

Decision and decision making

- A decision is a choice made from among available alternatives.
- Decision making is the process of identifying and choosing alternative courses of action.

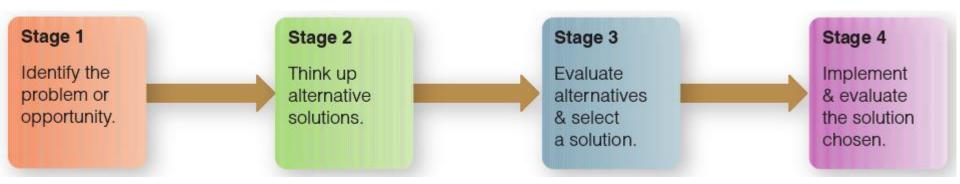
Two Systems of Decision Making

- System 1—intuitive and largely unconscious:
 - System 1 operates automatically and quickly; it is our fast, automatic, intuitive, and largely unconscious mode
 - e.g., when we detect hostility in a voice or detect that one object is more distant than another.
- System 2—analytical and conscious:
 - System 2 is our slow, deliberate, analytical, and consciously effortful mode of reasoning
 - e.g., when we have to fill out a tax form or park a car in a narrow space.

- Why don't we use the more deliberate and rational System 2 more often?
- Because it's lazy and tires easily, so instead of slowing things down and analyzing them, it is content to accept the easy but unreliable story that System 1 feeds it.

Rational Decision Making

- Rational model of decision making, also called the classical model, explains how managers should make decisions.
- It assumes managers will make logical decisions that will be the optimum in furthering the organization's best interests.
- The rational model is prescriptive, describing how managers ought to make decisions.



- Stage 1: Identify the Problem or Opportunity—
 Determining the Actual versus the Desirable
 - Problems, or difficulties inhibit the achievement of goals.
 - opportunities are situations that present possibilities for exceeding existing goals.
- Stage 2: Think Up Alternative Solutions—Both the Obvious & the Creative
- Stage 3: Evaluate Alternatives & Select a Solution—
 Ethics, Feasibility, & Effectiveness

- Stage 4: Implement & Evaluate the Solution Chosen
 - Successful Implementation:
 - Plan carefully;
 - Be sensitive to those affected.
 - Evaluation: What should you do if the action is not working (the Law of Unintended Consequences)?
 - Give it more time.
 - Change it slightly.
 - Try another alternative.
 - Start over.

Assumptions of the Rational Model

- Complete information, no uncertainty: You should obtain complete, error-free information
 about all alternative courses of action and the consequences that would follow from each choice.
- Logical, unemotional analysis: Having no prejudices or emotional blind spots, you are able to logically evaluate the alternatives, ranking them from best to worst according to your personal preferences.
- Best decision for the organization: Confident of the best future course of action, you coolly choose
 the alternative that you believe will most benefit the organization.

Nonrational Decision Making

- Nonrational models of decision making explain how managers make decisions;
- They assume that decision making is nearly always uncertain and risky, making it difficult for managers to make optimal decisions.
- The nonrational models are descriptive rather than prescriptive: They describe how managers actually make decisions rather than how they should.
- Two nonrational models are (1) satisficing and (2) intuition.

Satisficing Model

Satisfactory Is Good Enough

- Bounded rationality suggests that the ability of decision makers to be rational is limited by numerous constraints
 - such as complexity, time and money, and their cognitive capacity, values, skills, habits, and unconscious reflexes.
- Satisficing model—managers seek alternatives until they find one that is satisfactory, not optimal.
- While "satisficing" might seem to be a weakness, it may well outweigh any advantages gained from delaying making a decision until all information is in and all alternatives weighed.

Hindrances to rational decision making

Complexity:

The problems that need solving are often exceedingly complex, beyond understanding.

Time and money constraints:

There is not enough time or money to gather all relevant information.

Different cognitive capacity, values, skills, habits, and unconscious reflexes:

Managers aren't all built the same way, of course, and all have personal limitations and biases that affect their judgment.

Imperfect information:

Managers have imperfect, fragmentary information about the alternatives and their consequences.

Information overload:

There is too much information for one person to process.

