

Making Better Business Decisions By
Thinking Critically




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What Does Making Better Business Decisions Mean to You?



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What Skills are Needed to Make Better Decisions?




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- High standards of
 - Alignment
 - Accountability
 - Expertise
 - Collaboration/Partnerships
- Clear decision-making rights and process
- Functions are robust communities of knowledge and practice, sharing talent

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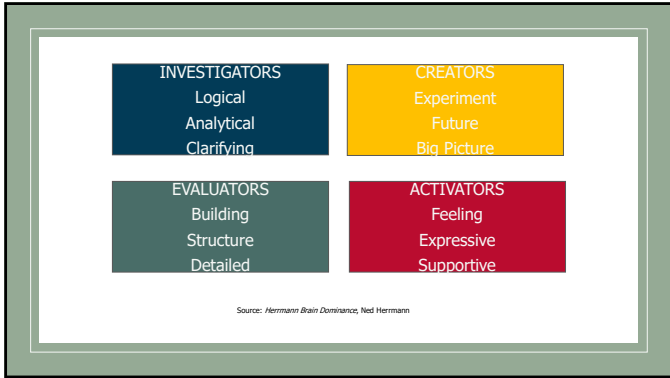
5 Modes of Decision Making

Autopilot	Intentional
➤ Fast & intuitive	➤ Logic
➤ Unconscious	➤ Structured
➤ Automatic	➤ Organized
➤ Everyday decisions	➤ Solution
➤ Biased	➤ Unbiased
<i>Acting on Inertia</i>	<i>Acting mindfully</i>

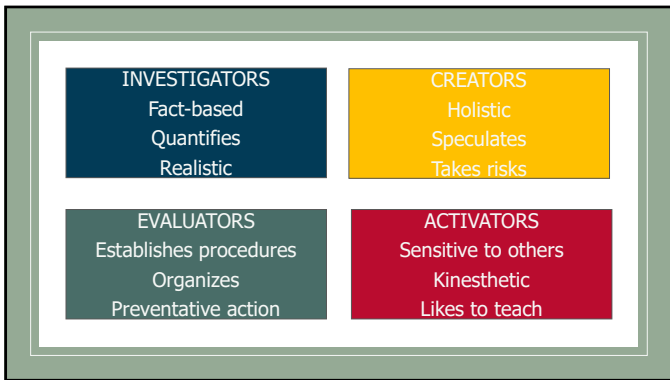
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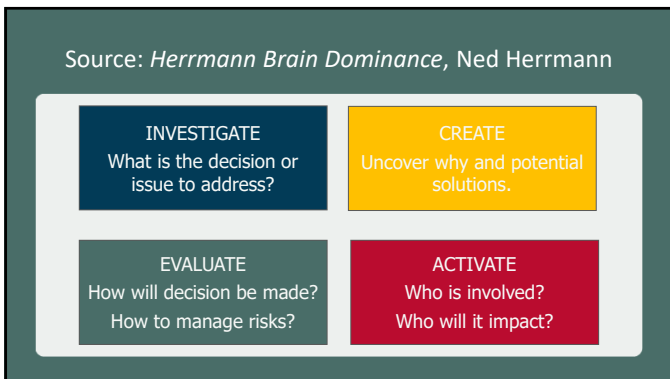
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Breakout Groups (Pairs) – 8 Minutes

What's YOUR Color?

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The Difference Between Problem Solving and Critical Thinking

Problem Solving
Ability to look at an external event and figure out how to effectively change it in an innovative and imaginative way.

Critical Thinking
Objectively analyzing (breaking down) and evaluating an issue in order to form an impartial judgment.

