

Decision Making

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A roadmap to the ten units in this course, and what each one will teach you.

Orientation Chapter



Lecture

00

COURSE ROADMAP

Chapter	This chapter covers
Chapter One	Heuristics and Biases in Probability Judgment
Chapter Two	How People Choose When They Want Many Things at Once
Chapter Three	Framing, Mental Habits and Cognitive Inertia
Chapter Four	Making Fair and Ethical Decisions
Chapter Five	Resolving Conflict Over Scarce Resources
Chapter Six	Resolving Conflict Through Negotiation
Chapter Seven	Influencing Others' Decisions
Chapter Eight	Combining the Judgments of a Group
Chapter Nine	Making Group Meetings Work
Chapter 10	Motivation: Concepts and Applications in Decision Making

Lecture

01

Heuristics and Biases in Probability Judgment

How our mental shortcuts help us decide, and how they quietly mislead us

1. Heuristics and biases
2. The availability heuristic
3. The representativeness heuristic
4. Anchoring and adjustment
5. Other biases
6. Is judgment really so poor?

Lecture

01

WHAT YOU WILL LEARN

- Explain what a **heuristic** is and why the mind relies on them
- Recognise the three classic heuristics: **availability, representativeness, anchoring and adjustment**
- Spot the biases each one creates, with everyday and business examples
- Correct simple probability errors, such as conjunctive and disjunctive events
- Judge fairly whether human probability judgment is really "so poor"

Every estimate you make is shaped by a mental shortcut, whether you notice it or not.

This unit trains you to catch the shortcuts before they cost you a decision.

Lecture

02

How People Choose When They Want Many Things at Once

The shortcuts, reasons and traps behind everyday multi-objective decisions

1. Bounded rationality
2. Fast and frugal heuristics
3. Attribute-by-attribute rules
4. Sequential choice and reasons
5. What decides the strategy?
6. Other effects on choice

WHAT YOU WILL LEARN

- Define **bounded rationality** and **satisficing**
- Separate **compensatory** from **non-compensatory** strategies
- Apply the recognition, minimalist, take-the-last, lexicographic, and elimination-by-aspects heuristics
- Explain **reason-based choice**, decoy effects, and framing of costs
- Decide when a quick heuristic is smart and when a fuller analysis is worth the effort

Most real choices pull you in several directions at once.

Here you learn the rules people actually use to choose, and when those rules need help.



Lecture

03

Framing, Mental Habits and Cognitive Inertia

Why smart people and firms keep solving problems the old way

1. Creativity and mental set
2. How people frame decisions
3. Five framing traps
4. Reference points
5. Prospect theory
6. Mental accounting

Lecture

03

WHAT YOU WILL LEARN

- Define a **decision frame** and explain how it limits the options we see
- Recognise five framing traps, such as solving the wrong problem
- Explain **reference points**, loss aversion, and **prospect theory**
- Describe **mental accounting** and **escalation of commitment**
- Use multiple frames to fight cognitive inertia in organisations

How a problem is framed decides which solutions you can even see.

This unit shows how to reframe a stuck decision, and how whole organisations get stuck too.

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04

Making Fair and Ethical Decisions

How biases, processes, groups and algorithms affect fairness, and what managers can do about it

1. Ethical foundations
2. Biased minds
3. Fair process
4. Groups and sharing
5. Machines and influence
6. Putting it into practice

WHAT YOU WILL LEARN

- Explain what makes a decision **fair** and **ethical**
- Show how mental biases can lead to **unfair** decisions
- Describe how open, participative processes build fairness
- Explain why no voting system is perfect (**Arrow's theorem**)
- Spot ethical risks in algorithms and in nudging
- Apply a simple checklist to your own decisions

A decision can be efficient and still be unfair.

This unit gives you the tools to check a decision for bias before it becomes a policy.

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05

Resolving Conflict Over Scarce Resources

How a group can share a limited budget using a decision-analysis model

1. The commons dilemma
2. The case: a furniture company
3. Building the model
4. Weights
5. Reading the results
6. Sensitivity analysis

WHAT YOU WILL LEARN

- Explain the **commons dilemma** and why it causes conflict
- Follow the main stages of a **resource-allocation** analysis
- Build values, **within-criterion** weights, and **across-criteria** weights
- Read costs and benefits of **packages** and the **efficient frontier**
- Use sensitivity analysis to settle arguments over numbers

Scarce resources turn colleagues into rivals, unless there is a shared model to point to.

