

Appendix H

End-to-End DECODE Example

APPENDIX H

END-TO-END DECODE EXAMPLE

A COMPLETE APPLICATION OF THE DECODE METHOD IN A REALISTIC CONTEXT



THE SITUATION

A mature organization operates a core system that has been in place for many years. Performance is acceptable, but confidence is eroding. Small issues are increasing, workarounds are growing, and dependencies feel brittle.

External pressure is building. Requirements are shifting. Internally, opinions differ. Some believe targeted improvements will restore confidence. Others argue the system's underlying structure is no longer fit for purpose and that incremental change only delays the inevitable.

No failure has occurred. But doing nothing feels increasingly uncomfortable.

A decision is approaching, but no one agrees on what kind of decision it is.

THE DECODE JOURNEY

1 DEFINE
THE IMPROVEMENT
INTENT

Clarify why we are having this conversation.

- Initial intent assumed modernization was needed.
- Reframed to explore whether the current system can continue to meet emerging requirements without disproportionate risk.
- Restores optionality and keeps all outcomes open.



KEY OUTPUT

A neutral, open improvement intent that invites exploration without bias.

2 EXPLORE
THE SYSTEM
AS IT EXISTS

Build a shared understanding of the system today.

- Map components, interfaces, dependencies, and context.
- Surface operating assumptions and historical constraints.
- Acknowledge differing views without forcing agreement.
- Build a complete description before seeking explanations.

EXAMPLE
INSIGHTS

Core elements
and handoffs
mapped

Workarounds
and brittle
dependencies
identified

Key assumptions
and historical
context
captured

Differences in
perspective
explicitly
recorded



KEY OUTPUT

A shared system map and context with known disagreements visible and noted.

3 CLARIFY
EMBEDDED
DECISIONS

Surface the decisions that shaped the current system.

- Identify past intentional decisions and inherited choices.
- Reveal constraints, assumptions, and trade-offs that are still active.
- Challenge what was once fixed but may no longer be necessary.
- Make the invisible influences on today's system visible.

EXAMPLE
INSIGHTS

Design choices
favored speed
over modularity

Assumptions
carry forward
to today

Constraints
have shifted
over time

Options once
discarded are
revisited



KEY OUTPUT

A map of embedded decisions, assumptions, constraints, and trade-offs.

4 OUTLINE
CHANGE
BOUNDARIES

Define what can change, what must stay, and what is uncertain.

- Establish hard constraints (non-negotiable).
- Identify flexible areas (open to change).
- Define unknowns and uncertainties that affect all options.
- Create the boundary conditions for valid choices.

EXAMPLE
INSIGHTS

Hard constraints
(e.g., compliance,
safety)

Flexible areas
(open to
change)

Unknowns
that create
uncertainty

Implications
for option
design



KEY OUTPUT

A clear set of boundaries that defines the space for valid options.

5 DECIDE
THE IMPROVEMENT
PATH

Choose the path that best meets intent within the boundaries.

- Compare viable paths across value, risk, cost, time, and adaptability.
- Test against uncertainties and boundary conditions.
- Select the path that creates the most future value with acceptable risk.

EXAMPLE
INSIGHTS

Path A
Improve

Path B
Redesign

Path C
Preserve

Chosen path
with rationale



KEY OUTPUT

An explicit decision outcome: Improve, Redesign, or Preserve, with clear rationale.

6 ESTABLISH
CLOSURE

Close the decision and prepare for execution.

- Record assumptions, boundaries and scope, and untested uncertainties.
- Define revisit triggers and the review date or review condition.
- Handover to execution planning after closure.

EXAMPLE
INSIGHTS

Decision
recorded and
signed off

Assumptions,
boundaries, and
scope captured

Review triggers
and timing
defined

Handover to
execution
planning



KEY OUTPUT

A closed decision package ready for execution planning and future review.



THE OUTCOME

- ✓ All critical influences are understood.
- ✓ The decision is intentional, defensible, and aligned.
- ✓ Trade-offs and uncertainties are explicit.
- ✓ The chosen path is clear and bounded.
- ✓ Execution can begin with clarity and commitment.



UNDERSTAND
BEFORE
DECIDING

DECISION CLOSED



DECIDE
WITH
DISCIPLINE



CLOSE FOR
CLARITY AND
COMMITMENT



EXECUTE
WITH
CONFIDENCE

The Situation

A mature organization operates a core system that has been in place for many years. Performance metrics remain within acceptable ranges, but confidence in the system is eroding. Small issues appear more frequently. Workarounds are increasing. Dependencies that were once manageable now feel brittle.

External pressure is building. Market expectations are shifting. New requirements are emerging slowly rather than through a single disruptive event. Internally, opinions differ. Some believe targeted improvements will restore confidence. Others argue that the system's underlying structure is no longer fit for purpose and that incremental change only delays the inevitable.

No failure has occurred. No crisis demands immediate action. At the same time, doing nothing feels increasingly uncomfortable. The organization senses that a decision is approaching but does not yet agree on what kind of decision it is.