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Differences


<p>Problem Solving</p> <ul style="list-style-type: none"> ➤ Imagination & Innovation (Yellow) ➤ <i>This is what we should do</i> (Green) ➤ Possibilities (Yellow) <p style="text-align: center;"><i>Autopilot</i></p>	<p>Critical Thinking</p> <ul style="list-style-type: none"> ➤ Logic & Proof (Blue) ➤ <i>This is what I think and why</i> (Blue) ➤ Probabilities (Blue) <p style="text-align: center;"><i>Intentional</i></p>
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Critical Thinking Skills

- Raise vital questions and uncover ambiguity (Blue)
- Build cognitive flexibility and avoid perception distortions (Blue and Yellow)
- Analyze the validity of your ideas (Blue)
- Evaluate weaknesses in your reasoning and strengthen them (Blue)
- Learn how to sell your ideas (Red)




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Raising Vital Questions

"BINGO"

*There was a farmer, who had a dog
And BINGO was his name-o.
B - I - NGO, B - I - NGO, B - I - NGO,
and BINGO was his name-o.*

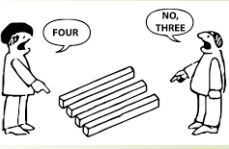
"Who is Bingo...the farmer or the dog?"



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It's All About Perception...

- **Cognitive Flexibility**
Being able to shift your thinking from one dimension (magnitude or size) to another to bring in more information.
- **Perception Distortion**
Making quick judgements when seeing one side of a situation and distorting what is really happening in the outer world.



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To Avoid Perception Distortion

Ask Yourself These Questions

- What am I trying to do?
- What is my point of view?
- What are my reasons for supporting this point of view?
- What might be a different perspective?
- Is there another way for me to think of this?

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Framing Your Thinking

- Focus on desired outcome
- State problem in 40 words. Cut down to 20, then 10 and end up with a 5 words
 - Research and collect information – understand the issue
 - Rephrase and focus - *"Are we solving the right problem? How do we know this is the right issue?"*
 - Challenge assumptions – what are the known truths?
 - Broaden and narrow the view
 - Change the perspective – analyze from different perspectives
 - Frame questions, not statements – use positive language

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10 Minute Break




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Breakout Activity

Problem Solving or Critical Thinking?



Focus on desired outcome



State problem in 40 words. Cut down to 20, then 10 and end up with a 5 words

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Two Types of Critical Thinking

- *Divergent thinking* is a thought process or method used to generate creative ideas by exploring many possible solutions. It typically occurs in a spontaneous, free-flowing, "non-linear" manner, such that many ideas are generated in an emergent cognitive fashion.
- *Convergent thinking* occurs when the solution to a problem can be deduced by applying established rules and logical reasoning. This type of reasoning involves solving a problem within the context of known information and narrowing down the solution based on logical inference.

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Divergent vs. Convergent Thinking

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Using Convergent and Divergent Thinking in Creative Problem Solving

Step 1: Discovery – use divergent thinking

- Possible causes of budget overruns?

Step 2: Narrowing the causes of the problem – use convergent thinking

- What is the biggest cause of the budget overruns?




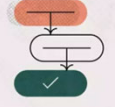
Step 3: Solutioning – use divergent thinking

- What are the steps in the plan to make sure all things to prevent budget overruns in the future are considered?

Step 4: Deciding – use convergent thinking

- Which solution will most effectively eliminate the problem?

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← Divergent	Convergent →	← Divergent	Convergent →
			
1	2	3	4
Discover	Define	Deduce	Determine
What are all the possible causes of this problem?	What one cause should we try to solve?	What are all the possible solutions to this problem?	What is the best solution to this problem?

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Group Activity – 25 minutes

You will be divided into 3 groups of 4 to use both divergent and convergent thinking to solve a problem. As a group, please include the following in your de-brief:

1. When using divergent thinking, please make note of where it was used in the problem-solving phases and why. What were the potential solutions.
2. When using convergent thinking, please make note of where it was used in the problem-solving phases and why.
3. What is the final solution and why?

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25 Awareness of Bias in Critical Thinking and Decision Making

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26 Types of Biases

- Similarity Bias -
- Expedience Bias -
- Experience Bias -

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27 Types of Biases (Cont.)

