

E3**Measure Model and Scenarios**

This FAQ addresses common questions and clarifications that arise while working through the E3 — Measure Model and Scenarios exercise. It covers formula and native measure mechanics, building the P&L hierarchy in the Measure Model canvas, the Measures in Rows and Tree layouts, and simulating a best-case scenario using Create Scenarios.

Part 1**Create the Measure Model****1. What is the difference between a native/DAX measure and a formula measure?**

Native/DAX measures come directly from the semantic model— such as Sales Volume or Raw Material Cost. A formula measure is calculated by combining other measures using an expression in the planning sheet — such as Gross Revenue being calculated as Sales Volume multiplied by Avg Selling Price. Formula measures can reference other formula measures too, which is how Net Profit ultimately rolls all the way down to native measures like Discounts and Returns.

2. Why are all the Fact Transactions measures assigned to Values before the Measure Model is configured?

Every native/DAX measure used in the Measure Model must already be placed in the Values field on the planning sheet. The Measure Model canvas only lists native/DAX measures that are already in the Values field — so assigning them upfront is a required prerequisite before any hierarchy can be built.

3. What is the main purpose of the Measure Model?

When semantic model measures are the foundation of a planning model, Measure Model provides a way to organize them into a meaningful hierarchy — such as a P&L structure — so teams can plan, simulate, and analyze the cascade of impacts across the full model in a single structured view.

4. If Gross Revenue is already used inside the Net Revenue formula, why does it also need to be dragged onto the canvas and nested under Net Revenue separately?

Referencing a measure inside a formula and placing it in the visual hierarchy are two separate

actions. Typing the formula creates the calculation logic, but it doesn't automatically position Gross Revenue as a child in the canvas — that nesting step is what determines how the measure displays in the Measures in Rows layout.

5. Does the order in which measures are dragged onto the canvas affect whether the calculations come out correctly?

Canvas placement doesn't affect calculation correctness, since the formulas themselves are independent of hierarchy positioning. What matters is the formula dependency order — COGS's formula must exist in the planning sheet before Gross Profit's formula can reference it, regardless of when either is dragged into the tree visually.

6. If a measure gets nested under the wrong parent by mistake, does that break its formula?

No — nesting only controls where a measure displays in the hierarchy, not what it calculates. If Labor Cost were accidentally nested under Operating Expenses instead of COGS, its own value would stay correct, but COGS's total would be wrong since it would no longer include Labor Cost in its formula.

7. If a measure gets placed under the wrong parent by mistake, how can it be corrected?

It can be unstaged and repositioned rather than deleted and rebuilt. In the Hierarchy Builder canvas, each measure has a small cross/remove icon available directly next to it — clicking it unstages that measure from its current parent without deleting it. Once unstaged, it can be dragged again into the correct position under the intended parent.

8. What is the difference between nesting a measure under a parent in the canvas and adding a measure to the Values field on the planning sheet?

Nesting in the canvas defines the hierarchy structure — how measures roll up under Net Profit for display in Measures in Rows or Tree layout. Adding a measure to Values on the planning sheet is what makes it appear as an editable or viewable column on that sheet. A measure can exist in Values without being part of the hierarchy.

9. Does every measure need to be dragged into the canvas individually?

Both approaches are used across the exercise — Gross Revenue and Net Revenue are dragged individually, while COGS's three children and Operating Expenses' four children are added using Select All plus Insert Measure. Which method is used depends on how many measures are being nested under the same parent at once.

10. Does switching to Measures in Rows change anything functionally, or is it purely visual?

It is a display change only. The same underlying measures, formulas, and data are shown, arranged so that each measure appears as a row rather than a column. It does not alter the Measure Model structure or its values — it simply makes the P&L hierarchy easier to read.

11. Is the Measure Model tied to the Simple P&L Model sheet specifically, or can the same structure be reused on other planning sheets?

The Measure Model is built and applied on the specific planning sheet it was configured on. Reusing the same P&L logic on another sheet would require building or referencing the structure on that sheet separately.

Part 2 Create and Compare Scenarios

12. Does switching to Tree layout change anything functionally?

It is a display change only — the same underlying nodes, formulas, and data are shown, rendered as connected branches instead of a flat hierarchy. It does not alter the Measure Model structure or its values.

