Decision-Making INGREDIENTS

Decision Making Framework OVERVIEW

Decision Making FRAMEWORK

A disciplined approach to decision-making that incorporates an effective challenge process will help avoid decision traps, aid collaboration and lead to effective action.

SUPPORT THAT LEADS TO EFFECTIVE ACTION

- Relevant knowledge (subject matter expertise and diverse perspectives)
- Cultural "enablers" (the challenge process, knowledge sharing, experimental discovery...)
- Critical thinking tools (marginal analysis, risk adjusted thinking, option thinking...)
- Decision frameworks (provide discipline, help avoid traps and aid collaboration)

DECISION MAKING FRAMEWORK

What it is

A process to help guide decisions that lead to effective action

What it is not

- A list of inflexible rules
- A substitute for thinking
- The write-up

Some common pitfalls and misapplications

- Failing to involve the right people appropriately early
- Failing to focus on what matters
- Overworking details
- Overlooking "big picture" issues
- Assuming "one-size-fits-all"

DEFINE THE OPPORTUNITY OR PROBLEM

Succinctly identify the opportunity or problem

- CLARIFY YOUR OBJECTIVES

 What are you trying to accomplish?

DETERMINE VIABILITY

Stop the process if it shouldn't be a priority!

DEVELOP A RANGE OF ALTERNATIVES

Be creative; think beyond the obvious!

ANALYZE THE ALTERNATIVES

Consider the pros/benefits/positives and the cons/difficulties/ obstacles of each solid alternative

SELECT THE BEST ALTERNATIVE

Focus on your objectives, value created and return on resources

DETERMINE NEXT STEPS

What is required to advance to the next stage?

COMMUNICATE AND SEEK APPROVALS

Communicate early and often; don't wait until the end of the process

SELECTED DECISION TRAPS

Overconfidence. Believing we are better at making predictions and estimates than we actually are.

Framing. Allowing the way a question is asked or worded to influence our conclusion.

Anchoring. Allowing irrelevant information or first thoughts to unduly influence decision-making.

Status quo. Biasing decisions in favor of the status quo or the default outcome.

Sunk cost. Basing decisions on past expenditures rather than future prospects.

Confirmatory evidence. Seeking out data that supports our existing point of view or avoiding data that may contradict it.

Recallability. Being overly influenced by dramatic, memorable or recent events.

Out-guessing randomness. Believing that we can identify patterns in what are really random events.

The process is relevant for all decisions, not just "big" ones

TIPS

- Seek out best knowledge
- Keep it as simple as possible, but no simpler
- Apply the challenge process
- Prepare a write-up only if needed

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COMMENTS AND QUESTIONS WELCOME

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Decision Making Framework POSSIBLE ISSUES AND QUESTIONS

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DEFINE THE OPPORTUNITY OR PROBLEM

- Succinctly identify the opportunity or problem
- Focus on the desired outcome, not possible solutions

2

CLARIFY YOUR OBJECTIVES

- What are you trying to accomplish?
- What do you care about most?
- Objectives help in selecting the best alternative; spend the appropriate time and effort on this!

3

DETERMINE VIABILITY

- Estimate the value of the opportunity or problem
- Brainstorm preliminary views on key issues including risks and long-term consequences
- Does addressing the opportunity or problem fit our business vision?
- Is it consistent with our compliance and ethics vision?
- Will it build competitive advantage?
- Are we the logical owners? Why us? Why now?
- Is further work justified? Who can help decide?
- Identify likely winners and eliminate losers early
- Avoid incremental investment in a "lost cause"
- Stop the process if it shouldn't be a priority!

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DEVELOP A RANGE OF ALTERNATIVES

- Brainstorm ways the opportunity or problem could be addressed
- What is the "optimized base case"?
- Be creative; think beyond the obvious!

TIPS

- Create alternatives first: evaluate later
- Ask "How?" using your objectives
- Do your own thinking first
- Ask others for suggestions

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ANALYZE THE ALTERNATIVES

- Consider the pros/benefits/positives and the cons/difficulties/ obstacles of each solid alternative
- Include potential compliance, ethics, EHS and reputational issues in the analysis
- Consider 2nd and 3rd order consequences (including intangibles)
- What about creative destruction? How could the pros and cons change in the future?
- Who has expertise? Who can help?

IDENTIFY KEY DRIVERS AND ASSUMPTIONS

- What will make the venture successful? Unsuccessful?
- Select the few key success drivers
- What assumptions are we making? Can they be tested?

MANAGE RISK AND UPSIDE

- What is the full range of possible outcomes?
- What do we need to do to capture the potential upside?
- What are the key areas of risk? What could go wrong?
- Are there any potentially catastrophic risks?
- Can the risks be mitigated? Should they be mitigated?
- Can we cap the downside?
- How will others (customers, competitors, policy makers, etc.) respond?
- How will we adapt if the unexpected occurs?
- What is our exit strategy?
- Can we embed options? Should we?

EXPLORE CAPABILITIES AND RESOURCES

- Do we possess the capabilities needed to implement this venture?
 - If not, should we hire, train or contract the capabilities?
- What capabilities will we acquire or build?
- What is the opportunity cost of the needed resources?

PERFORM ECONOMIC ANALYSIS

- What level of analysis (including risk assessment) is needed for this venture?
- Apply marginal analysis
- · Avoid false precision



SELECT THE BEST ALTERNATIVE

Focus on your objectives, value created and return on resources

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DETERMINE NEXT STEPS

- What is required to advance to the next stage?
- Who will own each step?
- How will we measure success?
- How will we know if we must "course correct"?

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COMMUNICATE AND SEEK APPROVALS

- Communicate early and often; don't wait until the end of the process
- Seek input from others; include those who will need to approve the venture
- Prepare a write-up only if needed to:
 - Clarify and communicate your thinking
 - Facilitate challenge
 - Request authority
 - Improve decision-making

FOCUS ON WHAT IS RELEVANT TO MAKING DECISIONS THAT LEAD TO EFFECTIVE ACTION

- Not all the detailed questions will be important for all decisions
- Other issues may matter
- Adjust the effort devoted to each step as appropriate
- · Keep it as simple as possible, but no simpler

ILLUSTRATIVE WRITE-UP OUTLINE

- Venture (opportunity, objectives, recommendation, rationale)
- Fit with vision
- Capabilities and resources required
- Alternatives considered
- Key drivers and risks
- Economics
- Next steps

TIPS

- Include only what is relevant
- Avoid unnecessary details
- Don't try to address every question that could be asked