

## Problem Solving and Decision Making

### ~~Thinking~~ A little Experiment

## The Monkey Business Illusion

[https://www.youtube.com/watch?v=IGQmdoK\\_ZfY](https://www.youtube.com/watch?v=IGQmdoK_ZfY)

## Problem Solving and Decision Making

### A little Experiment

- **This experiment reveals two things:**
  - We are missing a lot of what goes on around us
  - We have no idea that we are missing so much.
- **The 'Invisible Gorilla' isn't a theoretical phenomenon.**
  - It is something real that happens to us every day - in an age of 'busy-ness', 'doing more with less' and 'multi tasking', our limited attention spans mean we are susceptible to missing the 'gorilla' in the room!
- **How much attention do we give what's taking our attention?**
  - Here's to monitoring our attention bandwidth to catch all the gorillas this week!

**Problem Solving and Decision Making**

**Planning**

# **Problem Solving and Decision Making**

## Problem Solving and Decision Making

- Complex project or team members just want to get better at dealing with day-to-day issues

People can achieve much more when they solve problems and make decisions together.

## Problem Solving and Decision Making

### Planning

#### Active Listening - Hear What People are Really Saying

- **Listening** is one of the most important skills you can have. How well you listen has a major impact on your job effectiveness, and on the quality of your relationships with others.
- For instance:
  - We listen to **obtain** information.
  - We listen to **understand**.
  - We listen for **enjoyment**.
  - We listen to **learn**.

## Problem Solving and Decision Making

### Active Listening - Hear What People are Really Saying

- Active listening

- This is where you make a **conscious effort** to hear not only the words that another person is saying but, more importantly, try to **understand the complete message** being sent.
- In order to do this you **must pay attention** to the other person very carefully.
- **Don't get distracted** by whatever else may be going on around you, or by forming counter arguments that you'll make when the other person stops speaking.
- **Don't allow yourself to get bored** and lose focus on what the other person is saying. All of these contribute to a lack of listening and understanding.

## Problem Solving and Decision Making

Planning

### Becoming an Active Listener

#### 5 Key Active Listening Techniques

1. Pay Attention
2. Show that you're listening
3. Provide feedback
4. Defer Judgement
5. Respond Appropriately

# 1. Pay Attention

- Give the speaker your **undivided attention** and acknowledge the message. Recognize that non-verbal communication also "speaks" loudly.
- **Look** at the speaker directly.
- Put aside **distracting** thoughts.
- Don't mentally prepare a rebuttal!
- **Avoid being distracted** by environmental factors. For example, side conversations.
- "**Listen**" to the speaker's body language



## Problem Solving and Decision Making

### Listening

#### 5 Key Active Listening Techniques

## 2. Show That You're Listening

- Use your own **body language and gestures** to convey your attention.
- **Nod** occasionally.
- **Smile** and use other facial expressions.
- Note your **posture** and make sure it is open and inviting.
- **Encourage** the speaker to continue with small verbal comments like yes, and uh huh.

## Problem Solving and Decision Making

### 5 Key Active Listening Techniques

## 3. Provide Feedback

- Our personal filters, assumptions, judgments, and beliefs can distort what we hear. As a listener, your role is to understand what is being said. This may require you to reflect what is being said and ask questions.
- Reflect what has been said by **paraphrasing**. "What I'm hearing is," and "Sounds like you are saying," are great ways to reflect back.
- Ask **questions** to clarify certain points. "What do you mean when you say." "Is this what you mean?"
- Summarize the speaker's comments periodically.

## 4. Defer Judgment

- **Interrupting is a waste of time.** It frustrates the speaker and limits full understanding of the message.
- Allow the speaker to **finish** each point before asking questions.
- Don't interrupt with counter arguments.

## 5. Respond Appropriately

- **Active listening** is a model for respect and understanding. You are gaining information and perspective. You add nothing by **attacking** the speaker or otherwise putting him or her down.
- Be **candid, open, and honest** in your response.
- **Assert** your opinions respectfully.
- **Treat** the other person in a way that you think he or she would want to be treated.

