Fabric Plan

E3 Measure Model and Scenarios

30 min

Build and configure a Measure Model by organizing native and formula measures into a hierarchical P&L structure, then create two scenarios in the Tree layout and compare them to see the impact of revenue growth and cost restructuring on Net Profit in real time.

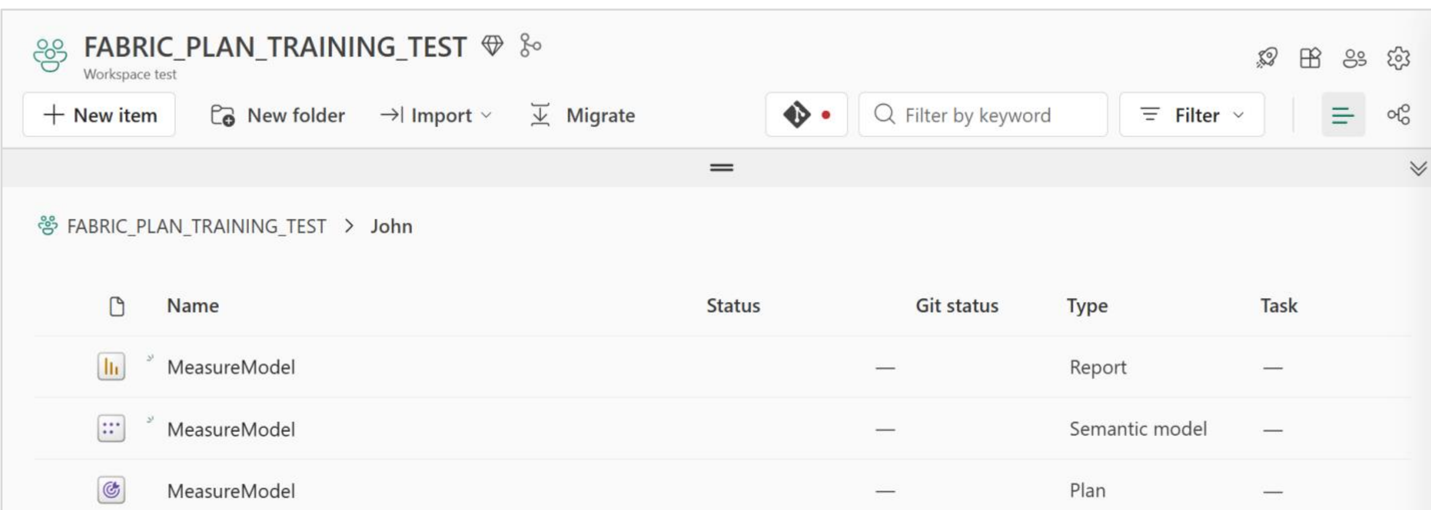
Before You Begin

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.

This exercise uses a different semantic model and plan app from E1 and E2. Follow the same environment setup steps as E1 Part 1, with these differences:

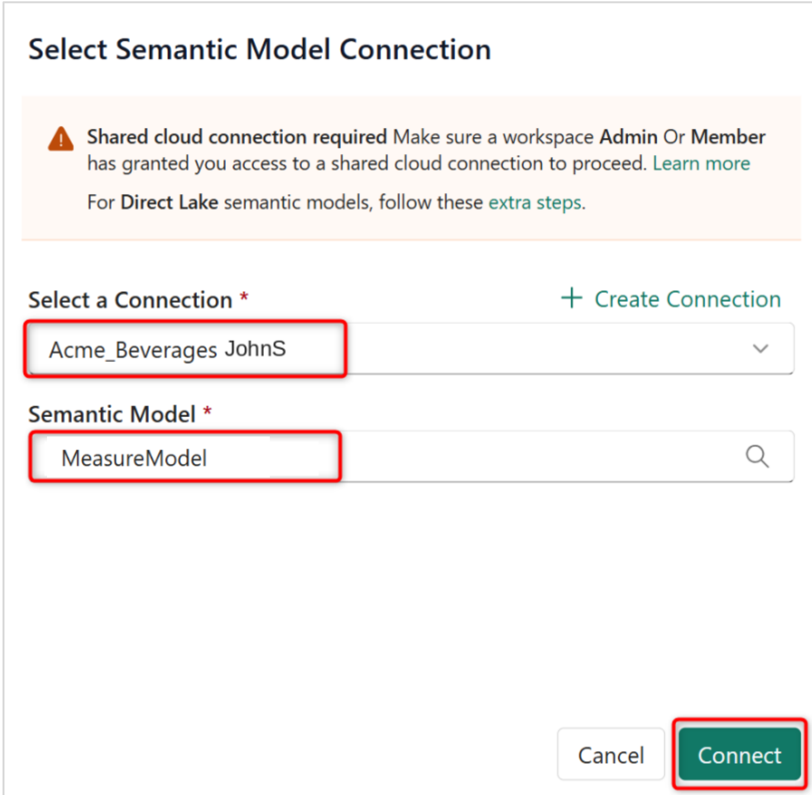
a) Import MeasureModel.pbix instead of Acme_Beverages.pbix

b) Create a new Plan app and name it MeasureModel



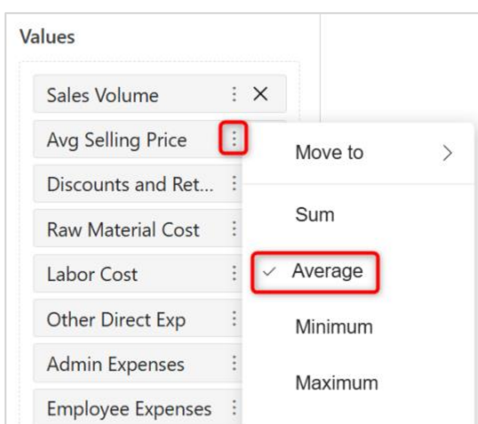
c) Use the semantic model connection created in E1 — select it from the connection dropdown and choose the MeasureModel semantic model

Note: *The connection created in E1 is reused here to save time — you do not need to create a new one. Although it was originally named after the Acme Beverages semantic model, a single connection can point to any semantic model in the workspace. In this step, you are simply selecting a different semantic model through the same connection.*

