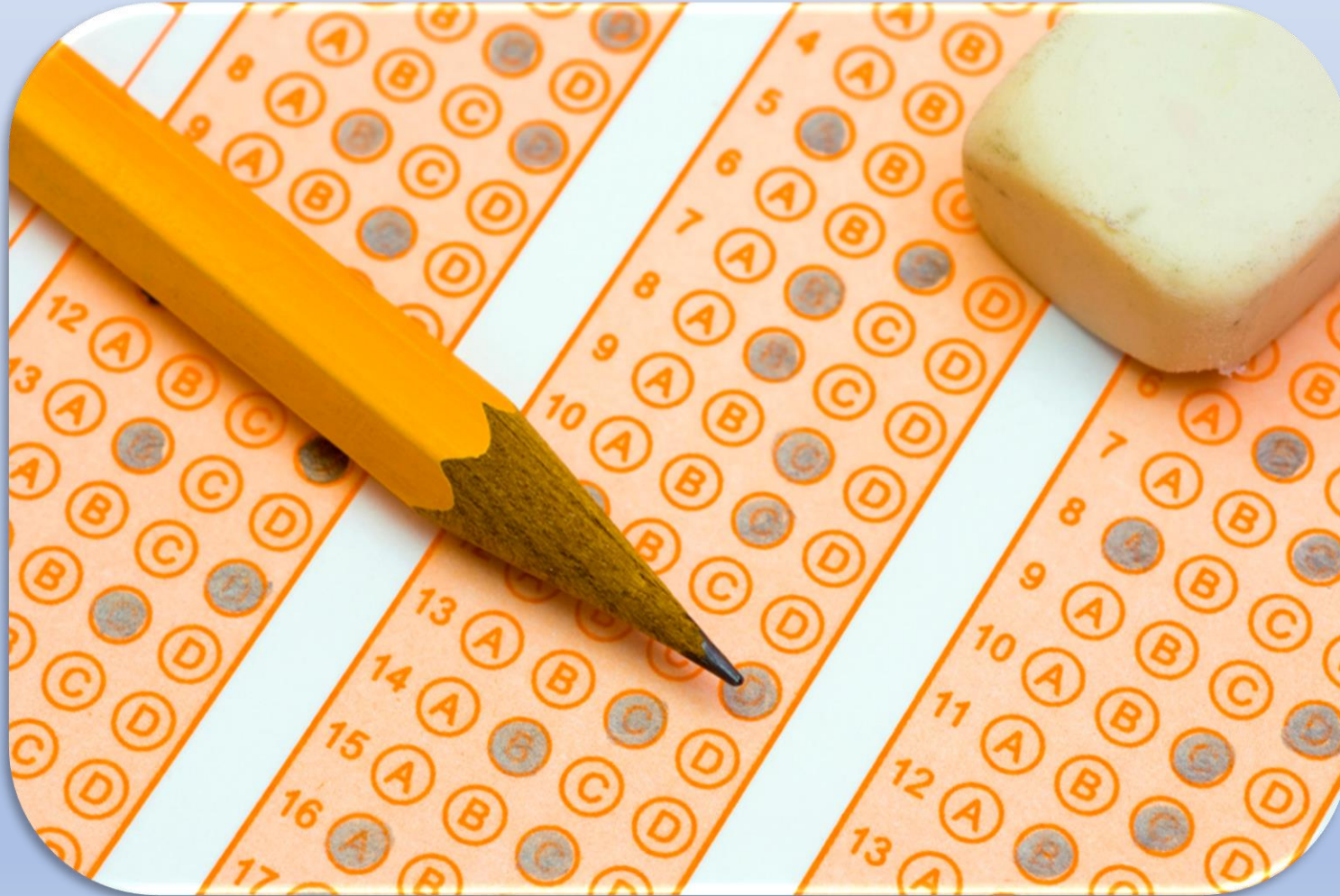# Decision Making Skills

What is Decision Making in Management

- Management decision is an important part of managing any organization.

- To make a choice between two or more options is the process of Decision making in management

- This involves evaluating the pros and cons of various choices and choosing the best option to achieve a desired outcome

- It is about acting in a way that meets organizational goals and objectives

- It allows managers to set goals and figure out
  - What actions are needed to meet those goals
  - Evaluate whether those actions are working as intended.

- It refers to managers guiding their organizations down the right path toward success

E.g., **Business manager may decide to invest in marketing to attract new customers. This decision could involve analyzing the costs, benefits, and risks involved with each possible course of action and choosing the best course of action for the organization**.

1) Doctor
2) Actor
3) Pregnant Lady
4) Pregnant lady's 3-year old
   son
5) Saint
6) National swimmer
7) Prime minister
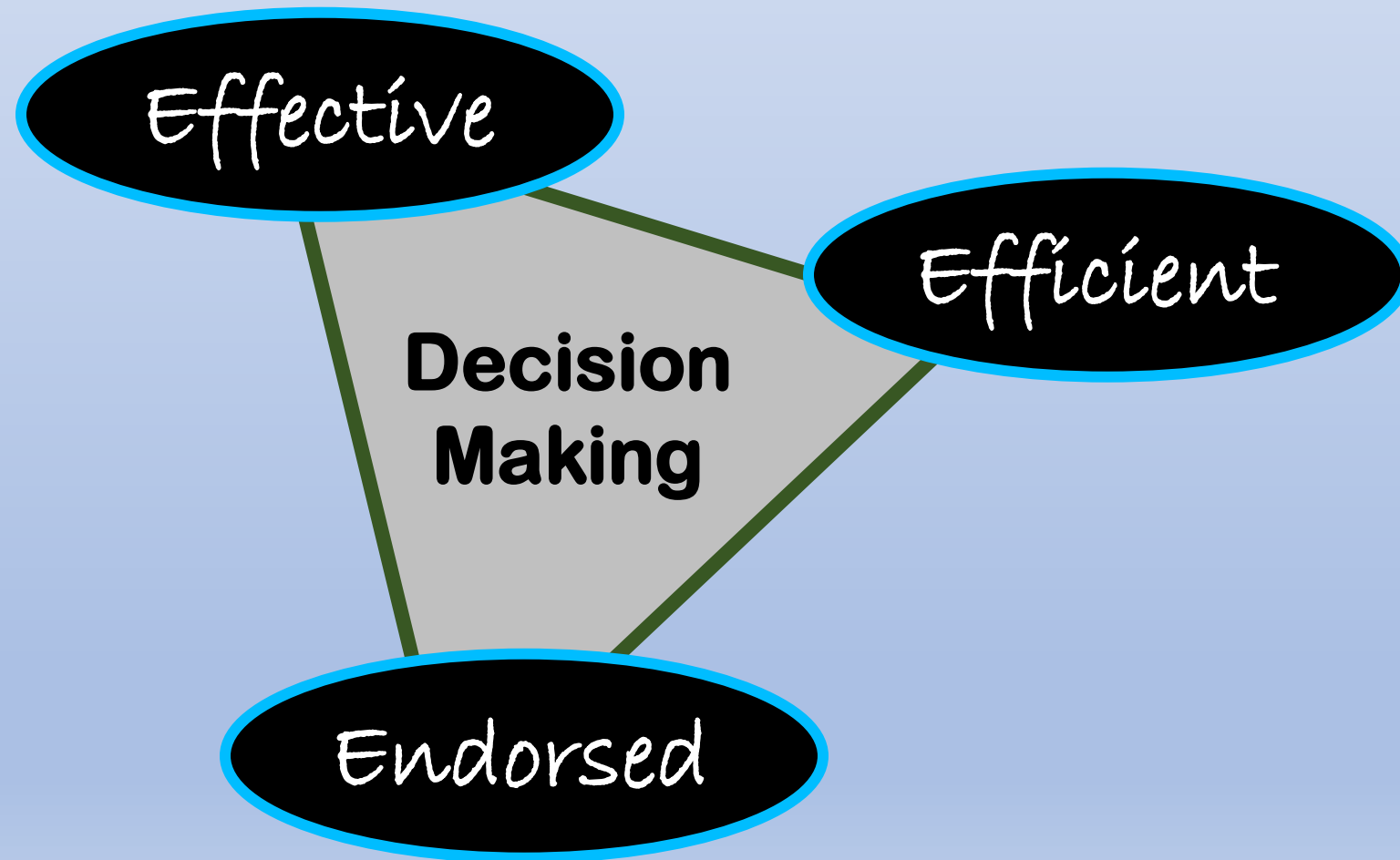
3Es of Decision making

Effective: Is the decision the most effective way to achieve the desired result? Is it a rational and logical approach, based on available information?

Efficient: How many resources are needed to implement this decision and who all are involved? To what extent does it affect the people involved?

Endorsed: Do people accept the decision? Do you have the support and the commitment?

