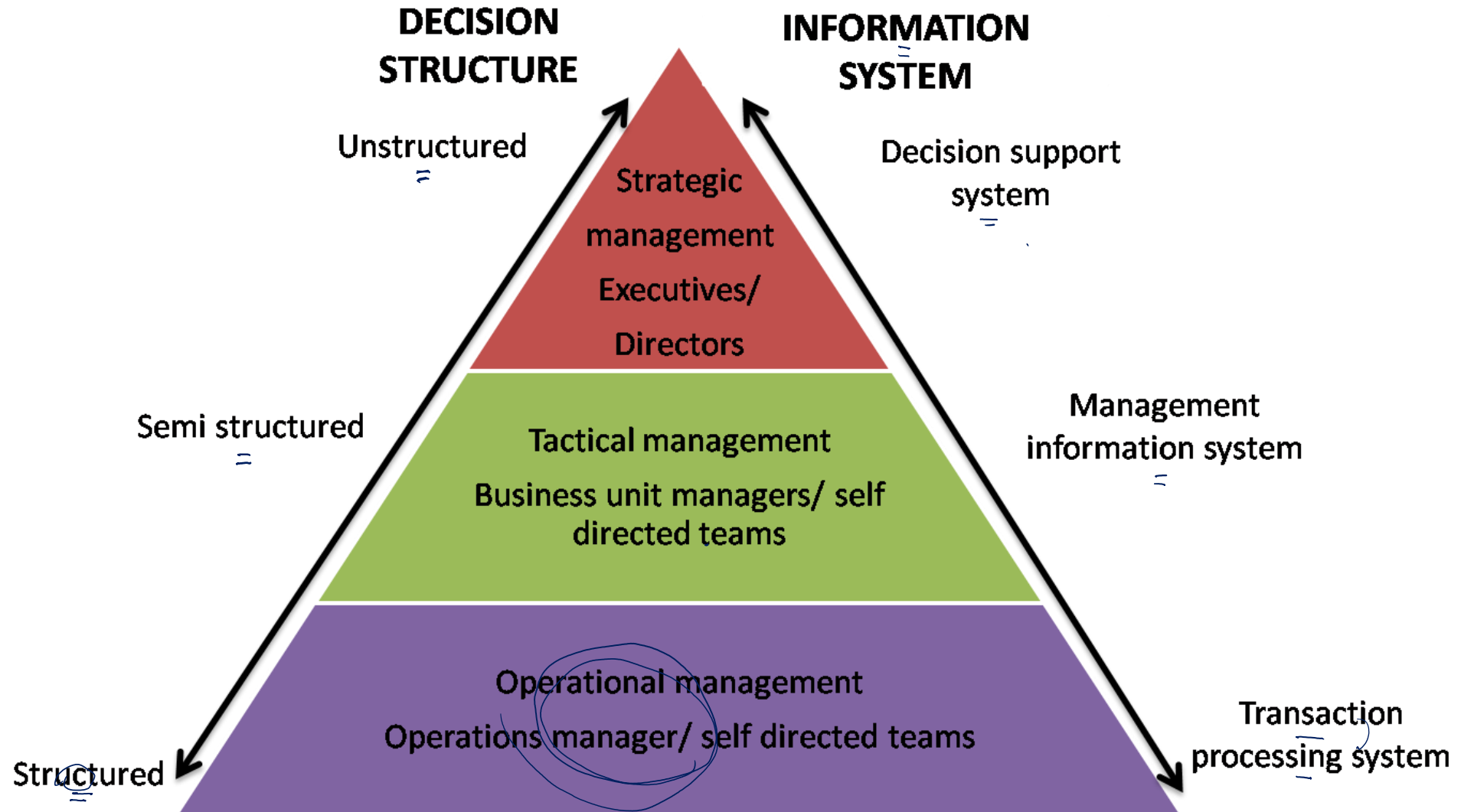
1. **Greater Knowledge:** because of the number of people involved, each with differing experience, knowledge, points of view and values, a larger number and variety of ideas for solving a problem can be produced.
2. **Shared responsibility:** makes individuals more willing to take risks. The discussion of different points of view also helps the group to be more realistic in assessing the risks associated with particular courses of action.
3. **Higher commitment:** individuals who have contributed to finding a solution feel a greater commitment to its successful implementation. 

DM in Project Teams (continue...)

Weak Points of Team Decision Making

1. **Time consumption:** group problem solving is a relatively slow process compared with working alone.
2. **Less recognition:** identifying who really did his/her best is difficult to recognize as it is a collaborative effort thus, less chance for recognition for promotion
3. **Conformity:** there is a strong tendency for individuals in a group to want to conform to the consensus. This can be due to a variety of reasons, including the need to feel valued or respected.

Decision Making and Information Systems



Exercise:

1. Have a group discussion with your ITP team members about what tools you have already used when you decide on technology/technologies to implement ITP Project.
2. Write a reflective journal about one of the decisions you have made in academic life. Discuss what tools you have used to make that decision. If you face the same situation, discuss how this lecture would help you.

■ Submit your assignment on or before midnight 21st August, 2021.