- Distance Bias -
- Safety Bias

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Exercise for Identifying Bias in Decision Making

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- >

P	Pay attention
A	Acknowledge your assumptions
U	Understand your perspective
S	Seek different perspectives
E	Examine your options and make a decision

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10 Minute Break



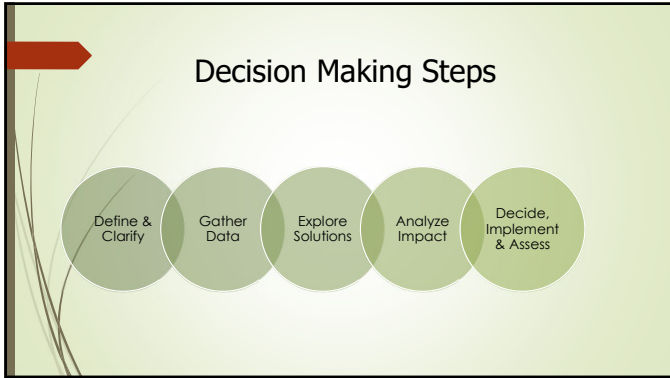
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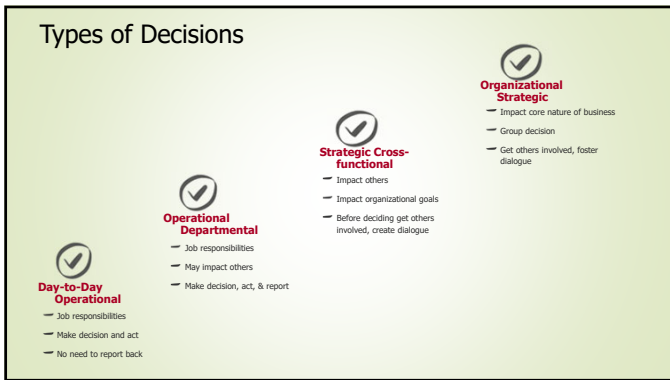
Decision Making Tools

Choose What Fits the Type of Decision

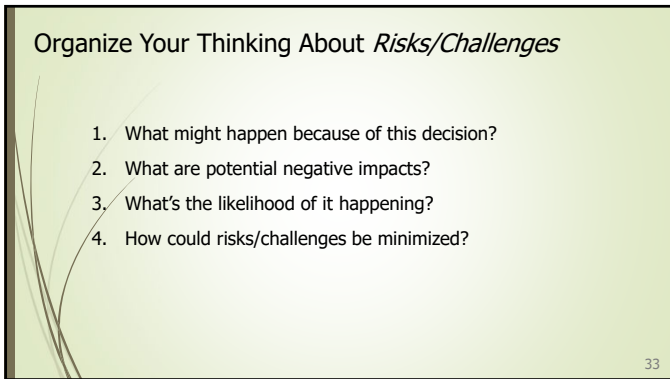
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Decision Making Tools

- SWOT or SOAR Diagram
- Decision Matrix
- Prioritization Chart
- Force Field Analysis
- Multi-voting
- Fish Bone Diagram
- Affinity Diagram
- PMI Chart
- Risk Analysis
- Pareto Analysis

Chat

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Alternative Mapping Tool

	Do Nothing Option	"Safe" Option	"Wild" Option	"Risky" Option
Expected outcome				
Pros				
Evidence in support of pros				
Cons				
Evidence in support of cons				
Assumptions				
Associated Risk				

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G h f l v l r q # P d w l { # W r r d

Potential Issues	Criteria					TOTAL
	Quality	Lower Cost	Delivery	Safety	Employee Satisfaction	

Scoring Key: 3 = High 2 = Medium 1 = Low
 "If we resolve this issue, it will have a ____ (1, 2, 3) impact on [each criterion]."

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I r u f h # I h g # D q d o | v l v # W r r c #

Example: Traditional Force Field Analysis Used to Answer the Question "Should the Office Be Moved?"