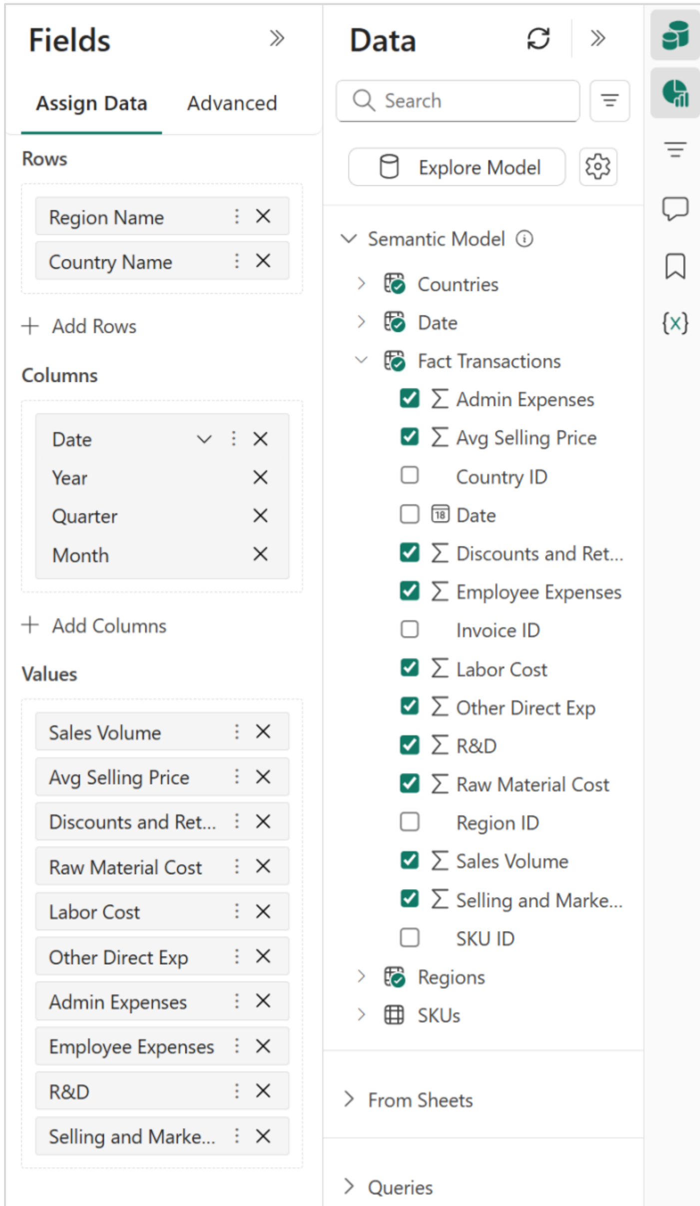


Once the plan app is created and connected, create a new Planning sheet named Measure Model and configure the field assignments as follows:

- Rows: Region Name → Country Name
- Columns: Date Hierarchy
- Values: All measures from the Fact Transactions table. Double-click each measure label and remove the "Sum of" prefix to improve readability. Click the three dots (⋮) next to Avg Selling Price in the Values well and select Average from the dropdown.



The field assignment should look like this.

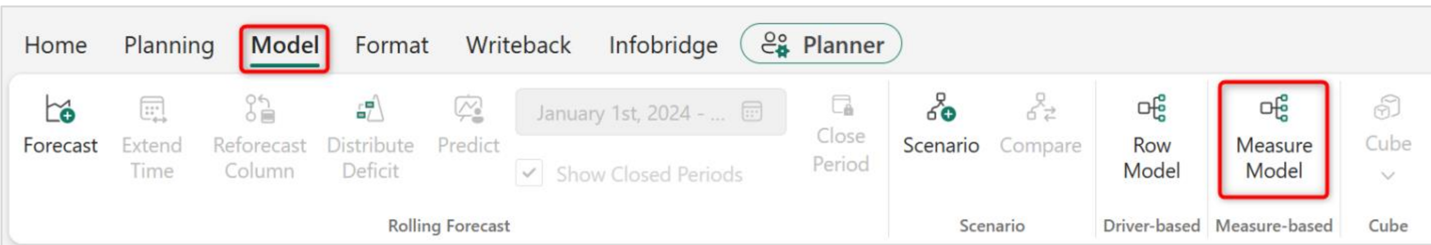


Part 1 Create the Measure Model

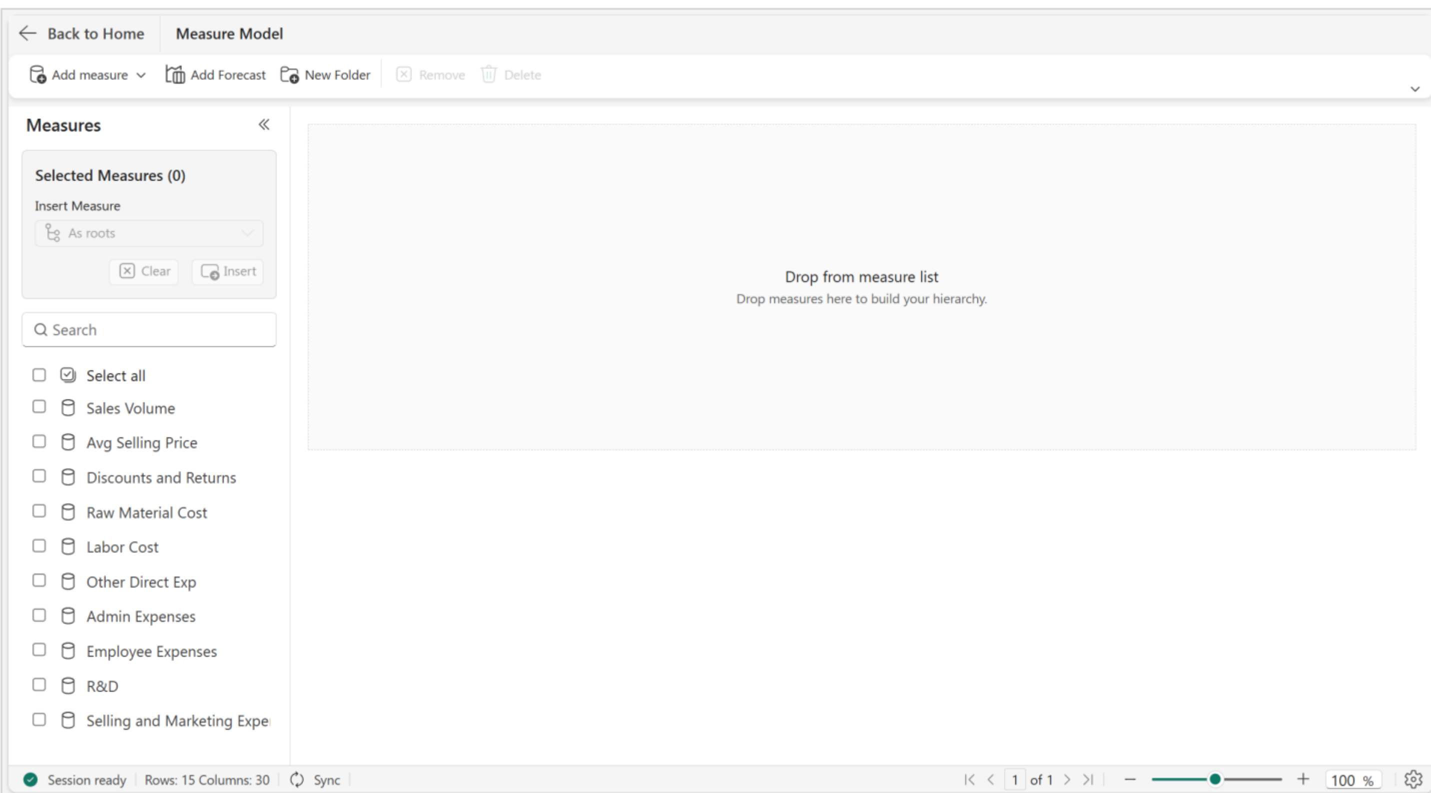
Build a simple P&L model using the Measure Model. Native measures are organized into a parent-child hierarchy using formula measures, turning a flat list of inputs into a structured P&L view.