The very first step in decision making is to identify whether it should be a team or an individual decision. To do this you first need to know what the different decision making styles are.

Decision Making Process

1. Establishing Objectives

- Establishing objectives is among the crucial decision-making steps in management.

- Without clear objectives, it can be difficult to make effective decisions that will help the organization meet its goals.

- Establishing objectives involves setting specific goals that need to be achieved within a certain timeframe.

For example,

If you are the HR of an e-commerce start-up with the expanding business, you would want to hire the right employees for various roles.

At first , you would have to establish your objectives regarding which parts of your business you would need to hire new people.

2. Identify the Decision

- Identifying the issues that needs to be addressed.

- Once the issue has been identified, the manager will gather information about possible solutions.

- This may involve consulting with others, doing research, or running simulations.

- After weighing the pros and cons of each option, the manager will choose the course of action that they believe is most likely to succeed.

E.g.,

- After establishing the objectives regarding which parts of your business need new recruits, you would have to identify the course of action with others to recruit the ideal employees for the various job roles.

3. Gather Appropriate Information

- This process of gathering information is known as information gathering

- The different sources of information that managers can use include surveys, interviews, focus groups, observation, and secondary data sources such as articles and reports.

- After gathering this information, managers must then analyze it to determine which is the best option

- E.g., After identifying the course of action for the new recruits, you, along with your team, have to gather proper information about the various hiring trends and how to recruit the ideal talents.

4. Identify the Alternatives

- One of the most important aspects of the decision-making process in management is identifying the alternatives.

- Without knowing what your options are, it can be difficult to make an informed decision. There are a number of different ways to identify the alternatives, but some of the most common methods include brainstorming, research, and consultation.

- E.g., After gathering the appropriate information on how to recruit the ideal talents, identify what alternatives you can offer to attract talents.

- You can offer remote working or a hybrid working model?

5. Weigh the Evidence

- When we define decision making in management One key step in this process is known as 'weighing the evidence'.

- This simply means taking the time to consider all of the available information before making a final decision.

- This can include things like market research, financial data, and even gut instinct.

- By taking the time to weigh the evidence, managers can make better-informed decisions that are more likely to lead to success.

- For example, after identifying what alternatives you can offer to attract new recruits, consider all the options to understand which would be the most profitable for your business. For this, you can take insights from market research, financial data, and even gut instinct.

7. Take Action

- There are many approaches to decision making, but one of the most popular is the "take action" approach.

- This approach involves taking decisive action in response to a issues, without overthinking or second-guessing yourself.

- While this approach can lead to quick results, it also carries the risk of making impulsive decisions that may not be in the best interest of the company.

- E.g., After choosing the most profitable ways to hire new talents, take the course of action of searching and interviewing the individuals.

8. Review the Decision

- Finally, after a decision has been made, it is important to review the results and make any necessary adjustments.

- E.g., After hiring the new recruits, review the whole process to see where you can make some changes to make the process more efficient.

Decision Making Model

Leaders are expected to be decisive

Many a times people with well-developed leadership skills may find the decision-making process tricky ,particularly when working under a tight deadline.

 A decision-making model can help guide you toward effective solutions

- A decision-making model is a process that takes individuals and/or teams through a series of steps to help them arrive at a decision.

- Decision-making models can be structured and collaborative, involving a wide range of stakeholders and resulting in greater buy-in.

- When a decision has to be made quickly, they are more informal. Then, the decision-making process may fall to the leader, who may rely on expertise, experience, and "gut instinct" to solve a problem.

Rational Decision-Making Model

The title alone hints that this might be a smart way to arrive at a decision.

In an article on decision-making models

Atlassian, a global software development company, outlines the six-step process:

1. Define the problem

2. Identify the criteria you will use to judge possible solutions

3. Decide how important each criterion is

4. Generate a list of possible alternatives

5. Evaluate those alternatives

6. Determine the best solution

Intuitive Decision-Making

- In their study "Intuitive Decision Making," researchers Kurt Matzler, Franz Bailom, and Todd Mooradian explain that intuition is, in fact, "a highly complex and highly developed form of reasoning that is based on years of experience and learning, and on facts, patterns, concepts, procedures and abstractions stored in one's head."[4]

- Experience is the key to finding business success with this decision-making model, researchers say.

- A study published in the journal Organizational Behaviour and Human Decision Processes, and reported in ScienceDaily, found the following :

"People can trust their gut and rely on intuition when making a broad evaluation—one that doesn't include a subset of additional decisions—in an area where they have in-depth knowledge of the subject, also referred to as domain expertise."

Decision Making Styles

Autocratic: you make the decision and inform others of it

Autocratic 1 (A1)
You use the information you already have and make the decisions

Autocratic 2 (A2)
You ask team members for specific information and once you have it, you make the decision. Here you don't necessarily tell them what the information is needed for

Decision Making Styles

Consultative: You gather information from the team and others and then make the decision
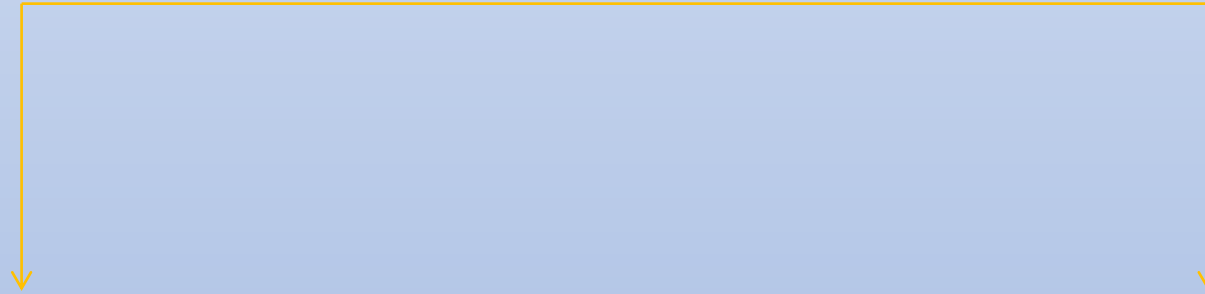
Consultative1 (C1)
You inform team members of what you doing and may individually ask opinions, however, the group is not brought together for discussion. You make the decision.

Consultative 2 (C2)
You are responsible for making the decision, however, you get together as a group to discuss the situation, hear other perspectives, and solicit suggestions.

Decision Making Styles

Collaborative: You and your team work together to reach a consensus
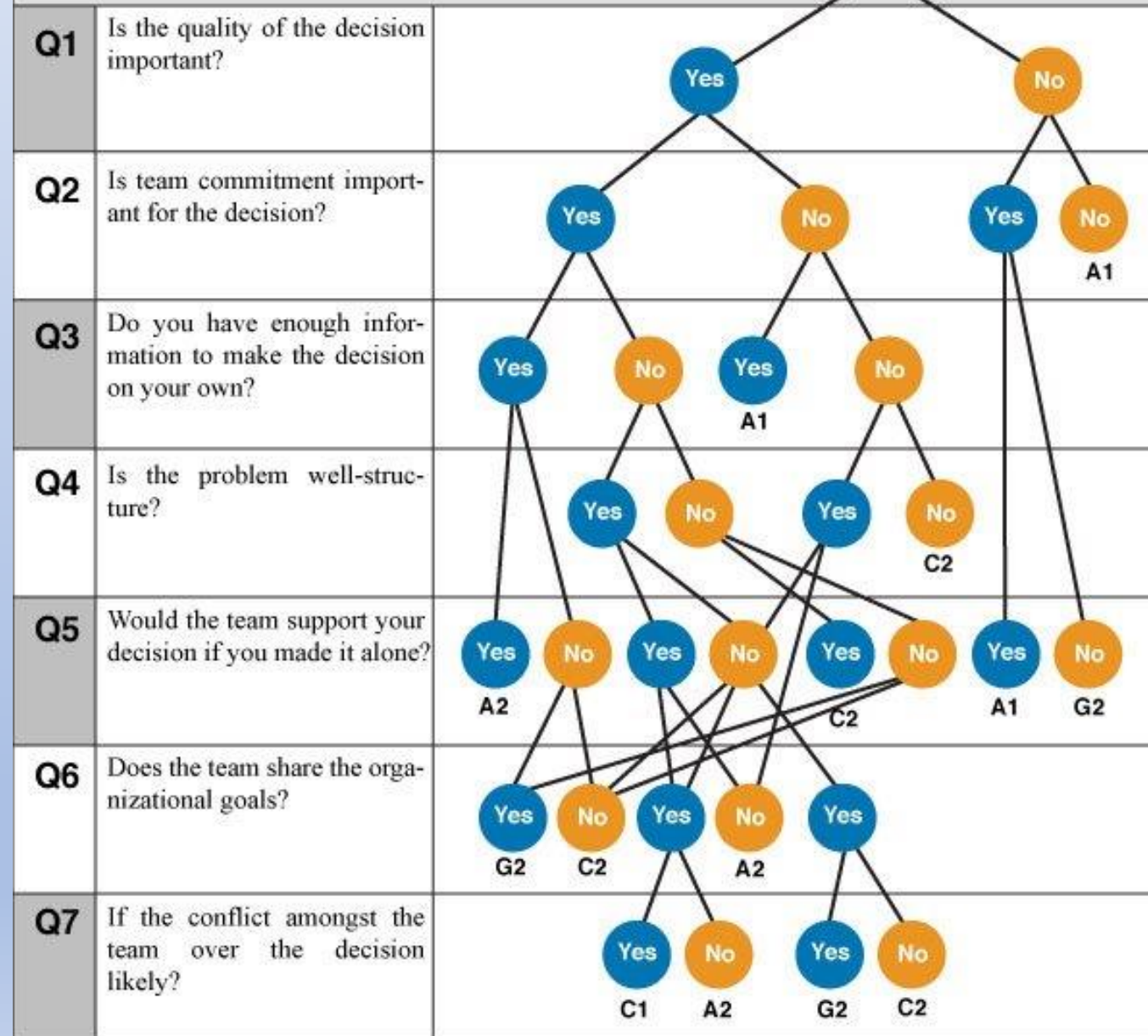
Group (G2)
The team makes a decision together. Your role is mostly facilitative and you help the team come to a final decision that everyone agrees on.