Driving Forces		Restraining Forces
Limited space	⇒	⇐ Close to service providers
Lack of parking	⇒	⇐ Many restaurants nearby
Lack of public transportation	⇒	⇐ Newly installed network system
Poor climate control	⇒	⇐ Employees have moved to be close to office
Limited access for service vehicles	⇒	⇐ Great view of city
Hiring 20 percent more employees	⇒	⇐ Close to airport
High rent	⇒	⇐ Expandable space

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P x o w l o y r w l q j # W r r c #

Note: Never multivote down to one item. The final group choice requires discussion to achieve true consensus.

Example:

Issues	First Vote	Second Vote
A	III I	III III
B	II	
C	III	
D	III	I
E	III	III III III
F	III	
G	III	II
H	III II	III III I
I	III	
J	I	
	38	38

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S u l r u w l } d w l r q # F k d u w # W r r c #

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Affinity Diagram



- Trello
- Miro
- Physical board with Post-It Notes
- Many other programs

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PMI Chart – Purchasing Manager's Index

Moving to a Big City

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Many jobs	Expensive	More people
Museums	Traffic	Mass transit
Restaurants	Pollution	Shopping
Parks	Crime	Close to airport

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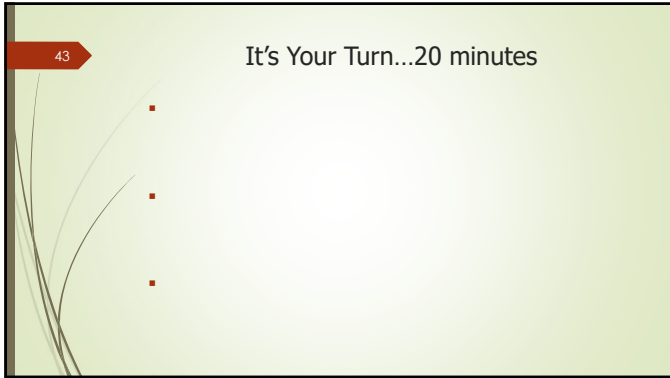
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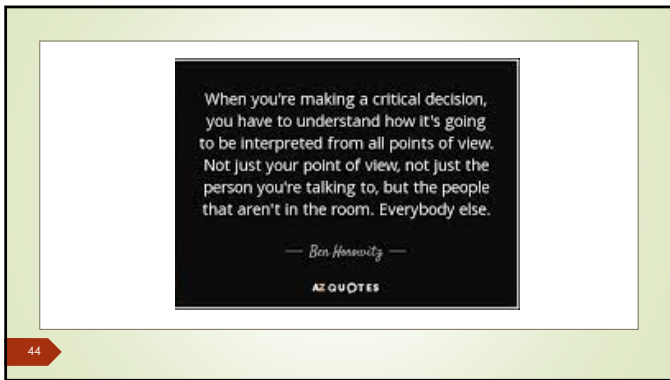
Pareto Analysis

Complaint Type	Frequency (Approx.)	Cumulative % (Approx.)
Quality certificate error	18	45%
Quality certificate missing	12	60%
Invoice error	6	70%
Packing list error	4	78%
Wrong quantity	3	85%
Other	2	90%

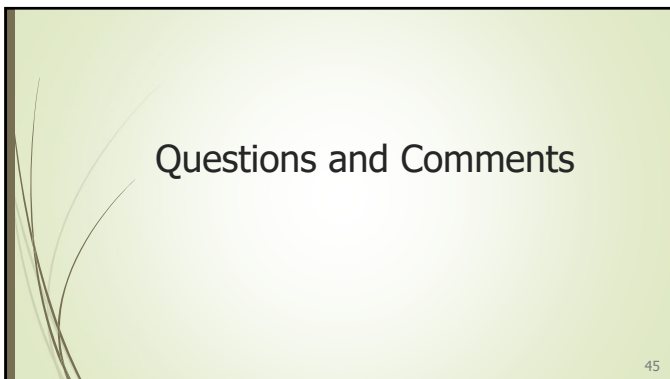
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