1. Configure the Measure Model

i. Navigate to the Model ribbon and select Measure Model.



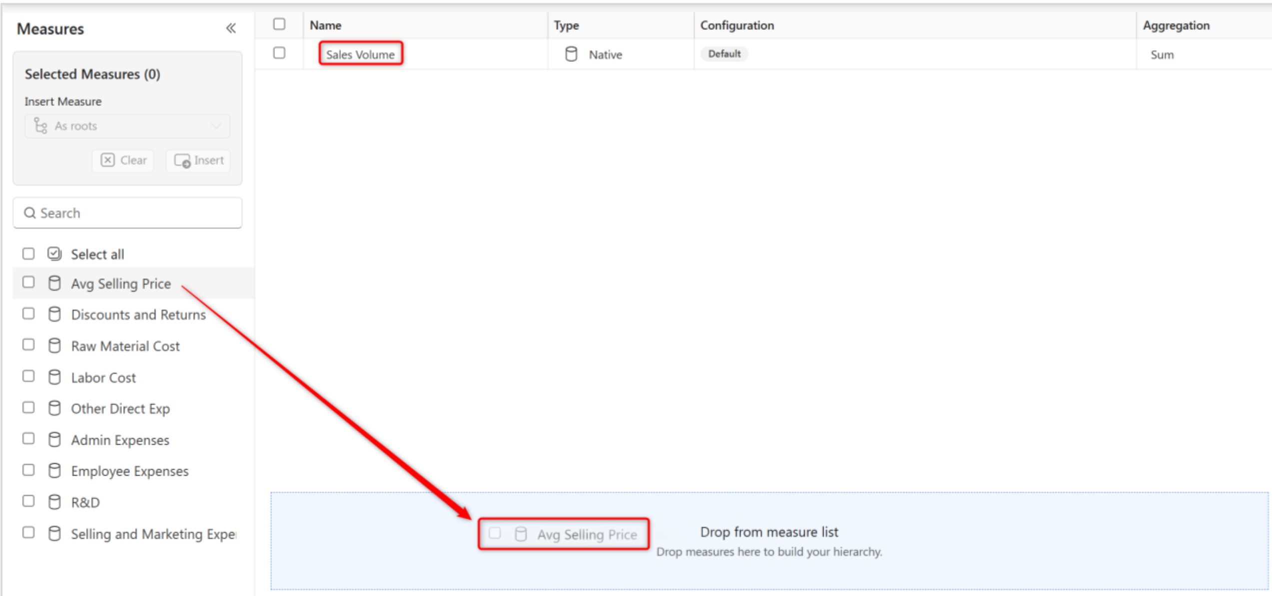
ii. The Measure Model canvas opens.



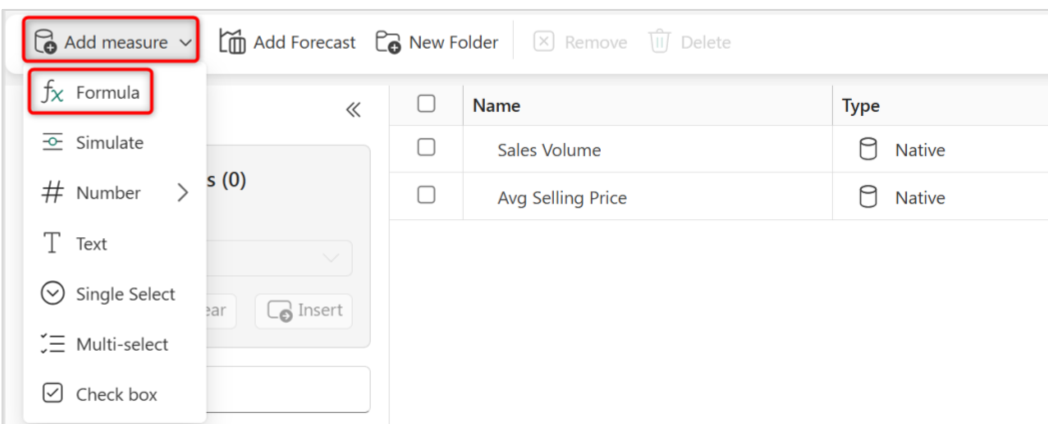
iii. Build the hierarchy by dragging measures from the measure list onto the canvas and creating formula measures as follows:

Gross Revenue

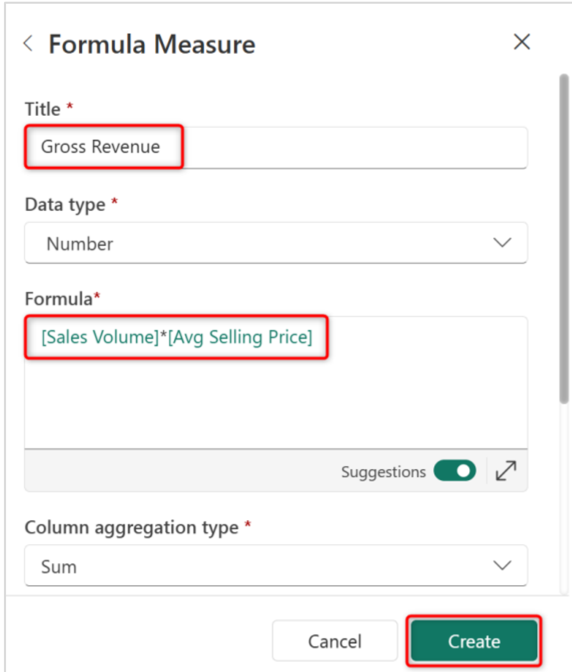
a) Drag Sales Volume and Avg Selling Price onto the canvas.