Different priorities:

Some data are considered more important, so certain facts are ignored.

Conflicting goals:

Other managers, including colleagues, have conflicting goals.

The Intuition Model —It Just Feels Right

- "Going with your gut," or intuition, is making a choice without the use of conscious thought or logical inference.
- Intuition that stems from expertise—a person's explicit and tacit knowledge about a person, situation, object, or decision opportunity—is known as a holistic hunch.
- Intuition based on feelings—the involuntary emotional response to those same matters—is known as automated experience.
- It is important to try to develop your intuitive skills because they are as important as rational analysis in many decisions.

Benefits of intuition:

- It can speed up decision making, useful when deadlines are tight.
- It can be helpful to managers when resources are limited.

Drawbacks of intuition:

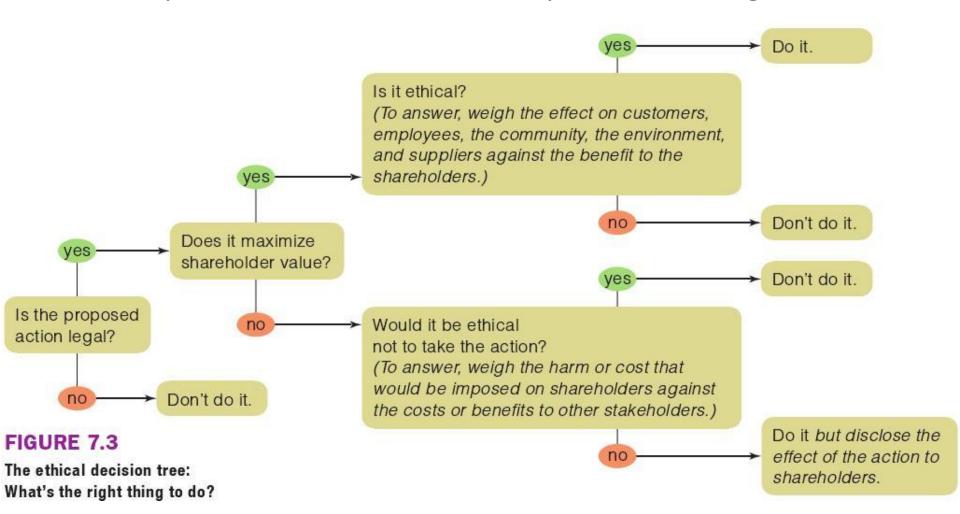
- It can be difficult to convince others that your hunch makes sense.
- It is subject to the same biases as those that affect rational decision making.
- Intuition is fine for start-ups but often deceives CEOs as their businesses become more complex.
- Intuition and rationality are complementary and managers should develop the courage to use intuition when making decisions.

Guidelines for Developing Intuitive Awareness

RECOMMENDATION	DESCRIPTION
1. Open up the closet.	To what extent do you experience intuition; trust your feelings; count on intuitive judgments; suppress hunches; covertly rely upon gut feel.
2. Don't mix up your l's.	Instinct, Insight, and Intuition are not synonymous; practice distinguishing between your instincts, your insights, and your intuitions.
3. Elicit good feedback.	Seek feedback on your intuitive judgments; build confidence in your gut feel; create a learning environment in which you can develop better intuitive awareness.
Get a feel for your batting average.	Benchmark your intuitions; get a sense of how reliable hunches are; ask yourself how your intuitive judgment might be improved.
5. Use imagery.	Use imagery rather than words; literally visualize potential future scenarios that take your gut feelings into account.
6. Play devil's advocate.	Test out intuitive judgments; raise objections to them; generate counterarguments; probe how robust gut feel is when challenged.
7. Capture and validate your intuitions.	Create the inner state to give your intuitive mind the freedom to roam; capture your creative intuitions; log them before they are censored by rational analysis.

Making Ethical Decisions

 A decision tree is a graph of decisions and their possible consequences; it is used to create a plan to reach a goal.