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The Vroom-Yetton-Jago Decision Model

- **Quality Requirement (QR):** How important is the technical quality of the decision?

- **Commitment Requirement (CR):** How important is subordinate commitment to the decision?

- **Leader's Information (LI):** Do you (the leader) have sufficient information to make a high quality decision on your own?

- **Problem Structure (ST):** Is the problem well structured (e.g., defined, clear, organized, lend itself to solution, time limited, etc.)?

- **Commitment Probability (CP):** If you were to make the decision by yourself, is it reasonably certain that your subordinates would be committed to the decision?

- **Goal Congruence (GC):** Do subordinates share the organizational goals to be attained in solving the problem?

- **Subordinate conflict (CO):** Is conflict among subordinates over preferred solutions likely?

- Subordinate information (SI): Do subordinates have sufficient information to make a high quality decision?

Vroom-Yetton-Jago Model
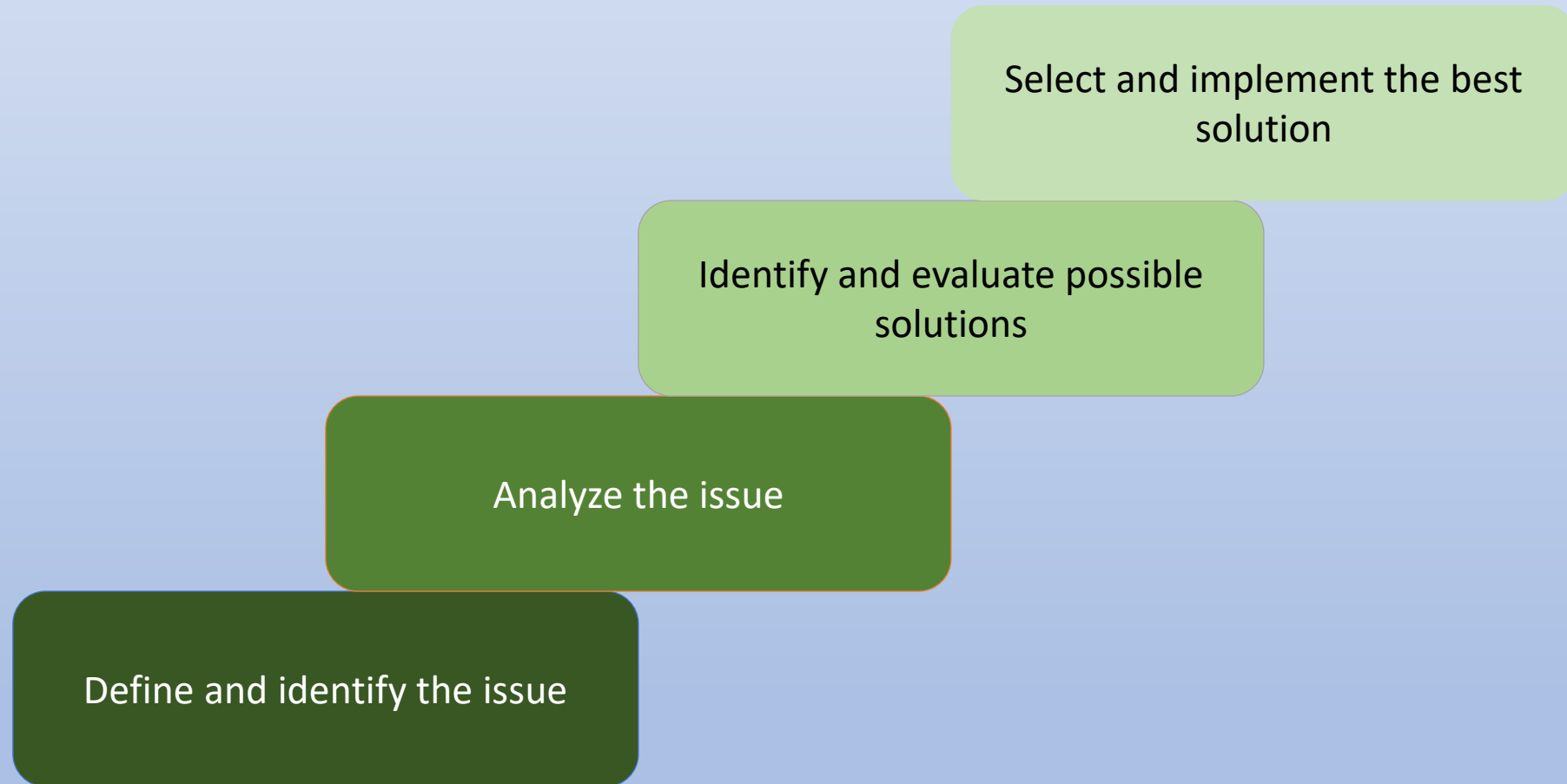Decision Tree

Select and Implement the Best Solution

Implementing the Solution

Select and implement the best solution

Identify and evaluate possible solutions

Analyze the issue

Define and identify the issue

PMI Technique: Edward de Bono developed the PMI tool

PLUS	MINUS	INTERESTING

Example :Imagine Shivam is a IT specialist. He lives in Greater Noida and works in Gurgaon. He is working on a project that involves long working hours. However, the long commute is affecting his health and he has decided to relocate to Gurgaon.

PLUS	MINUS	INTERESTING
Lesser travel time (+4)	No local transport (-5)	Meet new people (+1)
Lesser tiring journey (+4)	Higher living expenses (-5)	Better societies, modern constructions around (+3)
More time for self (+4)	Away from relatives (-3)	Away from railway stations, famous Delhi markets (-2)
Lower rent (+4)		More malls (+1)
+16	-13	3

Paired Comparison Analysis

- It is a systematic approach for evaluating a small range of options by comparing them against each other. It helps when :

- When the criteria are subjective in rating and ranking alternatives

- When priorities are not clear enough

- When alternatives are completely different from one another

- When there is little objective data to base our decision on, we make use of this analysis

Paired comparison is often used to choose the most compelling problem to solve, or to select the alternative that will be the most effective.

- It is useful in a wide range of applications as :
    - Selecting the concept design for a new product before it goes into production
    - Deciding the skills and qualifications when hiring people for a new position

Decisions like these are more difficult to make than
    - Comparing which investment to take
    - Which vendor to select

As the selection would be based on based on quality, price, and delivery speed.

Implementing a Paired Comparison Analysis
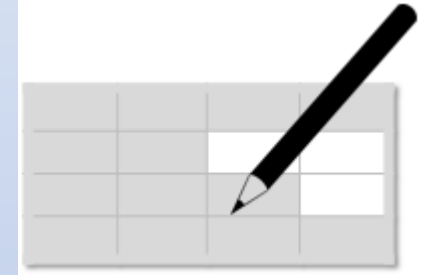
1. Need to work with your team
2. Identify the options to be evaluated
3. Identify the evaluation criterion to help you make the decision (e.g. the most important, the most interesting, or the easiest to implement).
4. List all the options on the left hand column and on the top row of the matrix.
5. In each blank cell, compare the option in the row with the option in the column, then write in the cell the option that better meets the evaluation criterion.
6. Repeat the process until all possible pairs are evaluated.
7. Count the number of times each option has been chosen.
8. Rank the options based on their count.
9. Consider the options with the highest ranking.