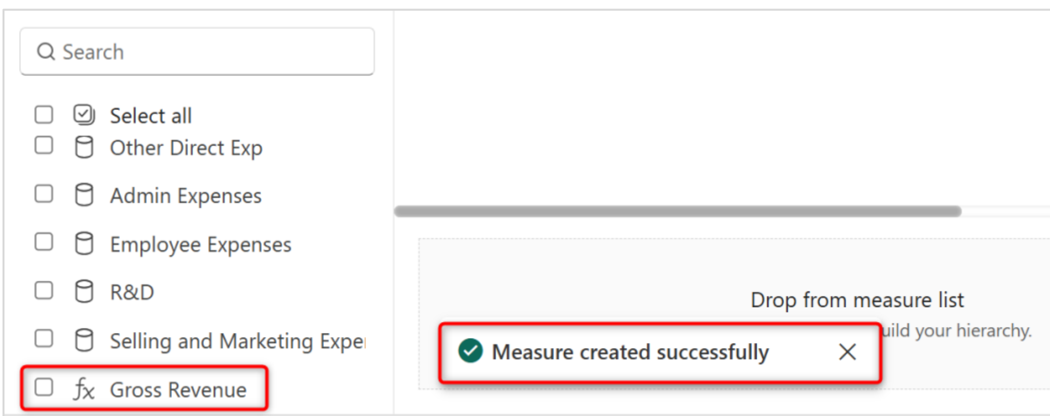
b) Click Add Measure → Formula Measure.



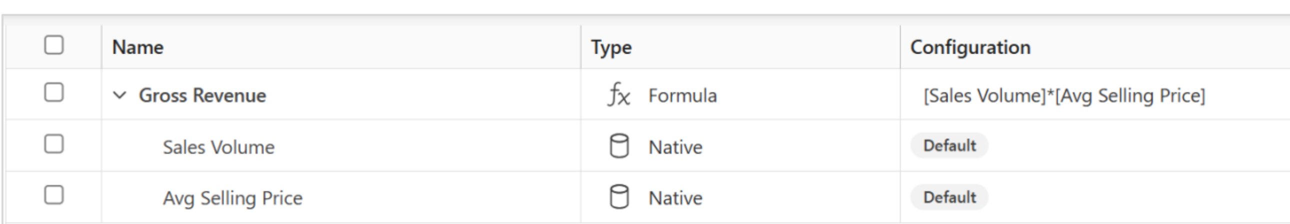
c) Name it Gross Revenue and enter the formula [Sales Volume]*[Avg Selling Price]. Click Create.



d) Confirm the toast message and observe that Gross Revenue is added to the measure list.



e) Drag Gross Revenue onto the canvas. Drag Sales Volume onto the Gross Revenue card — it snaps into place as a child. Drag Avg Selling Price onto the Gross Revenue card in the same way. Observe that Gross Revenue becomes the parent of Sales Volume and Avg Selling Price.

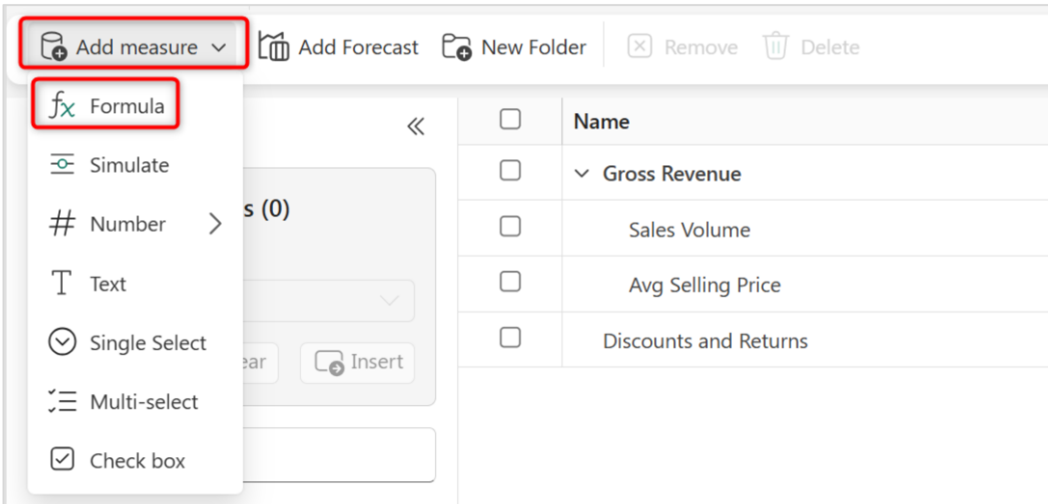


Name	Type	Configuration
Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]
Sales Volume	Native	Default
Avg Selling Price	Native	Default

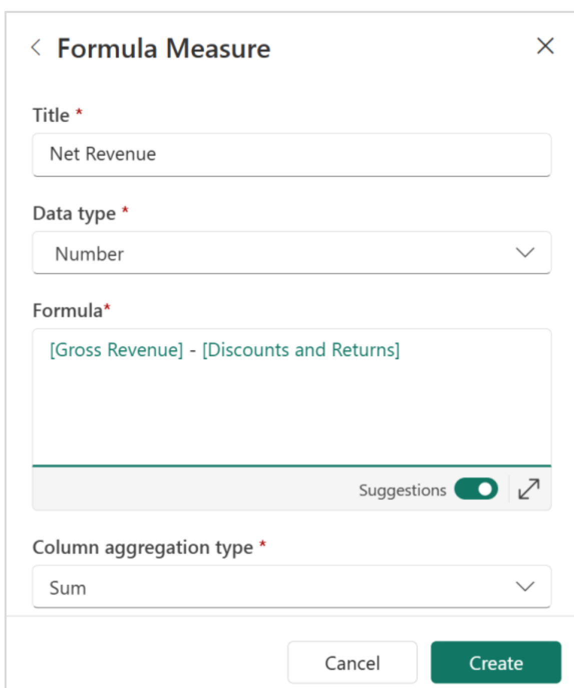
Note: *If a measure gets placed under the wrong parent by mistake, click the remove icon next to it in the canvas to unstage it from its current position — this does not delete the measure. Once unstaged, drag it again into the correct position under the intended parent.*

Net Revenue

a) Drag Discounts and Returns onto the canvas. Click Add Measure → Formula Measure.



b) Name it Net Revenue and enter the formula [Gross Revenue] – [Discounts and Returns]. Click Create. Confirm the toast message.