Evidence-Based Decision Making

- Evidence-based management is the translation of principles based on best evidence into organizational practice, bringing rationality to the decision-making process.
- Seven Implementation Principles:
 - Treat your organization as an unfinished prototype.
 - No brag, just facts.
 - See yourself and your organization as outsiders do.
 - Evidence-based management is not just for senior executives.
 - Like everything else, you still need to sell it.
 - If all else fails, slow the spread of bad practice.
 - The best diagnostic question: What happens when people fail?

Decision-Making Styles

- A decision-making style reflects the combination of how an individual perceives and responds to information.
- Value orientation reflects the extent to which a person focuses on either task and technical concerns or people and social concerns when making decisions.
- Tolerance for ambiguity indicates the extent to which a person has a high or low need for structure or control in his or her life.

High	Analytical	Conceptual
Tolerance for ambiguity	The Analytical Style: Careful Decision Makers Who Like Lots of Information & Alternative Choices	The Conceptual Style: Decision Makers Who Rely on Intuition & Have a Long-Term Perspective
	The Directive Style: Action-Oriented Decision Makers Who Focus on Facts	Behavioral The Behavioral Style: The Most People-Oriented Decision Makers
Low		
Task & technical		People & social

concerns

Value orientation

concerns

AMBIGUITY

ANALYTICAL

- · Committed to finding the best answer
- · Enjoys problem solving
- Comfortable with large amounts of information and data
- Innovative
- Thrives on control
- Will take as long as needed to find the best option
- · Enjoys variety and new challenges

CONCEPTUAL

- Achievement oriented
- Creative
- · Comfortable with "What ifs"
- Generally openminded with a broad outlook
- Humanitarian/conscious of how decision will affect others
- · Thinks in the future
- · Enjoys coming up with new ideas

DIRECTIVE

- · Driven by results
- · Relies primarily on rules and processes
- Aggressive nature
- · Prefers to make decisions alone
- · Intuitive nature
- Typically reacts quickly and doesn't like to dwell on decisions
- · Strong verbal communicator
- · Informs people once a decision is made

BEHAVIORAL

- · Generally supportive; a team player
- · Empathetic nature
- · Looks to others for advice
- Gets buy in from stakeholders before making a decision
- · Persuasive nature
- · Good communicator
- Relies on implied data (e.g. "reading" people)

STRUCTURE

- Very few people have only one dominant decision-making style; most managers have characteristics that fall into two or three styles.
- Decision-making styles vary across occupations, job level, and countries.
- There is not a best decision-making style that applies to all situation
- You can use knowledge of decision-making styles to
 - Know Thyself
 - Influence Others
 - Deal with Conflict

Individuals Response to Decision Making

- Four Ineffective Reactions
 - 1. Relaxed Avoidance—"There's No Point in Doing Anything; Nothing Bad's Going to Happen."
 - 2. Relaxed Change—"Why Not Just Take the Easiest Way Out?"
 - 3. Defensive Avoidance—"There's No Reason for Me to Explore Other Solution Alternatives."
 - 4. Panic—"This Is So Stressful, I've Got to Do Something—Anything—to Get Rid of the Problem!"

- Three Effective Reactions
 - 1. Importance—"How High Priority Is This Situation?"
 - 2. Credibility—"How Believable Is the Information about the Situation?"
 - 3. Urgency—"How Quickly Must I Act on the Information about the Situation?"

Deciding to Decide: How Should a Paper Maker Reinvent Itself?

EXAMPLE

"Failure isn't fatal, but failure to change might be," legendary UCLA basketball coach John Wooden once said. 107

In 2000, the paper industry was at its height, with 94 million tons of paper and paper-based packaging being produced. Then the computer revolution and the vogue phrase "the paperless office" really began to be felt, and the demand for paper plummeted. Paper companies such as 83-year-old family-owned Mohawk Fine Papers, located in a Civil War-era ax handle factory in Cohoes, New York, saw failure looming as companies cut back on paper for brochures, reports, and marketing materials. President Thomas D. O'Connor Jr. faced the dilemma of rescuing the firm founded by his grandfather.

Is This High-Priority? The first decision about how to handle the response—Should this be considered a high-priority matter?—was certainly much in evidence, as revenues slipped and operations at Mohawk's 350,000-square-foot mill shrank from seven days a week to five and then to four. Clearly, this was a high-priority concern.