This unit builds that shared model step by step, with a real company case.

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06

Resolving Conflict Through Negotiation

Using values, weights and the efficient frontier to find deals that leave both sides better off

1. Intuition versus analysis
2. Colleagues in conflict
3. Negotiation basics
4. A union case
5. Pitfalls and third parties
6. Practice

Lecture

06

WHAT YOU WILL LEARN

- Describe conflict inside one mind, among colleagues, and between parties
- Use the **requisite model** idea to settle intuition-versus-analysis conflicts
- Model a two-party, multi-issue negotiation with values and weights
- Read an **efficient frontier** and explain **Pareto optimality**
- Explain strategic misrepresentation and the role of a third party

The best deals are not found by simply splitting the difference.

This unit shows how two sides can both do better by trading what they value differently.

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07

Influencing Others' Decisions

How well-designed choices can help people decide better, and when the approach fails

1. Why people need help
2. Choice architecture and nudges
3. Defaults
4. Framing in nudges
5. When nudges work best
6. When nudges fail

Lecture

07

WHAT YOU WILL LEARN

- Explain **choice architecture** and what a **nudge** is
- Describe how **defaults** and **framing** change choices, with evidence
- Say when nudges work best and why they sometimes **backfire**
- Recognise biases that others use, or misuse, to influence decisions
- Design a simple, ethical nudge of your own

Small changes in how a choice is presented can change what people choose.

This unit teaches you to design that influence responsibly, and to recognise it in others.

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08

Combining the Judgments of a Group

When and how to average estimates, probabilities and preferences, and what can go wrong

1. Mathematical aggregation
2. Combining estimates
3. Combining probabilities
4. Combining preferences
5. Wrapping up

Lecture

08

WHAT YOU WILL LEARN

- Explain why groups make important decisions, and the trade-offs of doing so
- Combine estimates with **simple** and **weighted** averages
- Aggregate **probabilities**, and see why no method is perfect
- Explain Condorcet's paradox and **Arrow's impossibility theorem**
- Combine **values and utilities**, and know the limits of doing so

Averaging opinions sounds safe, but it can quietly produce a decision nobody actually wants.

This unit shows when averaging works well, and where it goes wrong.

Lecture

09

Making Group Meetings Work

Groupthink, the Delphi method, prediction markets and decision conferencing

1. Pitfalls of unstructured meetings
2. The Delphi method
3. Prediction markets
4. Decision conferencing
5. Choosing a method

WHAT YOU WILL LEARN

- Describe the shortcomings of **unstructured** meetings, including **groupthink**
- Explain the **Delphi method** and how to run one well
- Explain how **prediction markets** turn prices into probabilities
- Describe **decision conferencing** and how it guards against groupthink
- Choose the right group method for a given problem

A meeting can make a group smarter, or it can make it confidently wrong together.

This unit gives you structured alternatives: Delphi, prediction markets and decision conferencing.

Lecture

10

Motivation: Concepts and Applications in Decision Making

Ten theories managers use to explain, predict and improve motivation at work

1. Defining motivation
2. Early theories of motivation
3. Contemporary theories of motivation
4. Motivation through job design
5. Employee involvement and rewards

WHAT YOU WILL LEARN

- Define motivation and its three key elements: **intensity, direction, and persistence**
- Compare early theories: **Maslow's Hierarchy, Alderfer's ERG, McGregor's Theory X and Y, and McClelland's Three Needs**
- Apply contemporary theories: **Goal-Setting, Self-Efficacy, Reinforcement, Equity, and Expectancy Theory**
- Use the **Job Characteristics Model** to redesign jobs so they motivate
- Compare **employee involvement** and **reward strategies**, including pay structure and variable pay

**People are not moved by one single lever;
they respond to needs, goals, fairness, and
the design of the job itself.**

This unit surveys the theories managers actually rely on, and how to put them to work.



Thank You