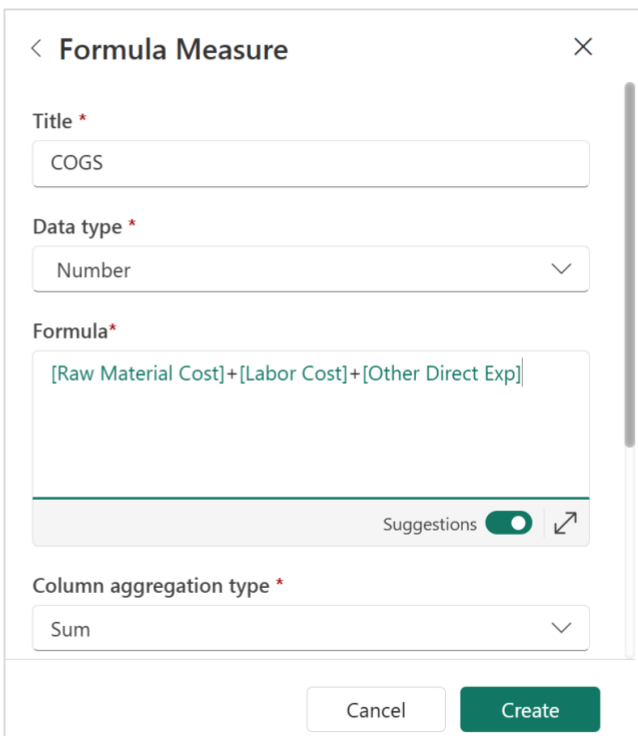


c) Drag Net Revenue onto the canvas. Then drag Gross Revenue and Discounts and Returns over the Net Revenue measure. Observe that Net Revenue becomes the parent of Gross Revenue, and Discounts and Returns.

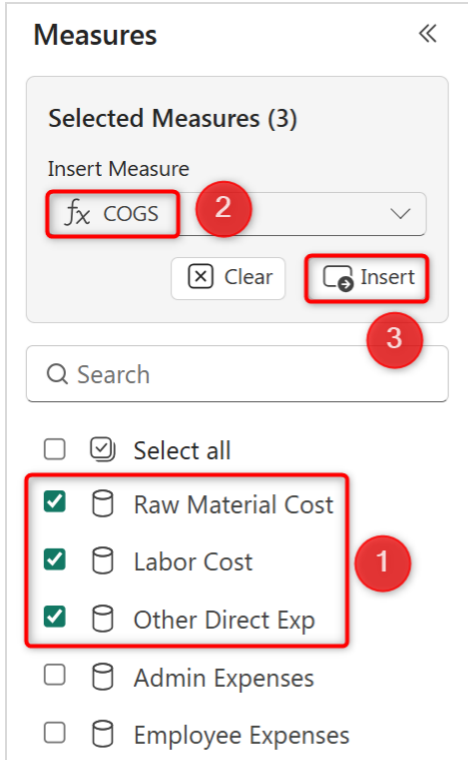
☐	Name	Type	Configuration
☐	Net Revenue	Formula	[Gross Revenue] - [Discounts and Returns]
☐	Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]
☐	Sales Volume	Native	Default
☐	Avg Selling Price	Native	Default
☐	Discounts and Returns	Native	Default

COGS

a) Click Add Measure → Formula Measure. Name it COGS and enter the formula [Raw Material Cost]+[Labor Cost]+[Other Direct Exp]. Click Create. Confirm the toast message.



b) Drag COGS onto the canvas. In the measure list, select Raw Material Cost, Labor Cost, and Other Direct Exp. Click the Insert Measure dropdown, select COGS, and click Insert.



c) Observe that COGS becomes the parent of Raw Material Cost, Labor Cost, and Other Direct Exp.

☐	Name	Type	Configuration
☐	Net Revenue	Formula	[Gross Revenue] - [Discounts and Returns]
☐	Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]
☐	Sales Volume	Native	Default
☐	Avg Selling Price	Native	Default
☐	Discounts and Returns	Native	Default
☐	COGS	Formula	[Raw Material Cost]+[Labor Cost]+[Other Direct Exp]
☐	Raw Material Cost	Native	Default
☐	Labor Cost	Native	Default
☐	Other Direct Exp	Native	Default

Gross Profit

Click Add Measure → Formula Measure. Name it Gross Profit and enter the formula [Net revenue] – [COGS]. Click Create. Drag Gross Profit onto the canvas. Then drag Net Revenue and COGS over the Gross Profit measure. Observe that Gross Profit becomes the parent of Net Revenue and COGS.

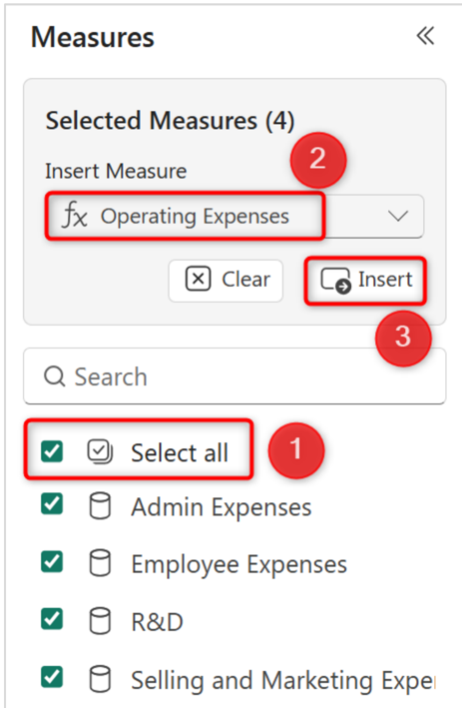
Name	Type	Configuration
Gross Profit	Formula	[Net Revenue]-[COGS]
Net Revenue	Formula	[Gross Revenue] - [Discounts and Returns]
Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]
Sales Volume	Native	Default
Avg Selling Price	Native	Default
Discounts and Returns	Native	Default
COGS	Formula	[Raw Material Cost]+[Labor Cost]+[Other Direct Exp]
Raw Material Cost	Native	Default
Labor Cost	Native	Default
Other Direct Exp	Native	Default

Operating Expenses

a) Click Add Measure → Formula Measure. Name it Operating Expenses and enter the formula [Admin Expenses]+[Employee Expenses]+[R&D]+[Selling and Marketing Expenses]. Click Create. Drag Operating Expenses onto the canvas.

Name	Type	Configuration	Aggregation
Gross Profit	Formula	[Net Revenue]-[COGS]	Sum
Net Revenue	Formula	[Gross Revenue] - [Discounts and Returns]	Sum
Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]	Sum
Sales Volume	Native	Default	Sum
Avg Selling Price	Native	Default	Sum
Discounts and Returns	Native	Default	Sum
COGS	Formula	[Raw Material Cost]+[Labor Cost]+[Other Direct Exp]	Sum
Raw Material Cost	Native	Default	Sum
Labor Cost	Native	Default	Sum
Other Direct Exp	Native	Default	Sum
Operating Expenses	Formula	[Admin Expenses]+[Employee Expenses]+[R&D]+[Selling and Marketing	Sum

b) In the measure list, select Select All. Click the Insert Measure dropdown, select Operating Expenses, and click Insert. Observe that Operating Expenses becomes the parent of Admin Expenses, Employee Expenses, R&D, and Selling and Marketing Expenses.