Understanding is partial. Signals are mixed. Momentum to act is present, but justification is not yet clear.

Step 1**Define the Improvement Intent**

The initial intent proposed in the discussion is framed as:

"Modernize the system to reduce risk and improve performance."

This intent fails quietly. It already assumes both a problem and a direction. It collapses exploration into action by implying that modernization is necessary and desirable.

After discussion, the intent is reframed as:

"Determine whether the current system can continue to meet emerging requirements without disproportionate risk to reliability, cost, or adaptability."

This intent succeeds because it restores optionality. It does not assume that change is required. It clarifies why the system is being questioned without implying how that question must be answered.

The first intent failed because it smuggled a solution into the conversation. The corrected intent creates space for understanding to develop before commitment occurs.

Step 2**Explore the System as It Exists**

The group describes the system as it exists today.

They identify core elements, supporting components, and external dependencies. They describe interfaces where handovers occur and where coordination is required. Context is surfaced, including operating assumptions, historical growth, and constraints imposed by surrounding systems.

One disagreement emerges early. Some participants describe the system as fundamentally stable with localized weaknesses. Others describe it as fragile, arguing that stability is an illusion maintained through informal workarounds.

The disagreement is not resolved. It is noted and held. Both descriptions are plausible given the current level of understanding.

Explanations are deliberately postponed. The focus remains on shared description rather than agreement.

Step 3**Clarify Embedded Decisions**

Attention shifts to past decisions that shaped the current system.

One inherited decision becomes visible: a design choice made years earlier to prioritize speed of deployment over modularity. At the time, this choice was intentional and appropriate. Its consequences were acceptable under earlier conditions.

A constraint believed to be fixed begins to soften. A dependency long treated as unavoidable turns out to be the result of a historical integration choice rather than a fundamental limitation.

A moment occurs when someone says, "That's just how the system works," and then pauses. On examination, it becomes clear that this behavior is not inherent. It is the result of accumulated decisions that were never revisited.

At this point, inevitability collapses into history. The group regains agency.

Step 4**Outline Change Boundaries**

The group defines boundaries that cannot be crossed safely or responsibly.

One boundary eliminates a favored option. A popular proposal would violate regulatory constraints that are non-negotiable. This option is removed early, before further energy is invested.

Another boundary reveals itself as an assumption. A perceived organizational limitation turns out to be a capability choice rather than a hard limit. Changing it would be costly, but not impossible.

This distinction is uncomfortable. It forces the group to confront trade-offs directly rather than hiding behind presumed constraints.

By the end of this step, the space of legitimate options is smaller but clearer.

Step 5**Decide the Improvement Path**

With understanding stabilized, the group decides.

The decision is to redesign.

Improvement is rejected because it would continue to rely on structural choices that no longer align with emerging requirements. Preservation is rejected because confidence cannot be restored without addressing those structures directly.

Redesign is chosen with full awareness of cost, disruption, and risk. It is selected not because it is attractive, but because it is now justified.

No plans are discussed. No timelines are set. The decision stands on its reasoning alone.

Step 6**Establish Closure**

The decision is captured explicitly.

Decision statement

The organization commits to redesigning the core system to address structural limitations that cannot be resolved through incremental improvement.

Evidence and reasoning

Performance remains within acceptable ranges, but workarounds and brittle dependencies are increasing.

Improvement within the current structure would preserve structural choices that no longer align with emerging requirements.

A favored alternative was eliminated because it would violate non-negotiable regulatory boundaries.

Assumptions

External requirements will continue to evolve rather than stabilize.

Organizational capacity to absorb redesign exists if paced deliberately.

Boundaries and scope

Regulatory requirements remain non-negotiable.

The decision authorizes redesign of the system structure, but does not select the detailed technical solution.

Trade-offs accepted

Near-term efficiency will decrease.

Transition risk is acknowledged and accepted.

Revisit triggers

A material change in external requirements.

Evidence that assumptions about capacity are no longer valid.

Review condition

Review the decision at the first formal redesign gate, or earlier if a revisit trigger occurs.

The decision is now closed.

Execution planning can now begin through the appropriate downstream method.

What Would Normally Have Gone Wrong

Under normal conditions, the organization would have committed earlier.

A modernization initiative would have been launched under the banner of improvement. Incremental changes would have accumulated. Dependencies would have deepened. By the time redesign became unavoidable, reversal would have been politically and technically expensive.

DECODE prevented this by holding commitment long enough for the nature of the decision to become clear.

What Changed

Nothing was fixed yet. No outcome was achieved.

What changed was clarity.

The organization could explain why it chose redesign. It could explain why improvement was insufficient and why preservation was rejected. It could revisit the decision without rewriting history. Restraint replaced momentum. Understanding replaced urgency.

That change was enough to justify the discipline.

Closing Note

This example is not exceptional.

Most decisions that benefit from DECODE look exactly like this. No crisis. No villain. No breakthrough insight. Just a disciplined pause that prevents accidental commitment.

That is what the method is for.