## Problem Solving and Decision Making

### • **Grouping and Group Thinking**

- The ideal scenario is for teams to arrive at a consensus decision where everyone's opinion is heard.
- Doesn't always happen naturally:
  - **Assertive people** tend to get the most attention.
  - **Less forthright team members** can often feel **intimidated** and don't always speak up
    - particularly when their ideas are different from the popular view.
- Where discussions are one-sided, draw quieter people in so that everyone is involved, but explain why you're doing this, so that people learn from it.

## Problem Solving and Decision Making

### Groupthink - Avoiding Fatal Flaws in Group Decision Making

**Groupthink** is a phenomenon that occurs when the desire for group consensus **overrides** people's common sense desire to present alternatives, critique a position, or express an unpopular opinion.

- Here, the desire for group cohesion **effectively drives out** good decision-making and problem solving.

## Problem Solving and Decision Making

### Groupthink - Avoiding Fatal Flaws in Group Decision Making

- Two well-known examples of **Groupthink** in action are the Challenger Space Shuttle disaster and the Bay of Pigs invasion.
  - Engineers of the space shuttle knew about some faulty parts months before takeoff, but they did not want negative press so they pushed ahead with the launch anyway.
  - With the Bay of Pigs invasion, President Kennedy made a decision and the people around him supported it despite their own concerns.

Groupthink - Avoiding Fatal Flaws in Group Decision Making

## How to Spot Groupthink

- Groupthink happens when there is:
  - A **strong**, persuasive group leader.
  - A **high level** of group cohesion.
  - Intense pressure from the **outside** to make a good decision.
  - In fact, it is now widely recognized that Groupthink-like behavior is found in many situations and across many types of groups and team settings.



## Problem Solving and Decision Making

### Symptoms of Groupthink

- **Rationalization:**

This is when team members **convince** themselves that despite evidence to the **contrary**, the decision or alternative being presented is the best one.  
*"Those other people don't agree with us because they haven't researched the problem as extensively as we have."*

- **Peer Pressure:**

When a team member expresses an opposing opinion or questions the rationale behind a decision, the rest of the team members work together to pressure or penalize that person into compliance.  
*"Well if you really feel that we're making a mistake you can always leave the team."*

## Problem Solving and Decision Making

### Symptoms of Groupthink

- **Complacency:**

After a few successes, the group begins to feel like any decision they make is the right one because there is no disagreement from any source.

*"Our track record speaks for itself. We are unstoppable!"*

- **Moral High Ground:**

Each member of the group views him or herself as **moral**: The combination of moral minds is therefore thought not to be likely to make a poor or immoral decision. When morality is used as a basis for decision-making, the pressure to conform is even greater because no individual wants to be perceived as immoral.

*"We all know what is right and wrong, and this is definitely right."*

- **Stereotyping:**

As the group becomes more uniform in their views, they begin to see outsiders as possessing a different and inferior set of morals and characteristics from themselves.

These perceived negative characteristics are then used to **discredit** the opposition.

*"Lawyers will find any excuse to argue, even when the facts are clearly against them."*

## Problem Solving and Decision Making

### Symptoms of Groupthink

- **Censorship:**

Members censor their opinions in order to conform.

***"If everyone else agrees then my thoughts to the contrary must be wrong."***

Information that is gathered is censored so that it also conforms to, or supports the chosen decision or alternative.

***"Don't listen to that nonsense, they don't have a clue about what is really going on."***

- **Illusion of Unanimity:**

Because no one speaks out, everyone in the group feels the group's decision is unanimous. This is what feeds the Groupthink and causes it to spiral out of control.

***"I see we all agree so it's decided then."***

## Problem Solving and Decision Making

### Thinking

## How to Avoid Groupthink

The challenge for any team or group leader is to create a working environment in which Groupthink is unlikely to happen.

It is important also to understand the risks of Groupthink – if the stakes are high, you need to make a real effort to ensure that you're making good decisions.

## Problem Solving and Decision Making

### How to Avoid Groupthink

- Explore objectives.
- Explore alternatives.
- Encourage ideas to be challenged without reprisal.
- Examine the risks if the preferred choice is chosen.
- Test assumptions.
- If necessary, go back and re-examines initial alternatives that were rejected.
- Gather relevant information from outside sources.
- Process this information objectively.
- Have at least one contingency plan .