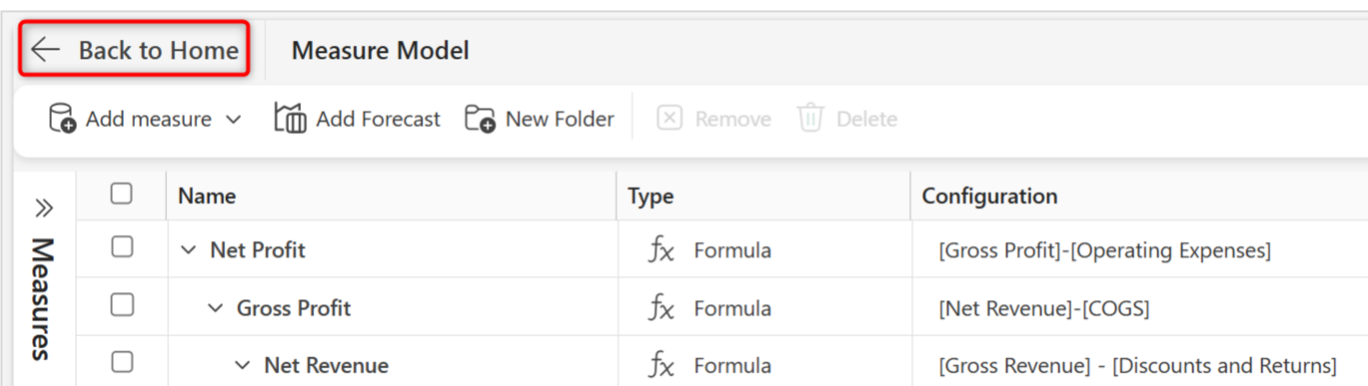
Net Profit

Click Add Measure → Formula Measure. Name it Net Profit and enter the formula [Gross Profit] – [Operating Expenses]. Click Create. Drag Net Profit onto the canvas. Then drag Gross Profit and Operating Expenses over the Net Profit measure. The simple P&L model is now complete.

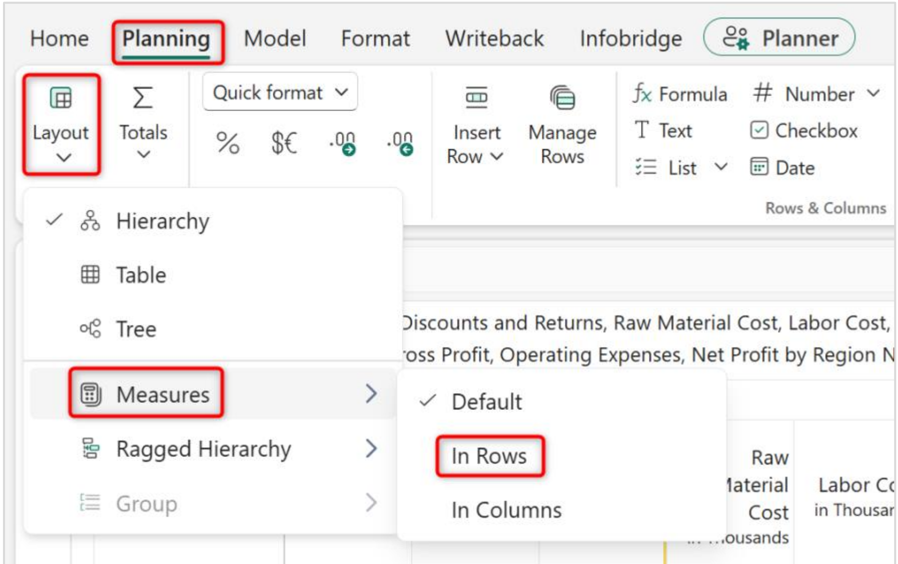
Name	Type	Configuration	Aggregation
Net Profit	Formula	[Gross Profit]-[Operating Expenses]	Sum
Gross Profit	Formula	[Net Revenue]-[COGS]	Sum
Net Revenue	Formula	[Gross Revenue] - [Discounts and Returns]	Sum
Gross Revenue	Formula	[Sales Volume]*[Avg Selling Price]	Sum
Sales Volume	Native	Default	Sum
Avg Selling Price	Native	Default	Sum
Discounts and Returns	Native	Default	Sum
COGS	Formula	[Raw Material Cost]+[Labor Cost]+[Other Direct Exp]	Sum
Raw Material Cost	Native	Default	Sum
Labor Cost	Native	Default	Sum
Other Direct Exp	Native	Default	Sum
Operating Expenses	Formula	[Admin Expenses]+[Employee Expenses]+[R&D]+[Selling and Marketing Expenses]	Sum
Admin Expenses	Native	Default	Sum
Employee Expenses	Native	Default	Sum
R&D	Native	Default	Sum
Selling and Marketing Expenses	Native	Default	Sum

2. View the Measure Model

i. Click Back to Home.



ii. In the Planning ribbon, click the Layout dropdown and select Measures in Rows.



iii. Observe that the configured measure hierarchy is now displayed — a structured P&L view of the calculated measures and their underlying components, replacing the cluttered flat list from the setup step.