Is the Data Believable? The second decision—How believable is the information?—was reinforced in depressing numbers throughout the paper industry, with the decline in orders for newsprint and writing paper, which accounted for about 85% of the decrease in paper sales. The copy-machine paper business

also shrank. Meanwhile, the U.S. government stepped up its campaign to "go paperless," creating more government websites and permitting taxpayers to file income tax returns online.

How Fast Do We Need to Act? The answer to the final decision—
How quickly should this information be acted on?—was evident in
the speed of the preceding events. "For the first time in hundreds
of years," O'Connor said, "paper had to justify itself." As the
digital revolution appeared ready to wipe out Mohawk and every
other paper company, in 2004, reports The Wall Street Journal,
O'Connor made an extraordinary bet: His company decided to expand into the fine stationery business, borrowing millions of dollars
to do so. 109 It decided to take advantage of paper's transformation
from commodity to keepsake, supplying high-quality, highly profitable paper for personalized holiday cards, photo books, and announcements from Shutterfly, Minted.com, and others.

YOUR CALL

Today Mohawk's sales, which first began declining in 1996, are way up. "We couldn't just downsize and hope to survive," O'Connor said later. "We knew we had to change our product completely." With this knowledge in hindsight, how would you have handled O'Connor's initial decisions about finding a new direction for the company?

Decision-Making Biases

1. The Availability Bias:

- Using information readily available from memory to make judgments.
- Because of the efforts of interest groups or celebrities, more news coverage may be given to AIDS or to breast cancer than to heart disease, leading people to think the former are the bigger killers when in fact the latter is.

2. The Representativeness Bias:

- The tendency to generalize from a small sample or a single event.
- Just because you hired an extraordinary sales representative from a particular university, that doesn't mean that same university will provide an equally qualified candidate next time.

3. The Confirmation Bias:

 Seeking information to support their point of view and discount data that do not.

4. The Sunk-Cost Bias:

 Or sunk-cost fallacy, is when managers add up all the money already spent on a project and conclude it is too costly to simply abandon it.

5. The Anchoring & Adjustment Bias:

- The tendency to make decisions based on an initial figure.
- Before the 2008 crash in real estate markets, homeowners inclined at first to list their houses at an extremely high selling price. These sellers were then unwilling later to come down substantially to match buying offers that reflected real market worth.

6. The Overconfidence Bias:

 people's subjective confidence in their decision making is greater than their objective accuracy.

7. The Hindsight Bias:

- The tendency of people to view events as being more predictable than they really are.
- When at the end of watching a game we decide the outcome was obvious and predictable, even though in fact it was not.

8. The Framing Bias:

- The tendency of decision makers to be influenced by the way a situation or problem is presented to them.
- Customers have been found to prefer meat that is framed as "85% lean meat" instead of "15% fat," although of course they are the same thing.

9. The Escalation of Commitment Bias:

- decision makers increase their commitment to a project despite negative information about it.
- A website (Swoopo.com) offers a penny auction in which a \$1,500 laptop is offered for bidding starting at a penny and going up one cent at a time—but it costs bidders 60 cents to make a bid, because "once people are trapped into playing, they have a hard time stopping."

Group Decision Making

- Most managers work with groups and teams.
- Although groups don't make as high-quality decisions as the best individual acting alone, research suggests that groups make better decisions than most individuals acting alone.

Pros and Cons

Advantages:

- Greater pool of knowledge.
- Different perspectives.
- Intellectual stimulation.
- Better understanding of decision rationale.
- Deeper commitment to the decision.

• Disadvantages:

- A few people dominate or intimidate.
- Groupthink: occurs when group members strive to agree for the sake of unanimity and thus avoid accurately assessing the decision situation.
- Satisficing.
- Goal displacement: occurs when the primary goal is subsumed by a secondary goal.

Neutral:

- They Are Less Efficient
- Their Size Affects Decision Quality
- They May Be Too Confident
- Knowledge Counts
- Minority dissent, dissent that occurs when a minority in a group publicly opposes the beliefs, attitudes, ideas, procedures, or policies assumed by the majority of the group, should be encouraged.

