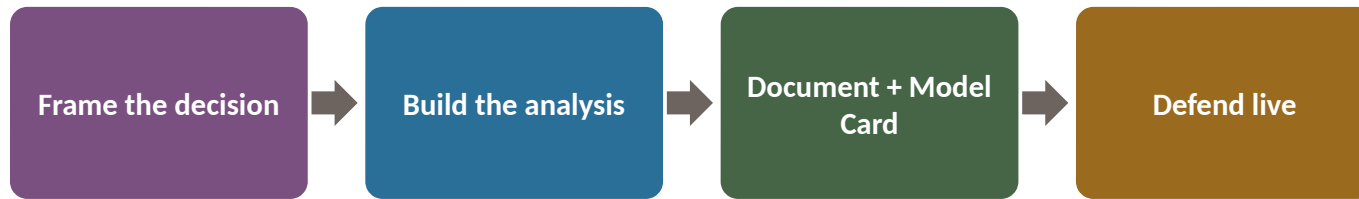


MODULE 8

Capstone: the RiverCity consulting engagement

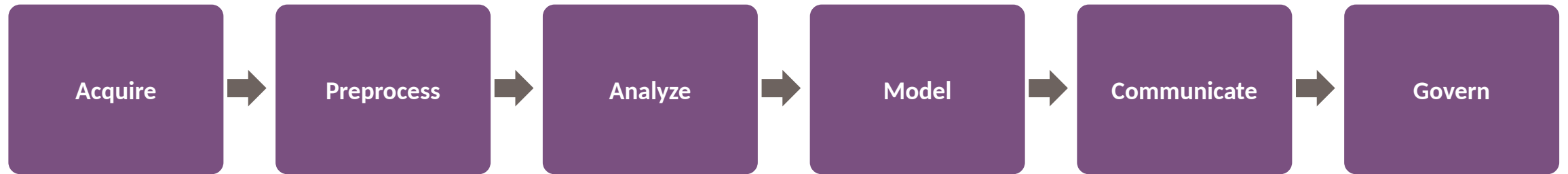
A solo consulting engagement threaded from Week 1. Name the decision, quantify the uncertainty, and defend it.

Watch a little, then do a little



Each recorded segment is short. You pause, practice the concept hands-on, then return for the next piece.

The capstone spans the whole lifecycle



Everything from the first seven modules comes together: a genuine, ambiguous decision for a real decision-maker, carried from messy multi-source data all the way to a defended recommendation.

PART 1 OF 2

What a defensible engagement looks like

About 12 minutes on camera

Name the decision and the decision-maker

- A defensible project names the decision and who makes it, quantifies impact and uncertainty, and states what it would take to change the recommendation.
- The brief hands you an ambiguous decision (for example, reallocating a fixed budget across service districts under uncertain demand), not a labeled prediction target.
- Where the grade lives: the decision, its communication, and its defense weigh more than the model's headline metric.

The repository a stranger can reproduce

README. what the engagement is, how to run it, and what it concludes

Data-lineage record. an auditable trail of every source and transformation

Pinned environment. so the result runs the same on another machine

Code + Model Card. the analysis plus documented behavior, limits, and provenance

NOW TRY IT

Assemble your engagement repository

- Stand up the README, the pinned environment, and the data-lineage record before you model anything.
- Work with the client contact and the course tutor for support, without outsourcing the judgment being assessed.

Ongoing across the capstone weeks.

PART 2 OF 2

The defense, and handling drift

About 13 minutes on camera

The stakeholder defense: 20 minutes, three role-players

The executive

presses on the decision, the impact, and the cost of being wrong

The compliance officer

presses on fairness, consent, provenance, and governance

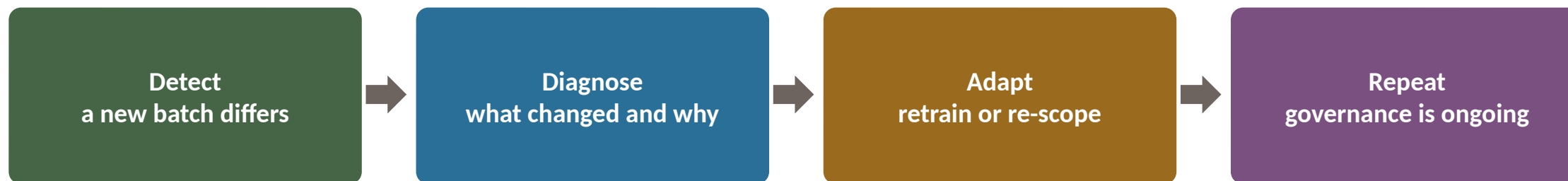
The engineer

presses on reproducibility, validation, and leakage

The difference

an answer that holds under a follow-up versus one that unravels

Distribution shift: the detect–diagnose–adapt loop



Last month's accuracy is not this month's accuracy. A defensible engagement says how it would detect and respond to shift, not just how it performed once.

NOW TRY IT

Rehearse the defense

- Use the on-device defense-practice tool to answer randomized, unscripted questions one at a time.
- Practice the honest answer to “what would change your recommendation?” before the real board.

Your recording stays on your device; nothing is uploaded.

The grade lives in the decision and its defense

Decision + communication. a clear, defensible recommendation a stakeholder can act on

The live defense. answers that hold under unscripted follow-up from three role-players

Reproducibility + governance. an auditable repo, a Model Card, and a drift plan

The model itself. competent and honestly validated, but not the headline of the grade

GRADED ASSESSMENT

The RiverCity Engagement

- You are a solo consultant retained by RiverCity, a recurring client you have tracked since Week 1.
- The one-page brief hands you a genuine, ambiguous decision and messy, multi-source data, not a labeled target.
- You deliver a defended recommendation and defend it live before a three-person stakeholder board.

Includes a live or recorded oral defense: rehearse it first with the on-device defense-practice tool.