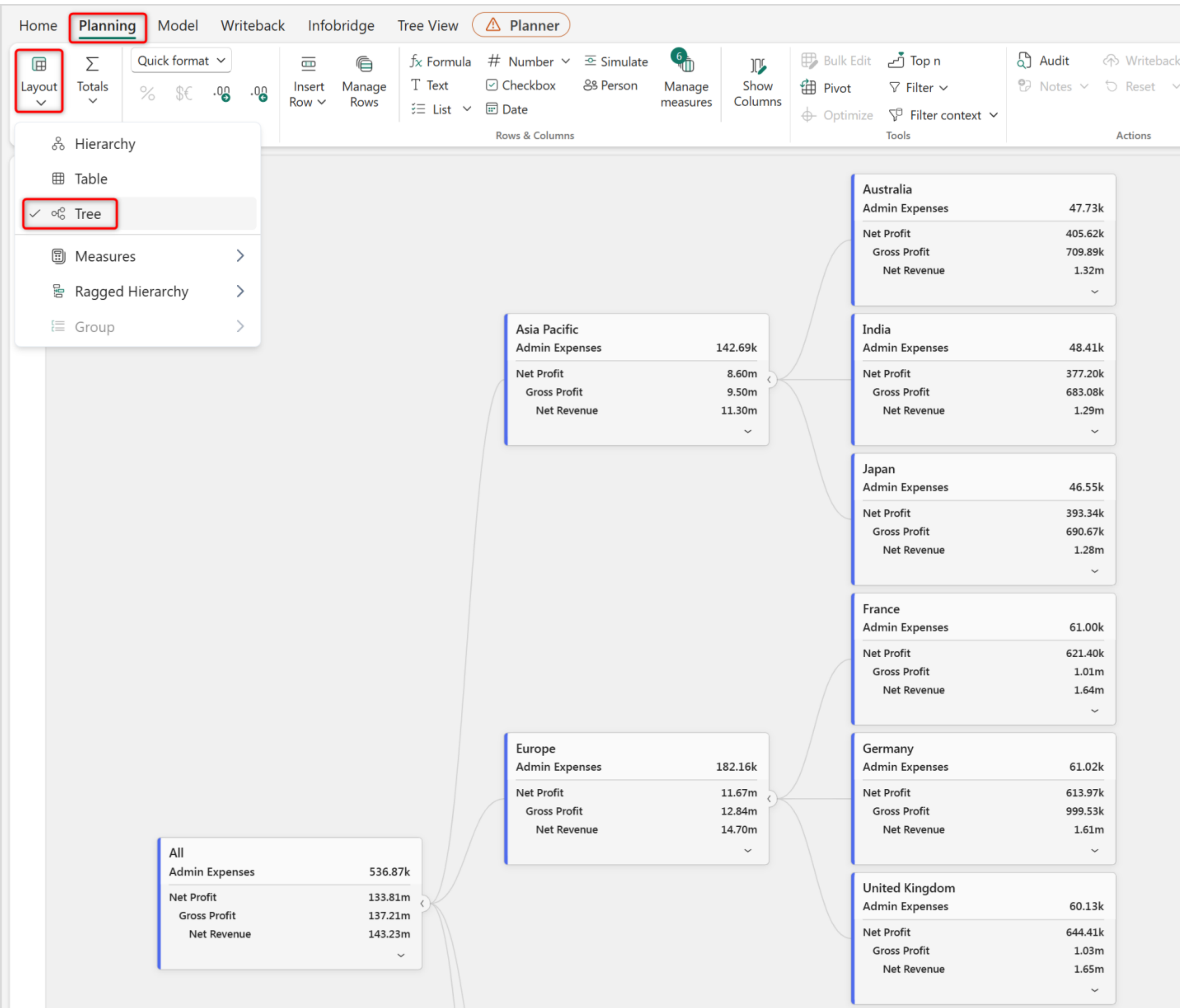
Year	> 2024	> 2025	> 2026
Region Name	Values	Values	Values
⊟ **All**			
⊟ **Net Profit**	**1.68m**	**1.67m**	**1.63m**
⊟ **Gross Profit**	**2.83m**	**2.81m**	**2.75m**
⊟ **Net Revenue**	**4.86m**	**4.83m**	**4.71m**
⊟ **Gross Revenue**	**5.12m**	**5.08m**	**4.96m**
Sales Volume	315.51k	311.19k	303.51k
Avg Selling Price	16.24	16.34	16.36
Discounts and Returns	255.49k	252.11k	250.25k
⊟ **COGS**	**2.04m**	**2.02m**	**1.96m**
Raw Material Cost	1.32m	1.31m	1.27m
Labor Cost	533.54k	533.63k	519.75k
Other Direct Exp	180.00k	175.03k	172.71k
⊟ **Operating Expenses**	**1.15m**	**1.14m**	**1.12m**
Admin Expenses	178.95k	183.50k	174.42k
Employee Expenses	361.78k	358.83k	351.61k
R&D	142.02k	140.66k	135.84k
Selling and Marketing E...	462.93k	459.46k	453.28k

Part 2 **Create and Compare Scenarios**

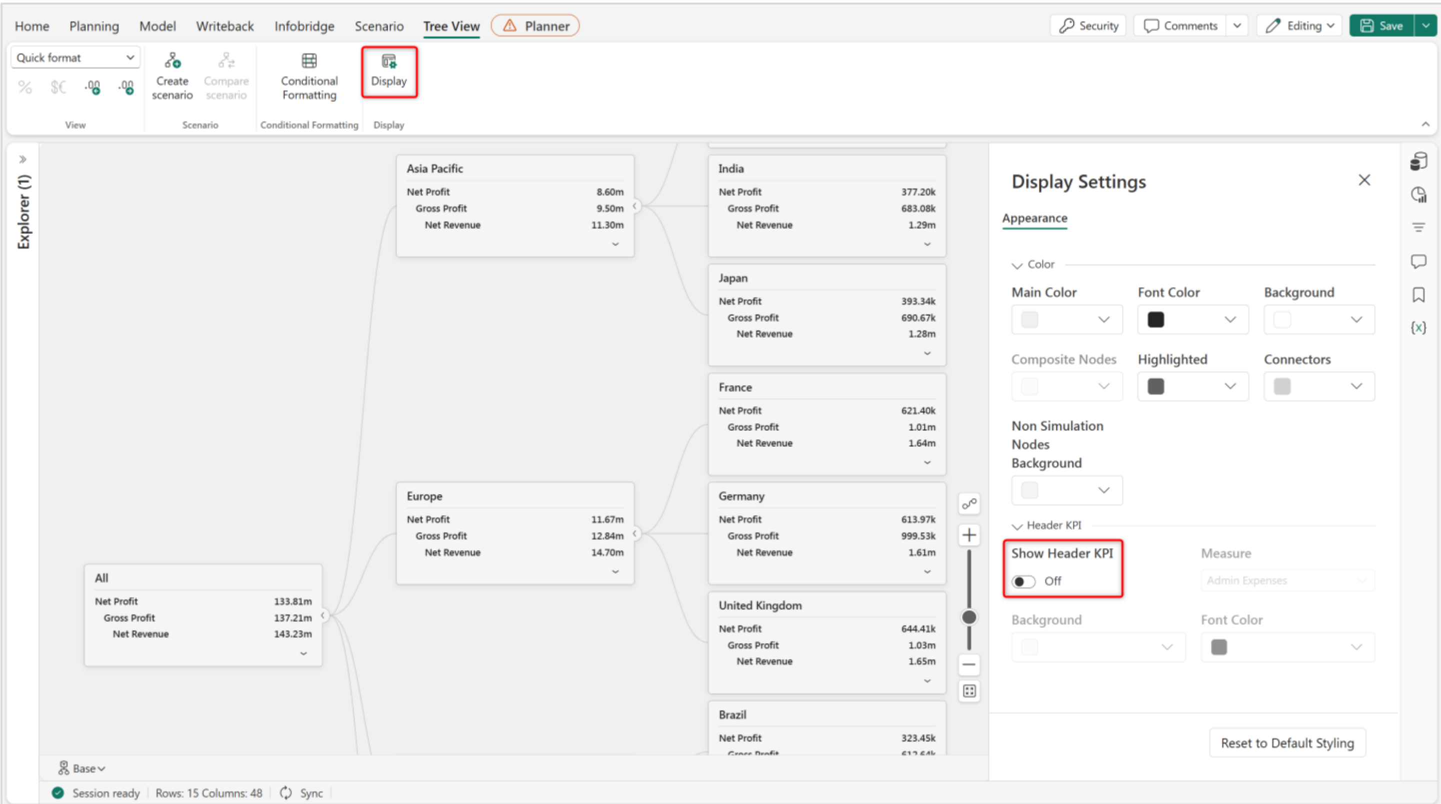
Create two scenarios in Tree layout — one simulating revenue growth in Germany and one restructuring costs in the United States — then use the Compare view to see the impact of each scenario on Net Profit side by side.

