Module 3 Review

Data Modelling for Decision Support — Scored Evaluation & Guided Feedback

Overall Assessment (Executive Summary)

Score: 86 / 100 — Strong Pass

This is **not** a beginner data model. It demonstrates:

- Clear understanding of analytical grain
- Explicit KPI-to-table traceability
- Decision-first modelling (rare, even in industry)

Your model is *fit for purpose* and already portfolio-worthy.
The gaps are **refinement-level**, not foundational.

Scoring Rubric & Results

1. Decision Alignment (20 pts) — 18 / 20

What you did well

- Every fact table exists for a *decision reason*, not convenience
- Grain choices are explicitly justified
- The model clearly supports the deployment decision

Minor gap

- Decision ownership is implicit, not explicit, in the model narrative

Guided improvement
Add a short line such as:

"This model exists to support a go/no-go capital deployment decision under standardized execution rules."

This tightens traceability between Module 1 and Module 3.

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2. Grain Correctness & Separation (25 pts) — 23 / 25

What you did exceptionally well

- Trade grain vs daily grain separation is textbook-correct
- You explicitly avoid aggregation masking (very important)
- Duration drift and risk exposure are correctly kept at trade level

This line is particularly strong:

“Aggregating this to a daily level would hide dangerous trades…”

That is senior-level thinking.

Minor gap

- Session vs calendar-day assumption is not challenged

Guided improvement
Add a note acknowledging:

- Why calendar day is acceptable *for now*
- Under what conditions session-based grain would replace it

This shows awareness without overengineering.

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3. KPI-to-Model Traceability (20 pts) — 20 / 20

Perfect score

This section is one of the strongest parts of the document.

- Every KPI has:
    - A clear source table
    - A defensible grain justification
- No “floating” or orphaned metrics
- No circular dependencies

This is exactly how analytics governance should look in regulated environments.

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4. Data Model Completeness (20 pts) — 14 / 20

This is the main area for improvement.

What’s missing
Your model is *fact-heavy* but **dimension-light**.

Examples:

- Symbol is repeated, not dimensionalized
- Time attributes are embedded, not abstracted
- No explicit execution regime metadata

Why this matters
Right now, the model supports:

- One EA
- One configuration
- One regime

For portfolio strength, you want it to *suggest scalability*, even if you do not implement it yet.

Guided improvements (non-invasive)
You do **not** need to rebuild the model. Simply:

1. Acknowledge implied dimensions:
    - Dim_Symbol (even if logical only)
    - Dim_Date (derived from Date/OpenTime)
2. Add a note on extensibility:
    - "This model can support multiple EAs or regimes by introducing an ExecutionConfigID."

This signals architectural maturity without overengineering.

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5. Analytical Rigor & Narrative Quality (15 pts) — 11 / 15

Strengths

- Clear language
- Correct use of analytical terminology
- Strong justification in Section 3

Where it can improve

- Some sections read as *descriptive* rather than *analytical*
- Opportunity to emphasize *risk prevention* more strongly

Guided improvement
In the Design Justification, explicitly call out:

- What failure modes this model prevents
- What incorrect decisions it protects against

Example:

"This structure prevents capital allocation decisions from being influenced by isolated profitable days that conceal systematic risk violations."

Specific Technical Observations (Important)

RiskPercent Formula (Trade Grain)

You correctly define:

RiskPercent = [StopLossDistance * Lot] / OpenBalance

One clarification to add

- State assumptions about pip value / contract size
- Note that OpenBalance is a proxy for equity

This protects you from “but actually…” critiques.

DailyDrawdown Definition

Your definition is **conceptually correct**, but add:

- Whether drawdown is:
    - Peak-to-trough intra-day
    - StartBalance-to-minimum

State it explicitly to remove ambiguity.

Fact_Symbol_Performance

Excellent intent.

One suggestion:

- Clarify whether this table is:
    - Derived (aggregation of Fact_Trades)
    - Or materialized for performance

This signals analytics engineering awareness.

What This Submission Signals Professionally

This Module 3 artefact demonstrates that you can:

- Model data **for decisions**, not dashboards
- Prevent common analytical fallacies
- Justify grain choices to stakeholders
- Build analytics that could survive audit or review

This is **well beyond “dashboard builder” level**.

Recommended Next Actions (v1.1)

You should **not** rewrite this. Instead:

1. Add a short “Model Scope & Assumptions” section
2. Acknowledge implied dimensions
3. Clarify drawdown and risk calculation assumptions
4. Slightly strengthen the Design Justification language