## **Techniques for Quality in Group Decision Making**

- Stepladder
- Brainstorming
- Nominal Group Technique
- Delphi Technique
- Devil's Advocacy Approach
- Dialectical Inquiry

## Problem Solving and Decision Making

- When team/group discussion is unbalanced
  - You can use the **Stepladder Technique**
    - Ask each team member to think about the problem individually.
    - One at a time, introduce new ideas to an appointed group leader – without knowing what ideas have already been discussed.
    - After the first two people present their ideas, they discuss them together.
    - Then the leader adds a third person, who presents his or her ideas before hearing the previous input.
    - This cycle of presentation and discussion continues until the whole team has had a

## Problem Solving and Decision Making

### Planning

- **Brainstorming**

- A technique to enhance creativity by encouraging group members to generate as many novel ideas as possible on a given topic without evaluating them.

- Rules of Brainstorming

- Freewheeling is encouraged.
- Ideas are not criticized as they are being generated.
- Quality is encouraged.
- The wilder the ideas, the better.
- Piggyback on previously stated ideas.
- Ideas are evaluated after alternatives are generated.



## Problem Solving and Decision Making

### Planning

## Other Decision-Making Techniques

- **Nominal Group Technique (NGT)**
  - Individuals **come up with ideas on their own** rather than as a group. Once different ideas are established, they are evaluated, ranked, and agreed upon collectively. The top-ranked ideas are selected as the output of this process.
- **Delphi Technique**
  - Uses experts to make predictions and forecasts about future events without meeting face-to-face.

## Problem Solving and Decision Making

### Decision Making

#### Other Decision-Making Techniques (*cont'd*)

- **Devil's Advocacy**

- An individual or subgroup appointed to critique a proposed course of action and identify problems to consider before the decision is final.

- **Dialectical Inquiry**

- Approaches a decision from two opposite points and structures a debate between conflicting views.

## Problem Solving and Decision Making

- **Strategic Decision Making**
  - Selection of a strategy that will define the long-term direction of the firm—occurs at the highest levels of the organization.
- Two important areas for strategic decision making are:
  - Strategy selection
  - Evaluation of portfolios

## Problem Solving and Decision Making

### Strategy Selection

- The Strategic Decision-Making Matrix
  - A two-dimensional grid used to select the best strategic alternative in light of multiple organizational objectives.
  - Management usually assigns the weights based on its subjective assessment of the importance of each objective.

# Problem Solving and Decision Making

## Planning

### Strategic Decision-Making Matrix

#### Objectives

	Increased Profit	Increased Share Market	Increased Output Production	Total Weighted Score
<i>(Mgmt)</i> <i>Alternative Strategies/</i> <i>Weight</i>	<i>0.5</i>	<i>0.3</i>	<i>0.2</i>	<i>1</i>
<b>Product development</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b><math>0.5(2) + 0.3(2) + 0.2(3) = 2.2</math></b>
<b>Horizontal integration</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b><math>0.5(4) + 0.3(2) + 0.2(2) = 3.0</math></b>
<b>Joint venture</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b><math>0.5(5) + 0.3(3) + 0.2(3) = \underline{4.0}</math></b>

# Problem Solving and Decision Making

## Planning

### Strategic Decision-Making Matrix

Family Vacation Objectives							
	Lowest	Best	Time to	Activities	Adult	Score	
	Cost	Weather	Travel	Family	Activities		
Alternative Strategies/Weight	0.5	0.1	0.2	0.4	0.3		
Hawaii	1	5	1	4	5	$0.5(1) + 0.1(5) + 0.2(1) + 0.4(4) + 0.3(5)$	4.3
New York	4	1	4	1	5	$0.5(4) + 0.1(1) + 0.2(4) + 0.4(1) + 0.3(5)$	5.4
Florida	3	3	3	5	4	$0.5(3) + 0.1(3) + 0.2(3) + 0.4(5) + 0.3(4)$	5.6
New Hampshire	5	1	5	3	3	$0.5(5) + 0.1(1) + 0.2(5) + 0.4(3) + 0.3(3)$	5.7
California	2	5	2	5	3	$0.5(2) + 0.1(5) + 0.2(2) + 0.4(5) + 0.3(3)$	4.6

Score: 1 to 5. 1 being the lowest and 5 being the highest

# **Management Information Systems**

## **Problem Solving and Decision Making**

[https://www.mindtools.com/pages/article/newTED\\_03.htm](https://www.mindtools.com/pages/article/newTED_03.htm)