When a Group Can Help in Decision Making

- When it can increase quality: If additional information would increase the quality of the decision, managers should involve those people who can provide the needed information. Thus, if a type of decision occurs frequently, such as deciding on promotions or who qualifes for a loan, groups should be used because they tend to produce more consistent decisions than individuals do.
- When it can increase acceptance: If acceptance within the organization is important, managers need to involve those individuals whose acceptance and commitment are important.
- When it can increase development: If people can be developed through their participation, managers may want to involve those whose development is most important.

Group Problem-Solving Principle: Reaching for Consensus

- Consensus occurs when members are able to express their opinions and reach agreement to support the final decision.
- To achieve consensus:
- Dos:
 - Use active listening skills.
 - Involve as many members as possible.
 - Seek out the reasons behind arguments.
 - Dig for the facts.

• Don'ts:

- Avoid log rolling and horse trading ("I'll support your pet project if you'll support mine").
- Avoid making an agreement simply to keep relations amicable and not rock the boat.
- Don't try to achieve consensus by putting questions to a vote; this will only split the group into winners and losers, perhaps creating bad feelings among the latter.

Group Problem-Solving Techniques

1. Brainstorming

 Brainstorming is a technique used to help groups generate multiple ideas and alternatives for solving problems.

Procedures:

- Having members of a group meet and review a problem to be solved.
- Individual members are then asked to silently generate ideas or solutions.
- Then collect (preferably without identifying their contributors) and write on a board or flip chart.
- A second session is then used to critique and evaluate the alternatives.

Rules for Brainstorming

- 1. **Defer judgment.** Don't criticize during the initial stage of idea generation. Phrases such as "we've never done it that way," "it won't work," "it's too expensive," and "our manager will never agree" should not be used.
- 2. Build on the ideas of others. Encourage participants to extend others' ideas by avoiding "buts" and using "ands."
- 3. Encourage wild ideas. Encourage out-of-the-box thinking. The wilder and more outrageous the ideas, the better.
- 4. Go for quantity over quality. Participants should try to generate and write down as many new ideas as possible. Focusing on quantity encourages people to think beyond their favorite ideas.
- Be visual. Use different colored pens (for example, red, purple, blue) to write on big sheets of flip-chart paper, whiteboards, or poster boards that are put on the wall.
- 6. Stay focused on the topic. A facilitator should be used for keeping the discussion on target.
- 7. One conversation at a time. The ground rules are that no one interrupts another person, no dismissing of someone's ideas, no disrespect, and no rudeness.

2. The Delphi Technique

- Delphi technique is a group process that uses physically dispersed experts who fill out questionnaires to anonymously generate ideas; the judgments are combined and averaged to achieve a consensus of expert opinion.
- The Delphi technique is useful
 - when face-to-face discussions are impractical
 - when disagreement and conflicts are likely to impair communication
 - when certain individuals might try to dominate group discussions
 - when there is a high risk of groupthink

Review case - Would You Agree to Wear a Sensor So Your Employer Can Track Your Movements & Conversations?

Would You Agree to Wear a Sensor So Your Employer Can Track Your Movements & Conversations?

The onset of Big Data and its application has prompted companies to ask employees to wear tracking sensors. For example, Bank of America Corp. decided to study whether face time among coworkers at call centers affected performance. Ninety employees were asked to wear sensors "for a few weeks that contained tiny sensors to record their movements and the tone of their conversations."

Results from the study showed that close-knit teams talked more together and had higher productivity. The bank then decided to schedule workers for group breaks rather than individual breaks in order to foster more social interactions. "But there's a fine line between Big Data and Big Brother," says *The Wall Street Journal*, "at least in the eyes of some employees, who might shudder at the idea of the boss tracking their every move. Sensor proponents, however, argue that smartphones and corporate ID badges already can transmit their owner's location."

A survey of 50 large- and medium-sized firms that have asked employees to wear sensors reveals that 10% of employees refused to wear the tracking device. Because of the backlash this might create for people, firms selling these devices have created "dummy badges" for people to wear. They are identical to the actual technology but don't record or transmit data.

What would you do if your employer asked you to wear a tracking device for a few weeks?