13. Is Base itself an editable scenario, or is it a fixed reference point?

Base represents the current committed plan and acts as the reference point against which other scenarios are compared. Scenarios like Best Case are created as separate simulation layers on top of Base rather than edits made directly to it.

14. After creating the Best Case scenario, do its values carry forward into the new Cost Restructuring scenario, or does Cost Restructuring start from Base?

Cost Restructuring starts from the Base. Each new scenario is created as its own separate

simulation layer on top of the original Base figures, not on top of another scenario's adjusted values — so Germany's Best Case changes have no bearing on what Cost Restructuring starts from in the United States.

15. Why are Sales Volume, Avg Selling Price, Discounts, and Returns simulated under Gross Revenue rather than editing Gross Revenue itself?

Gross Revenue is a formula measure, calculated from Sales Volume and Avg Selling Price, so it has no independent value to simulate directly. The simulation has to move the native measures that actually feed the formula — Sales Volume and Avg Selling Price — for Gross Revenue to change as a result.

16. Do formula measures appear in the list of measures available for simulation?

No — formula measures cannot be simulated directly. Only native measures appear as simulatable inputs, since formula measures like Gross Revenue or COGS calculate their value from other measures and only change as a downstream result of those native inputs being adjusted.

17. When Sales Volume is simulated at +5% on the Germany card, why does that change reach Net Profit rather than stopping at Gross Revenue?

Because the Measure Model's formula chain connects Gross Revenue through Net Revenue, Gross Profit, and finally Net Profit, with each formula measure referencing the one below it. The simulation only has to move the native input at the bottom of the chain — the hierarchy built in Part 1 carries that change all the way up.

18. When Sales Volume, Avg Selling Price, and Discounts and Returns are simulated on the Germany card, do those changes affect other European countries like France or the UK?

No — the simulation is scoped specifically to Germany's own values. Europe's total updates because Germany rolls up into the regional figure, but France, the UK, and other countries under Europe remain at their Base values, unaffected.

19. Does the Measure Simulation dropdown behave differently for a native measure versus a formula measure?

Native measures like Sales Volume, Avg Selling Price, and the individual cost lines are simulated directly since they are the actual inputs being adjusted. Formula measures like COGS or Gross Revenue are not simulated directly — their values only move as a downstream result of the native measures feeding them changing.

20. Why does the exercise select Value before entering the Cost Restructuring inputs, when the Best Case scenario didn't need that step?

Value and percentage are two different simulation modes. Since Cost Restructuring uses flat replacement figures rather than percentage adjustments, Value has to be explicitly selected so the entered numbers are treated as absolute targets, not percentage changes.

21. Do the Cost Restructuring inputs replace the United States' existing baseline figures or add to them?

They replace the baseline figures. Since these are entered as Value rather than a percentage adjustment, each cost line takes on the exact figure entered, regardless of what the Base value was.

22. How does a simulated change on a leaf node like Raw Material Cost propagate up through COGS, Gross Profit, and Net Profit?

The propagation happens automatically and in real time because COGS aggregates its children and Gross Profit and Net Profit are formula measures referencing COGS — any change to a leaf recalculates every dependent node above it instantly.

23. Does Compare show the two scenarios' impact only at the country level where each was simulated, or across the entire tree?

Across the entire tree. Compare places both scenarios side by side at every level of the hierarchy — Germany and the United States where the direct inputs were changed, but also Europe, North America, and All, since each level rolls up its children's values under both scenarios.

24. Can more than one scenario exist at the same time without one overwriting the other?

Yes — Create Scenarios names and saves each simulation as its own distinct object. In this exercise, Best Case and Cost Restructuring coexist as separate, independently referenceable

scenarios rather than one replacing the other. Additional scenarios such as a Worst Case can be added the same way without affecting either existing scenario.

25. Does closing the simulation dialog finalize the scenario permanently, or can it be reopened and adjusted later?

Closing the dialog saves the scenario as it stood at that point, but it is not a one-time locked action — the Best Case scenario can be reopened later and its inputs adjusted further if assumptions change.

26. Are scenario simulations permanent once created, or can they be deleted without affecting Base?

Simulations exist within their scenario and do not alter Base or the underlying data source values, so they can be adjusted or deleted without any permanent impact on the actual plan.