Note: Further solutions can be developed by mixing the positive aspects of a number of solutions.

Example :
You need to decide how to spend your upcoming summer holidays, and you have four ideas under consideration.

	A:Write a book	B: Take a course	C:With family	D:Long walks
A:Write a book				
B:Take a course				
C: With family				
D:Long walks				

Example :
You need to decide how to spend your upcoming summer holidays, and you have four ideas under consideration.

	A: Write a book	B: Take a course	C: With family	D: Long walks
A: Write a book		B	C	D
B: Take a course			C	B
C: With family				C
D: Long walks				

Count	0	2	3	1
Rank	4	2	1	3

The highest rank is the third option, that is, spending time with family

Paired Comparison Analysis

- Make a list of all of the options that you want to compare. Assign each option a letter (A, B, C, D, and so on) and note this down.

- Mark your options as both the row and column headings on the worksheet.

- Within each of the blank cells, compare the option in the row with the option in the column. Decide which of the two options is most important.

- Write down the letter of the most important option in the cell. Then, score the difference in importance between the options, running from zero - three

- Finally, consolidate the results by adding up the values for each of the options. You may want to convert these values into a percentage of the total score.

Prominent psychometrician L. L. Thurstone first introduced a scientific approach to using pairwise comparisons for measurement in 1927

Paired Comparison Analysis

	A: Overseas Development	B: Local Education	C: University	D: Disaster Relief
A: Overseas Development				
B: Local Education				
C: University				
D: Disaster Relief				

Paired Comparison Analysis

	A: Overseas Development	B: Local Education	C: University	D: Disaster Relief
A: Overseas Development		A,2	C,1	A,1
B: Local Education			C, 1	B,1
C: University				C,2
D: Disaster Relief				

The following is an example that uses the paired comparison analysis to identify and rank the top motivators for a team

	A	B	C	D	E	F	G	H	I
A: Appreciation		A	A	A	A	A	A	A	A
B: Achievement			C	B	B	B	G	B	B
C: Work condition				C	C	C	G	C	C
D: Power					D	D	G	D	I
E: Creativity						F	G	E	I
F: Interest							G	F	I
G: Financial benefits								G	G
H: Relationship									I
I: Self development									
Count	8	5	6	3	1	2	7	0	4
Rank	1	4	3	6	8	7	2	9	5

The team has selected 'appreciation' to be their top motivator, followed by 'financial benefits.'

Decision Matrix

- ## The Pugh *Matrix-**by** Stuart Pugh

- Decision Matrix is also called decision grid, Pugh matrix, problem selection matrix, selection matrix, criteria-based matrix, problem matrix, solution matrix, opportunity analysis, and criteria rating form.

- A decision matrix is a decision-making tool/method that assesses and prioritizes a list of options.

- At first, a list of weighted criteria is formulated, and each option is assessed against that criterion.

- The options are listed as rows on a table and the factors as columns

Pugh's Matrix

- Suppose your manager assigns you the task of selecting a new software supplier.

- You will begin your research and shortlist several good options.

- How would you make the final decision, considering several factors such as technology, service levels, contract lengths, and more?

- Such situations can be handled efficiently by employing a decision matrix.

Given the above-mentioned decision matrix example, we can say that a decision matrix is generally used when:

- Comparing multiple similar options

- A list of options has to be narrowed to one choice

- The decision is to be made based on several criteria

- You have to approach the decision from a logical viewpoint rather than an intuitive or emotional one.

Example: You have to launch a website and look for agencies that could create content and design.

You find three decent agencies and have to choose on amongst them.

How to Create a Decision Matrix?

Evaluate the best option between alternatives based on various crucial factors and their relative importance, employing the following steps:

Step 1: Finding the Alternatives

- Decision matrices help decide the best option amongst a set of promising choices.

- Therefore, identifying the options is the first step before building decision matrices.

  Example: You have to launch a website and look for agencies that could create content and design. You find three decent agencies and have to choose one amongst them.

Step 2: Identifying Crucial Points

- Next, you must identify the important considerations to factor into your decision.
- These critical considerations help strike the optimal decision without any subjectivity.

- Considering the example mentioned above, you will now acknowledge some important criteria for selection as pricing customer support, experience, and customer reviews.

Step 3: Creating a Decision Matrix

Preparing a grid for comparing important considerations between options requires you to list all of your options as the row labels on the table. Include the list of factors as the column headings.

	Pricing	Customer Support	Experience	Customer Reviews	Score
Agency 1					
Agency 2					
Agency 3					

Step 4: Filling the Decision Matrix

- The next step in building a decision matrix is to rate every consideration on a predetermined scale.

- For little variations among options, use a scale of 1-3.

- For more options, opt for a 1-5 scale, where the highest number is the best.

- This step adds all the logical reasoning to your decision.

- As each option comes with its pros and cons, rating them is the best way to avoid the struggles of strategic decision- making

- You must remember that it is not essential to have a number for each option

- If none of them is good for a factor under consideration, you can rate them

  0 for that factor.

	Pricing	Customer Support	Experience	Customer Reviews	Score
Agency 1	3	4	2	5	
Agency 2	5	2	3	3	
Agency 3	1	5	3	4	

Step 5: Including Weight

Often, some factors are more important than others. Use a weighted decision matrix in that case.

For example, continuing our example, suppose you cannot exceed your budget, so the pricing is a critical factor. To add weight to your decision matrix, you will now assign a number (between 1-3 or 1-5) to each consideration.

	Pricing	Customer Support	Experience	Customer Reviews	Score
Weights	(4)	(1)	(3)	(2)	
Agency 1	3	4	2	5	
Agency 2	5	2	3	3	
Agency 3	1	5	3	4	

	Pricing	Customer Support	Experience	Customer Reviews	Score
Weights	(4)	(1)	(3)	(2)	
Agency 1	3 × 4 = 12	4 × 1 = 4	2 × 3 = 6	5 × 2 = 10	
Agency 2	5 × 4 = 20	2 × 1 = 2	3 × 3 = 9	3 × 2 = 6	
Agency 3	1 × 4 = 4	5 × 1 = 5	3 × 3 = 9	4 × 2 = 8	

Step 6: Multiplying Weighted Score

To proceed further, you will multiply the weight by each consideration. This way, more important considerations are given more weight.

The decision matrix for our example will be as follows:

	Pricing	Customer Support	Experience	Customer Reviews	Score
Weights	(4)	(1)	(3)	(2)	
Agency 1	3 × 4 = 12	4 × 1 = 4	2 × 3 = 6	5 × 2 = 10	
Agency 2	5 × 4 = 20	2 × 1 = 2	3 × 3 = 9	3 × 2 = 6	
Agency 3	1 × 4 = 4	5 × 1 = 5	3 × 3 = 9	4 × 2 = 8	

Step 7: Estimating the Total Score

After multiplying the weighted score, add up all of the considerations for every row. A clear number-based answer will tell you the best decision.

Considering our decision matrix example, we will have the following grid:

	Pricing	Customer Support	Experience	Customer Reviews	Score
Weights	(4)	(1)	(3)	(2)	
Agency 1	3 × 4 = 12	4 × 1 = 4	2 × 3 = 6	5 × 2 = 10	32
Agency 2	5 × 4 = 20	2 × 1 = 2	3 × 3 = 9	3 × 2 = 6	**37**
Agency 3	1 × 4 = 4	5 × 1 = 5	3 × 3 = 9	4 × 2 = 8	26

Results: We can see that Agency 2 has the highest score, and therefore, it is the best decision based on the factors taken into consideration. Although Agency 1 had the best customer reviews, the combination of reviews, experience and cost make Agency 2 a better option.

