4- DECISION MAKING

● **Learning outcomes:**
1. *Describe the eight steps in the decision-making process.*
2. *Explain the four ways managers make decisions.*
3. *Classify decisions and decision-making conditions.*
4. *Describe different decision-making styles and discuss how biases affect decision making.*
5. *Identify effective decision-making techniques.*

● **The Decision-Making Process:**
- *Decision—making a choice from two or more alternatives.*

Step 1: Identify a Problem
- *Problem—an obstacle that makes it difficult to achieve a desired goal or purpose.*
- *Every decision starts with a **problem**, a discrepancy between an existing and a desired condition*
- *Example: Amanda is a sales manager whose reps need new laptops*

Step 2: Identify Decision Criteria
- *Decision criteria—are factors that are important (relevant) to resolving the problem*
- *Example: Amanda decides that memory and storage capabilities, display quality, battery life, warranty, and carrying weight are the relevant criteria in her decision.*

Step 3: Allocate weights to the criteria
- *If the relevant criteria aren't equally important, the decision maker must weight the items in order to give them the correct priority in the decision.*
- *The weighted criteria for our example are shown in the following figure.*

Memory and storage	10
Battery life	8
Carrying weight	6
Warranty	4
Display quality	3

Step 4: Develop Alternatives
- *List viable alternatives that could resolve the problem*
- *Example: Amanda, identifies eight laptops as possible choices.*

	Memory and Storage	Battery Life	Carrying Weight	Warranty	Display Quality
HP ProBook	10	3	10	8	5
Sony VAIO	8	7	7	8	7
Lenovo IdeaPad	8	5	7	10	10
Apple Macbook	8	7	7	8	7
Toshiba Satellite	7	8	7	8	7
Sony NW	8	3	6	10	8
Dell Inspiron	10	7	8	6	7
HP Pavilion	4	10	4	8	10

Step 5: Analyze Alternatives
- *Appraising each alternative's strengths and weaknesses*
- *An alternative's appraisal is based on its ability to resolve the issues related to the criteria and criteria weight.*

Step 6: Select an Alternative
- *Choosing the best alternative*
- *The alternative with the highest total weight is chosen.*

	Memory and Storage	Battery Life	Carrying Weight	Warranty	Display Quality	Total
HP ProBook	100	24	60	32	15	231
Sony VAIO	80	56	42	32	21	231
Lenovo IdeaPad	80	40	42	40	30	232
Apple Macbook	80	56	42	32	21	231
Toshiba Satellite	70	64	42	32	21	229
Sony NW	80	24	36	40	24	204
Dell Inspiron	100	56	48	24	21	249
HP Pavilion	40	80	24	32	30	206

Step 7: Implement the Alternative
- *Putting the chosen alternative into action*
- *Conveying the decision to and gaining commitment from those who will carry out the alternative.*

Step 8: Evaluate decision effectiveness
- *The soundness of the decision is judged by its outcomes.*
- *How effectively was the problem resolved by outcomes resulting from the chosen alternatives?*
- *If the problem was not resolved, what went wrong?*

● Exhibit 6-5: Decisions Managers May Make:

● **Planning:**
- *What are the organizations long-term objectives?*
- *What strategies will best achieve those objectives?*
- *What are the organization's short-term objectives?*
- *How difficult should individual goals be?*

● **Organizing:**
- *How many employees should I have report directly to me?*
- *How much centralization should there be in the organization?*
- *How should jobs be designed?*
- *When should the organization implement a different structure?*

● **Leading:**
- *How do I handle employees who appear to be unmotivated?*
- *What is the most effective leadership style in a given situation?*
- *How will a specific change affect worker productivity?*
- *When is the right time to stimuate conflict?*

● **Controlling:**
- *What activies in the organizauon need to be controlled?*
- *How should those activities be controlled?*
- *When is a performance deviation significant?*
- *What type of management in information system should the organization have?*

● Making Decisions: Rationality:
- ***Rational Decision-Making***—*describes choices that are logical and consistent while maximizing value.*
- ***Assumptions of Rationality:***
  —*The decision maker would be fully objective and logical*
  —*The problem faced would be clear and unambiguous*
  —*The decision maker would have a clear and specific goal and know all possible alternatives and consequences and consistently select the alternative that maximizes achieving that goal*

