

MODULE 1

Analytics With Intent (Foundations)

Module Purpose

To fundamentally shift your thinking from “*analyzing data*” to “*supporting a decision*.¹” This module establishes the intellectual spine for the entire curriculum.

What You Will Have at the End of This Module

- A formal **Decision Framing Document**
- A clearly defined **business decision**
- Explicit **assumptions, constraints, and risks**
- A defensible analytical intent that guides all future work

This document will anchor your portfolio and capstone.

Commented [OIP1]: a structured artifact used to define the core problem or opportunity, the context, objectives, alternatives, and consequences before a major decision is made. Its purpose is to ensure all stakeholders have a shared understanding, reduce bias, and align choices with strategic goals, thereby improving decision quality

PART 1 — CORE CONCEPT (EXPLANATION)

1. Why “Analytics Without Intent” Fails

Most analytics fail because they start with:

- “What data do we have?”
- “What charts can we build?”

Professionally, this leads to:

- Interesting but irrelevant insights
- Conflicting interpretations
- No action taken

Business-grade analytics always starts with a decision that someone is accountable for.

2. Decision vs Question (Critical Distinction)

- **✗ Question:** “How is the EA performing?”
- **✓ Decision:** “Should this EA configuration continue trading real capital under current rules?”

Questions explore. Decisions commit resources and risk.

In your case, **capital** is the scarce resource.

3. The Decision Stack (Mental Model)

Every decision sits on a stack:

1. **Decision Owner** – Who is accountable?
2. **Decision to Be Made** – What must be decided?
3. **Options** – What choices exist?
4. **Criteria** – How do we judge success?
5. **Evidence** – What data informs this?

Your analysis exists only to support this stack.

PART 2 — YOUR CONTEXT (MT5 EA)

We will frame **Phase 1 (Uncontrolled EA)** as the problem space.

Known Context (Already Established)

- EA initially traded multiple synthetics
- Variable risk exposure
- Multiple trades per day
- Inconsistent capital discipline
- Step Indexes emerged as viable during early back testing

This is **not failure**. This is *exploration*.

PART 3 — MODULE 1 EXERCISE

Decision Framing Document

You will now produce your **first portfolio artifact**.

Below is the **template**. Fill it in carefully. Do not rush.

Decision Framing Document — Version 1.0

1. Business Context

Describe the operating environment in plain language.

Example guidance (do not copy verbatim):

“An automated trading system was deployed to generate consistent daily profits using synthetic indices. Initial configurations prioritized opportunity discovery rather than capital governance.”

 **Your task:** Write 5–7 sentences.

2. Decision Owner

Who bears the consequences of this decision?

Example:

“The system operator responsible for capital allocation and risk exposure.”

 **Your task:** 1–2 sentences.

3. Decision Statement (Most Important Section)

This must be a **single, explicit decision**.

Format:

“Should we [ACTION] given [CONSTRAINTS], based on [EVIDENCE]? ”

 **Your task:** Write exactly one decision statement.

4. Available Options

List realistic options, not theoretical ones.

Example:

- Continue trading under existing rules
- Pause trading and reconfigure risk model
- Restrict trading to Step Indexes only

 **Your task:** 3–5 options.

5. Decision Criteria (Success Measures)

These are **not charts**. They are judgment criteria.

Examples:

- Maximum acceptable drawdown
- Profit consistency
- Capital preservation
- Operational simplicity

👉 Your task: 4–6 criteria.

6. Assumptions

What you are assuming to be true.

Examples:

- Historical performance is indicative (to a degree)
- Market conditions remain comparable
- EA logic behaves consistently

👉 Your task: 3–5 assumptions.

7. Constraints

What limits your options.

Examples:

- Capital size
- EA logic limitations
- Broker rules
- Psychological tolerance for loss

👉 Your task: 3–5 constraints.

8. Risks (Early Identification)

Not results—*risks*.

Examples:

- Overfitting to Step Index behaviour

- Short evaluation window
- False confidence from recent wins

👉 Your task: 3–5 risks.

9. What Data Is Required to Decide?

This is where Dataset A is formally justified.

Examples:

- Trade history by symbol
- Drawdown curves
- Trade frequency statistics
- Session-based performance

👉 Your task: 5–7 data elements.

PART 4 — QUALITY BAR (DO NOT SKIP)

Before submitting (to me), ensure:

- The decision is **clear and actionable**
 - No metrics appear without purpose
 - Language is non-technical where possible
 - You could hand this to a non-developer, and they would understand the decision
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PART 5 — WHAT HAPPENS NEXT

Once you complete this:

1. I will **review and critique** it as a senior analyst would
 2. We will refine it to **portfolio-grade quality**
 3. Module 2 will naturally follow from the decision criteria you define
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YOUR NEXT ACTION

Complete the **Decision Framing Document** using the template above