The Pugh Matrix-**by** Stuart Pugh

Factors:	Cost	Quality	Location	Reliability	Payment Options	Total
Weights:						
Supplier 1	1	0	0	1	3	
Supplier 2	0	3	2	2	1	
Supplier 3	2	2	1	3	0	
Supplier 4	2	3	3	3	0	

Factors:	Cost	Quality	Location	Reliability	Payment Options	Total
Weights:	4	5	1	2	3	
Supplier 1	4	0	0	2	9	**15**
Supplier 2	0	15	2	4	3	**24**
Supplier 3	8	10	1	6	0	**25**
Supplier 4	8	15	3	6	0	**32**

6 Thinking Hats
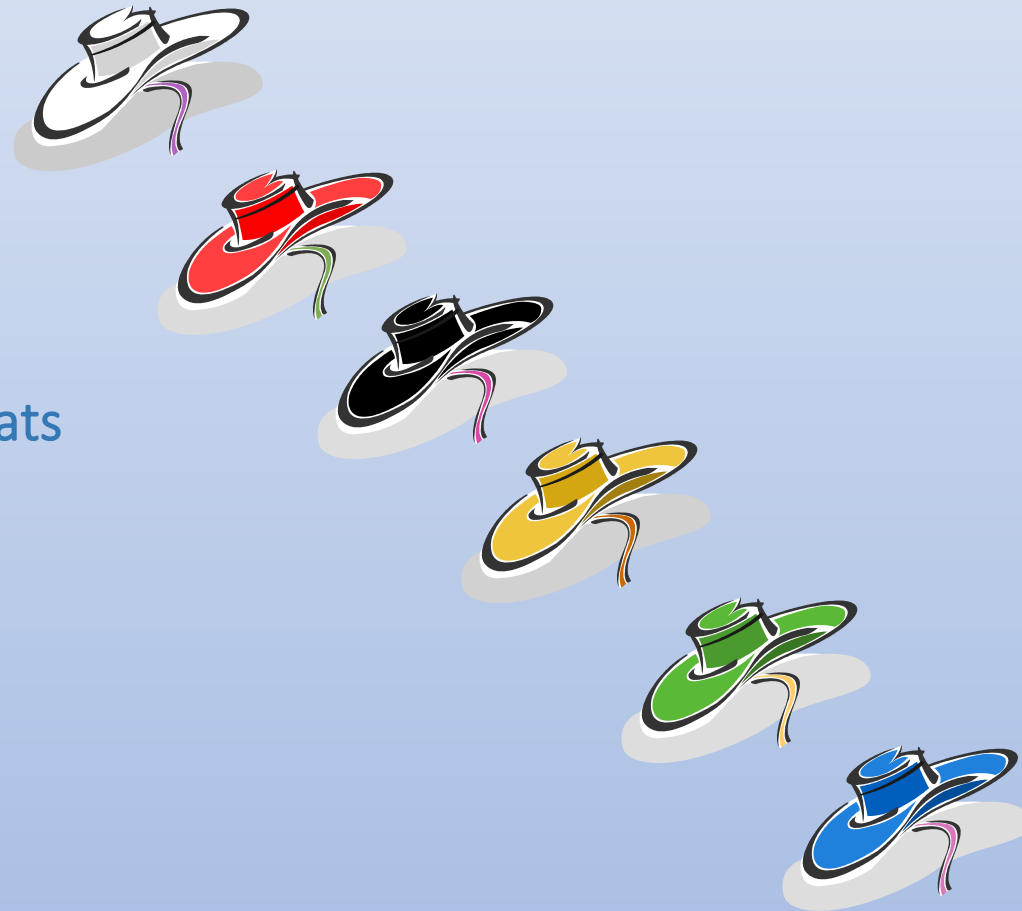
6 Colors

White : Neutral, Objective

Red : Emotional, angry

Black : Serious, somber

Yellow : Sunny, positive

Green : Growth, fertility

Blue : Cool, sky above

…and 6 Hats
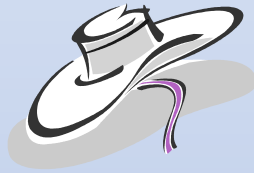
 : Objective facts & figures

 : Emotions & feelings

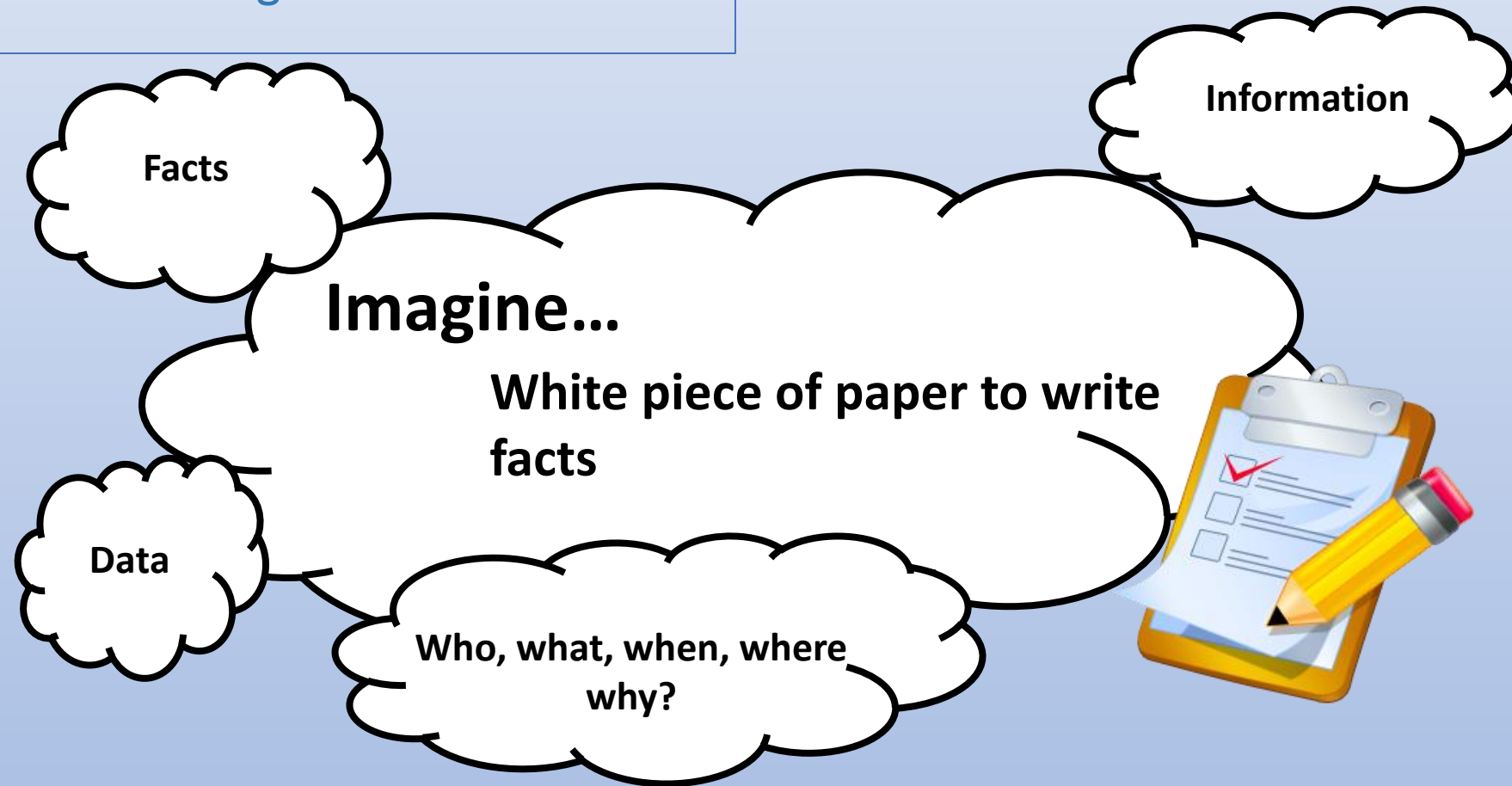 : Cautious & careful

 : Hope, positive and speculative

 : Creativity, ideas and lateral thinking

 : Control and organization of thinking

Information

Facts

Imagine…

White piece of paper to write facts

Data

Who, what, when, where why?

What information is available?
What information do we have?
What information do we need?
What's missing?
What questions do we need to ask?
How are we going to get the information?

47

The White Hat

- Focus on data available

- Look at the information you have, and see what you can learn from it

- Look for gaps in your knowledge, and either try to fill them or take account of them

- This is where you analyze past trends, and try to extrapolate from historical data

White Hat Thinking:

•Neutral, objective information

•Facts & figures

•Questions – what do we know, what do we not know, what do we need to know

•Excludes opinions, hunches, judgments

•Removes feelings and impressions

Emotion

Feelings

Imagine…
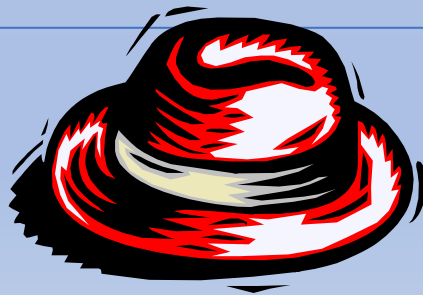**Red heart for feeling and emotion**
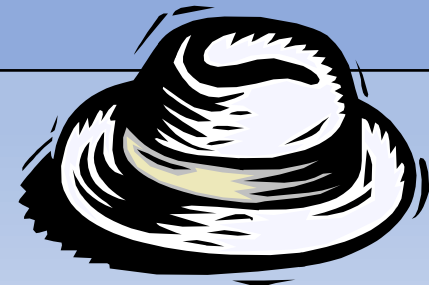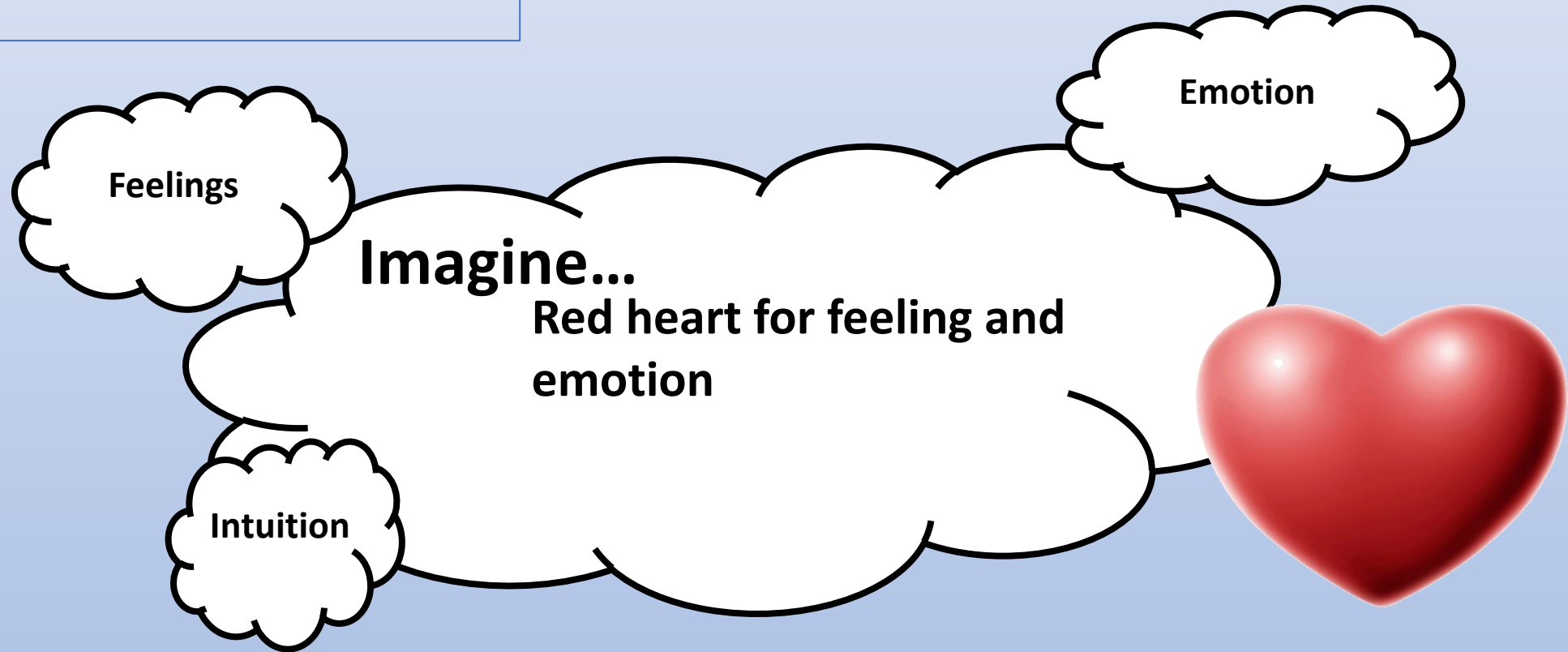
Intuition

What are my feelings now?
What does my intuition tell me?
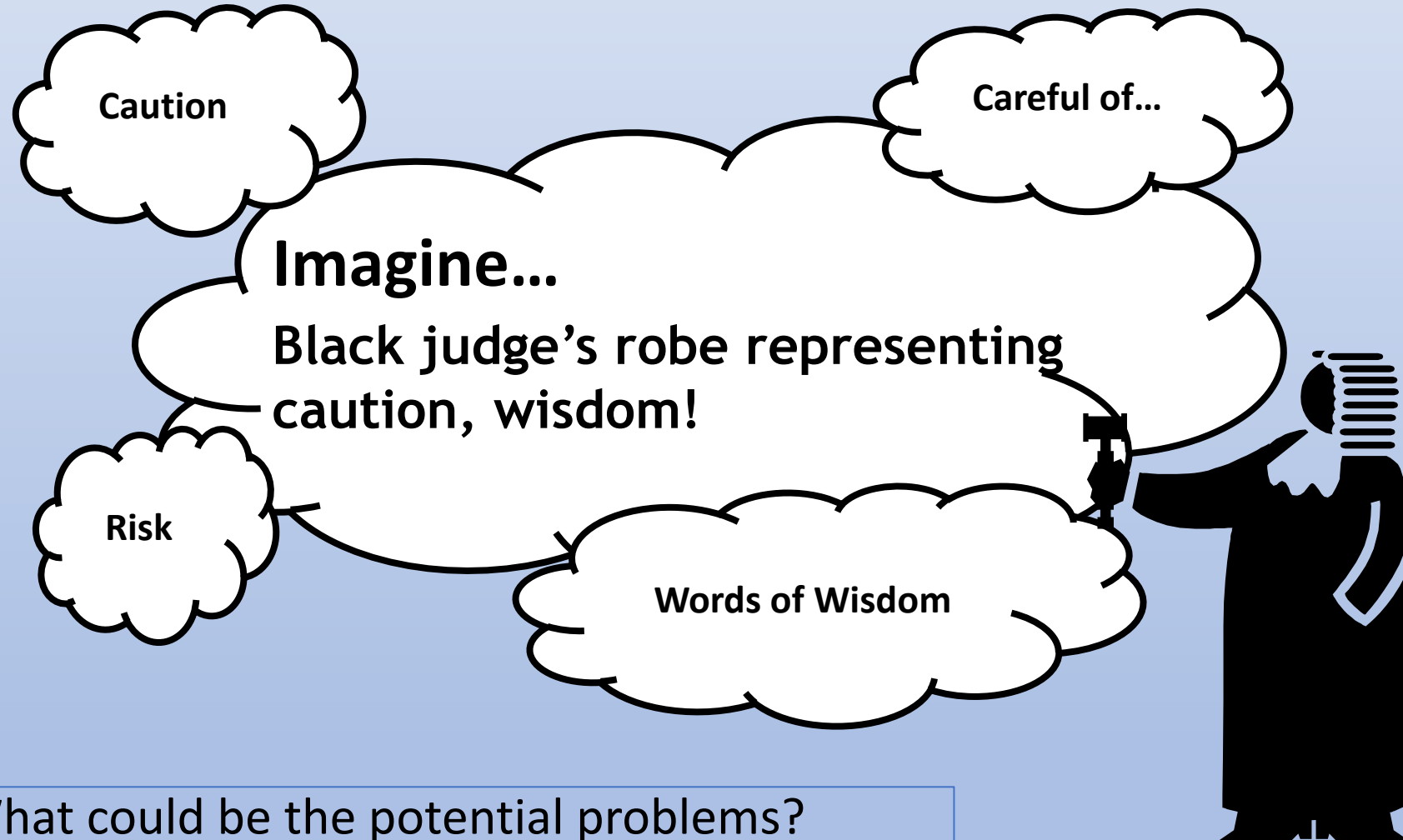What's my gut reaction?

The Red Hat

- Focus : feelings, emotions, intuition

- Look at problems using intuition, 'gut reaction' and emotion

- Trying to think how other people will react emotionally

- Trying to understand the responses of people who do not fully know your reasoning

Red Hat Thinking depends on :

•Emotions and feelings

•Hunches, intuitions, impressions

•Doesn't have to be logical or consistent

•No justifications, reasons or basis

•All decisions are emotional in the end

Caution

Careful of...

Imagine…
Black judge's robe representing caution, wisdom!

Risk

Words of Wisdom

What could be the potential problems?
What could some of the difficulties be?
What are the points of caution and risk?