● Making Decisions: Bounded Rationality:
- ***Bounded Rationality***—*decision making that's rational, but limited (bounded) by an individual's ability to process information.*
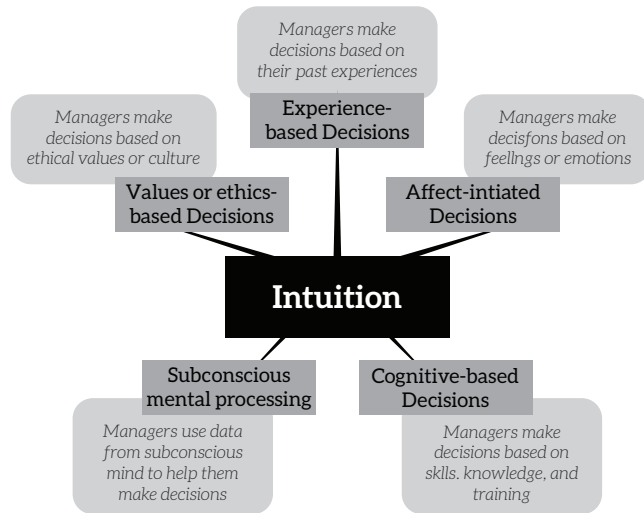- ***Satisfice***—*accepting solutions that are "good enough."*
- ***Escalation of commitment***—*an increased commitment to a previous decision despite evidence it may have been wrong*

● Making Decisions: The Role of Intuition:
-*Intuitive decision making*—*Making decisions on the basis of experience, feelings, and accumulated judgment.*

● Exhibit 6-6: What Is Intuition?

Managers make decisions based on their past experiences

Experience-based Decisions

Managers make decisions based on ethical values or culture

Values or ethics-based Decisions

Managers make decisfons based on feellngs or emotions

Affect-intiated Decisions

Intuition

Subconscious mental processing

Cognitive-based Decisions

Managers use data from subconscious mind to help them make decisions

Managers make decisions based on sklls. knowledge, and training

● Making Decisions: The Role of Evidence-Based Management:
- *Evidence-based management (EBMgt)*—*the systematic use of the best available evidence to improve management practice.*

● Structured Problems and Programmed Decisions:
- *Structured Problems*—*straight-forward, familiar, and easily defined problems.*
- *Programmed decision*—*a repetitive decision that can be handled by a routine approach.*
- *Procedure*—*a series of sequential steps used to respond to a well-structured problem.*
- *Rule*—*an explicit statement that tells managers what can or cannot be done.*
- *Policy*—*a guideline for making decisions.*

● Unstructured Problems and Nonprogrammed Decisions:
- *Unstructured Problems*—*problems that are new or unusual and for which information is ambiguous or incomplete.*
- *Nonprogrammed decisions*—*unique and nonrecurring and involve custom made solutions.*

● Exhibit 6-7: Programmed Versus Nonprogrammed Decisions:

Characteristic	Programmed Decisions	Nonprogrammed Decisions
1. Type of problem 2. Managerial level 3. Frequency 4. Information 5. Goals 6. Time frame for sol. 7. Solution relies on...	-Structured -Lower levels -Repetitive, routine -Readily available -Clear, specific -Short -Procedures, rules, policies	-Unstructured -Upper levels -New, unusual -Ambiguous or incomplete -Vague -Relatively long -Judgment and creativity

● Decision-Making Conditions:
- *Certainty*—*a situation in which a manager can make accurate decisions because all outcomes are known.*
- *Risk*—*a situation in which the decision maker is able to estimate the likelihood of certain outcomes.*
- *Uncertainty*—*a situation in which a decision maker has neither certainty nor reasonable probability estimates available.*

● Decision-Making Styles:
- *Linear Thinking Style*—*a person's tendency to use external data/facts; the habit of processing information through rational, logical thinking.*
- *Nonlinear Thinking Style*—*a person's preference for internal sources of information a method of processing this information with internal insights, feelings, and hunches. encompass traditions, history, religious beliefs, and deep-seated values.*

- **Decision-Making Biases & Errors:**
- *Heuristics—using "rules of thumb" to simplify decision making.*
- *Overconfidence Bias—holding unrealistically positive views of oneself and one's performance.*
- *Immediate Gratification Bias—choosing alternatives that offer immediate rewards and avoid immediate costs.*
- *Anchoring Effect—fixating on initial information and ignoring subsequent information.*
- *Selective Perception Bias—selecting, organizing and interpreting events based on the decision maker's biased perception*
- *Confirmation Bias—seeking out information that reaffirms past choices while discounting contradictory information.*
- *Framing Bias—selecting and highlighting certain aspects of a situation while ignoring other aspects.*
- *Availability Bias—losing decision-making objectivity by focusing on the most recent events.*
- *Representation Bias—drawing analogies and seeing identical situations when none exist.*
- *Randomness Bias—creating unfounded meaning out of random events.*
- *Sunk Costs Errors—forgetting that current actions cannot influence past events and relate only to future consequences.*
- *Self-Serving Bias—taking quick credit for successes and blaming outside factors for failures.*
- *Hindsight Bias—mistakenly believing that an event could have been predicted once the actual outcome is known (after-the-fact).*

- **Guidelines for Making Effective Decisions:**
- *Understand cultural differences*
- *Create standards for good decision making.*
- *Know when it's time to call it quits.*
- *Use an effective decision making process.*
- *Build an organization that can spot the unexpected and quickly adapt to the changed environment.*

- **Design Thinking and Decision Making:**
- *Design thinking—approaching management problems as designers approach design problems.*