The Black Hat:

- Focus : cautious and defensive – why it may not work?
- Decisions coming from wearing this hat might be logical and truthful, but not necessarily fair

- It allows you to eliminate problems/risks, alter them, or prepare contingency plans to counter them

- Identifies risks, obstacles, weaknesses to overcome

- It helps to make your plans 'tougher' and more resilient
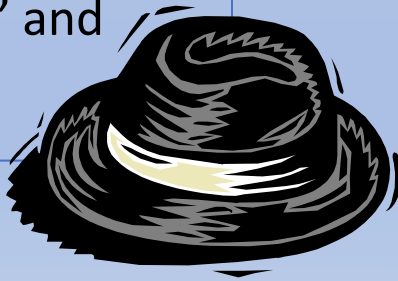
Black Hat Thinking:

- Cautious and careful

- Logical negative – why it won't work

- Critical judgment , pessimistic view

- Separate logical negative from emotional
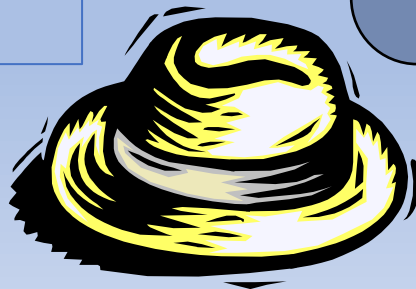
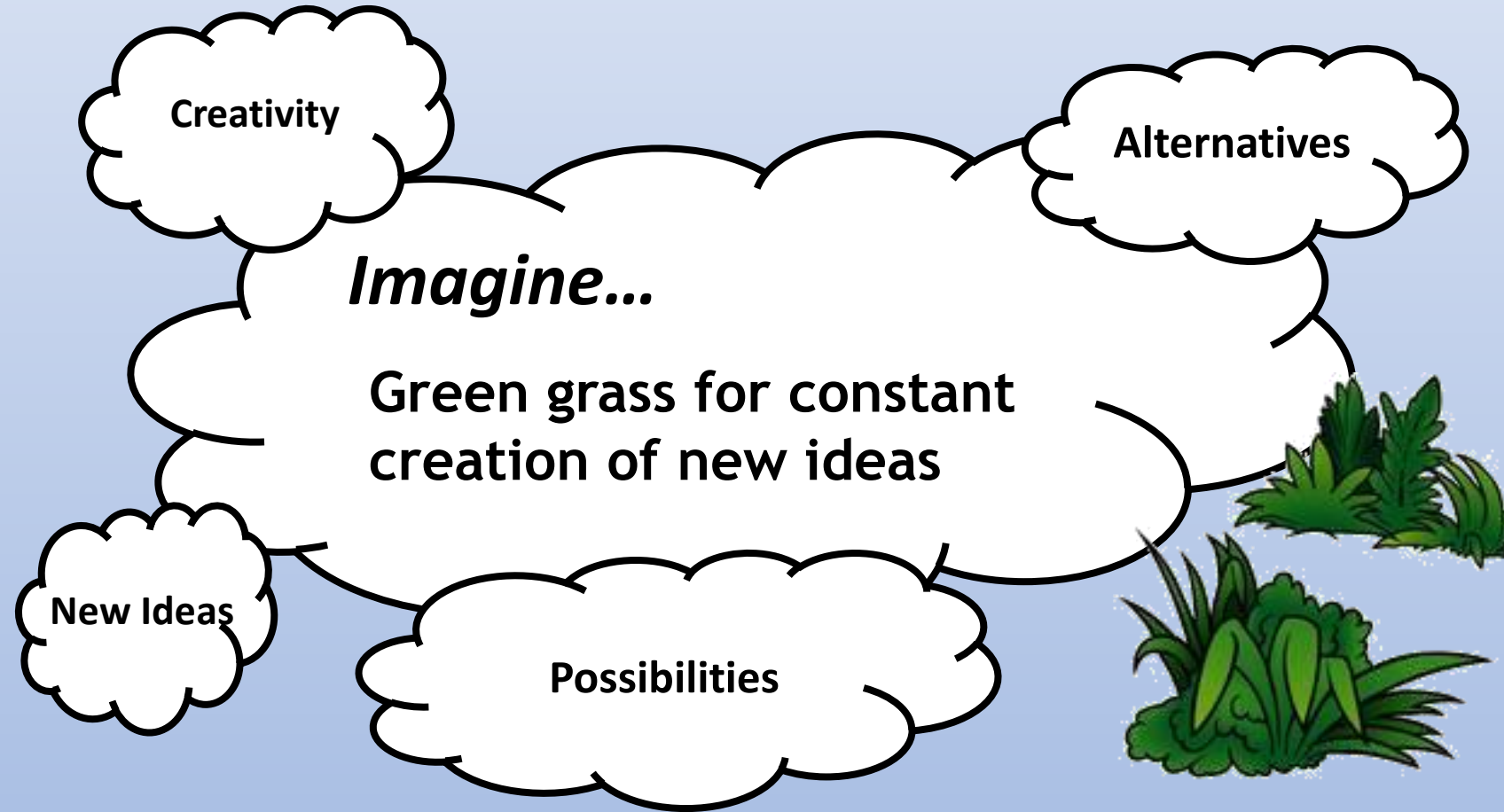- Focus on errors, evidence, conclusions

- Focus : think positively!

- Sees all the benefits in a decision

- Sees the value in a decision

- Sees the opportunities in a decision

Yellow Hat Thinking:

•Positive and speculative

•Positive thinking, optimism, opportunity

•Views the benefits of a situation

•Best-case scenarios

•Exploration

Creativity

Alternatives

Imagine…

Green grass for constant creation of new ideas
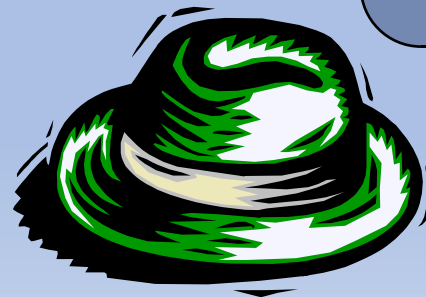
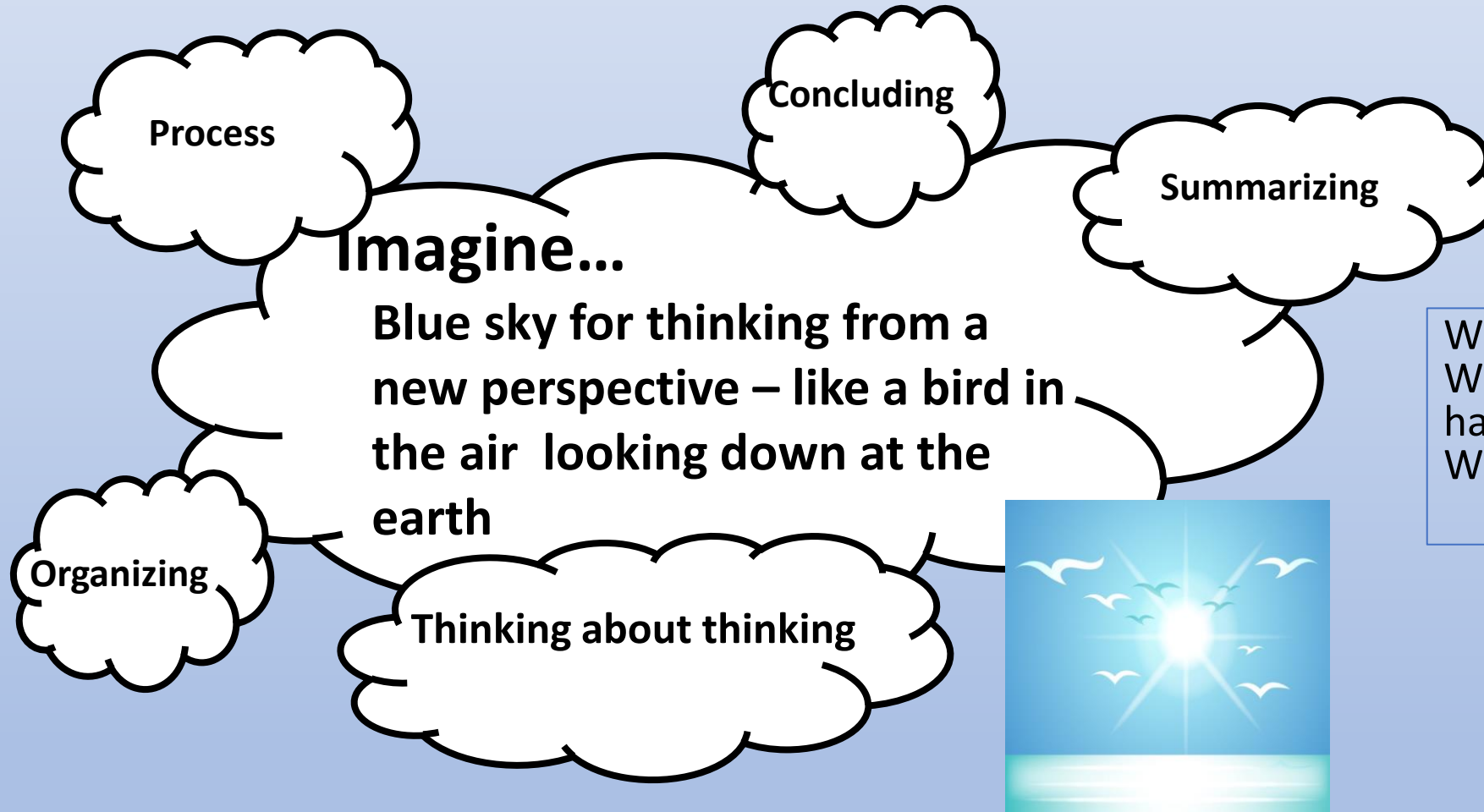New Ideas

Possibilities

The Green Hat: Creativity

- Focus : creativity

- New ideas and outlooks

- Develop creative solutions to a problem

- Be unconstrained by practicality

- Don't criticize ideas

Green Hat Thinking:

•New ideas, concepts, perceptions

•Deliberate creation of new ideas

•Alternatives and more alternatives

•New approaches to problems

•Creative and lateral thinking

The Blue Hat :Facilitator

Process

Concluding

Summarizing

Imagine…
Blue sky for thinking from a new perspective – like a bird in the air looking down at the earth

Organizing

Thinking about thinking

What is our agenda?
What is our next step and next hat?
What is our decision?

The Blue Hat: Process Control

- Focus : process control

- Worn by people leading/facilitating meetings

- Setting the focus

- Making summaries

- Overviews, conclusions, action plans

Blue Hat Thinking:

•Thinking about Thinking

•Instructions for thinking

•The organization of thinking

•Control of the other hats

•Discipline and focus
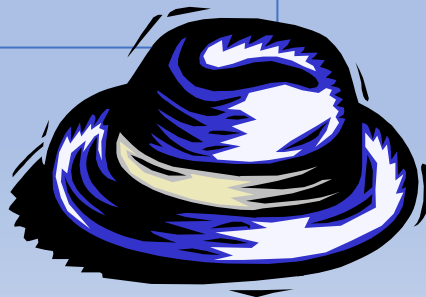
Control of Thinking and the Process
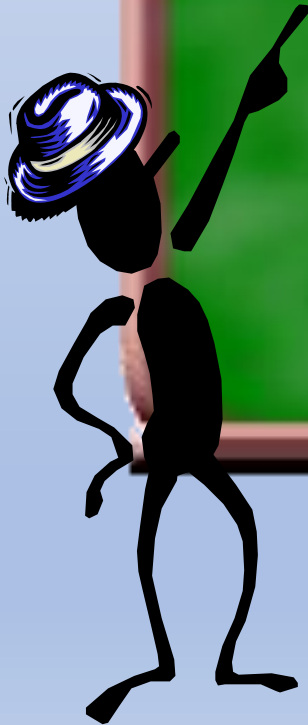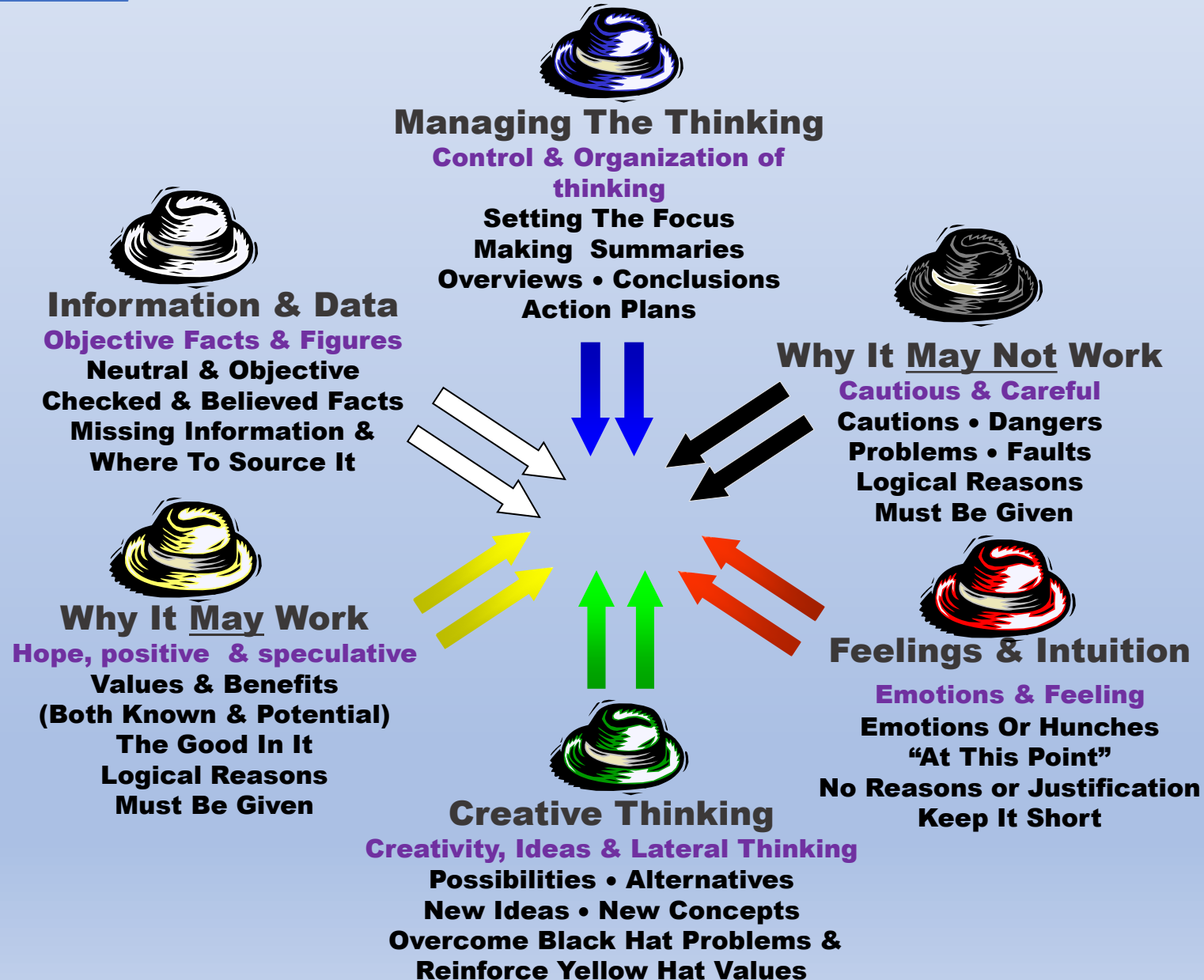
Opening the session

- Why are we here?
- What are we thinking about?
- Definition of the situation or problem
- Alternative definitions
- What do we want to achieve
- Where do we want to end up
- The background to the thinking
- A plan for the sequence of hats

... & Closing the session

- What we have achieved?
- Outcome
- Conclusion
- Design
- Solution
- Next steps

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Managing The Thinking
Control & Organization of thinking
Setting The Focus
Making Summaries
Overviews • Conclusions
Action Plans

Information & Data
Objective Facts & Figures
Neutral & Objective
Checked & Believed Facts
Missing Information &
Where To Source It

Why It May Not Work
Cautious & Careful
Cautions • Dangers
Problems • Faults
Logical Reasons
Must Be Given

Why It May Work
Hope, positive & speculative
Values & Benefits
(Both Known & Potential)
The Good In It
Logical Reasons
Must Be Given

Feelings & Intuition
Emotions & Feeling
Emotions Or Hunches
"At This Point"
No Reasons or Justification
Keep It Short

Creative Thinking
Creativity, Ideas & Lateral Thinking
Possibilities • Alternatives
New Ideas • New Concepts
Overcome Black Hat Problems &
Reinforce Yellow Hat Values

Using the Hats

- Use any hat, as often as needed

- Focus the thinking – only one hat at one time

- Sequence can be preset or evolving

- Not necessary to use every hat

- Time under each hat should generally be short(red hat generally very brief)

- Requires discipline from every person in the group

- Can be used by individuals and groups

General Hat Issues

- Direction, not description

- Not categories of people

- A constructive form of highlighting one's thinking ability

- Use in whole or in part

6 Hats in Group Activities

- Everyone needs to consider a problem with the same hat on

- The intention should be to reach a conclusion without confrontations

- All hats should be treated seriously by everyone

- Put different thinking hats on in turns, until you've considered the problem from all angles

- Avoid getting "stuck in a rut" i.e.. – thinking in only one way

- Iterate around the hats until all your thinking is done

Using the 6 Hats – Facilitator Role

- Define the focus of your thinking

- Plan the sequence and timing of the thinking

- Ask for changes in the thinking if required

- Handle requests from the group for changes in the thinking

- Form periodic or final summaries of the thinking, for consideration by the team

Using the 6 Hats – Participants Role

- Follow the lead of the 6 Hats Thinking facilitator

- Stick to the hat(type of thinking) that is in current use

- Try to work within the time limits

- Contribute honestly and fully under each of the hats

Case Study

Implement the Solution

The Value of an idea lies in the implementation of it…

Action Plan

- Identify your improvement areas on the basis of the assessment taken on Problem solving and your managers assessment during the pre work

- Mention the steps that you will take to improve on those area on the basis of what you have learnt from the program

- This will be sent to you and your manager as an action plan for you

- Your manager will gauge your improvement on the basis of your action plan 30 days from now.