3. Create the Best Case scenario

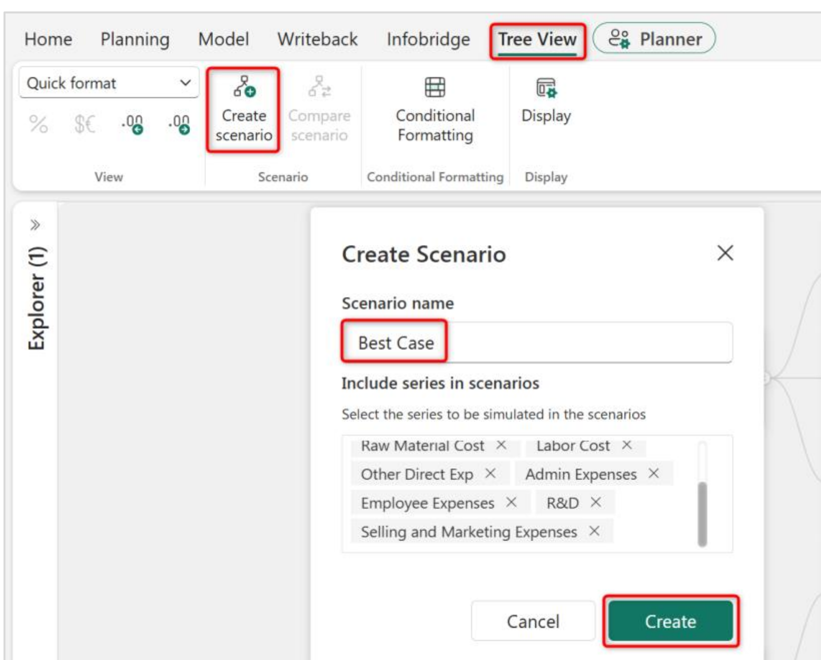
i. In the Planning ribbon, click the Layout dropdown and select Tree. The P&L model displays in tree view, breaking down from the Grand Total through region and country with the measure hierarchy.



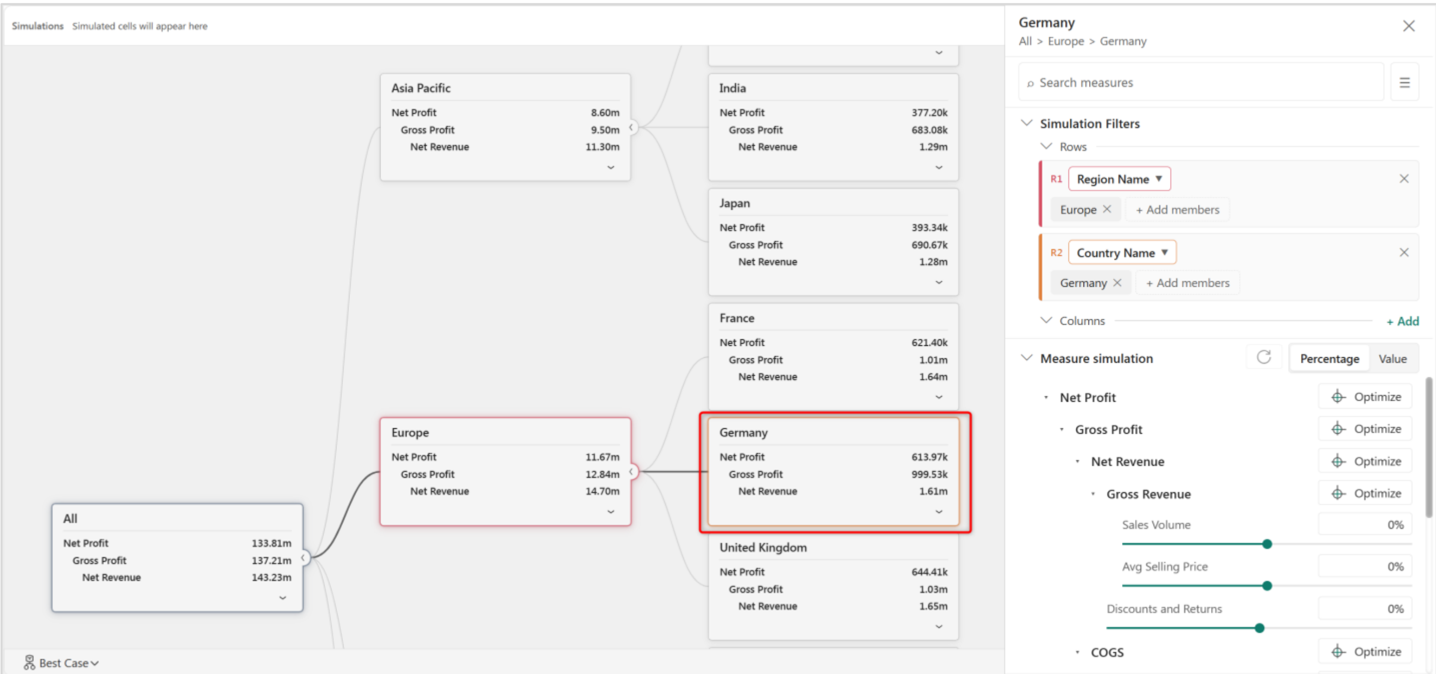
ii. Click Display in the Tree View ribbon. In the Display Settings side panel, turn off Show Header KPI.



iii. Click Create Scenarios from the ribbon. Name it Best Case, ensure that all measures from the semantic model are included in the series, and click Create.

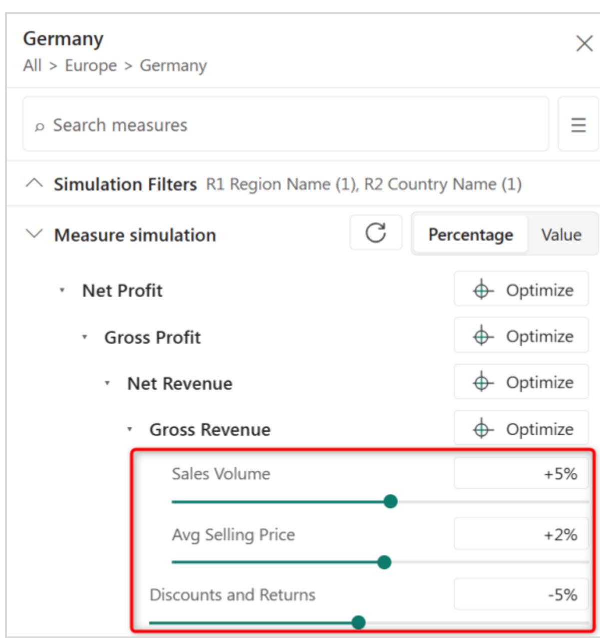


iv. Under the Europe region, select the Germany card. The simulation dialog box opens.

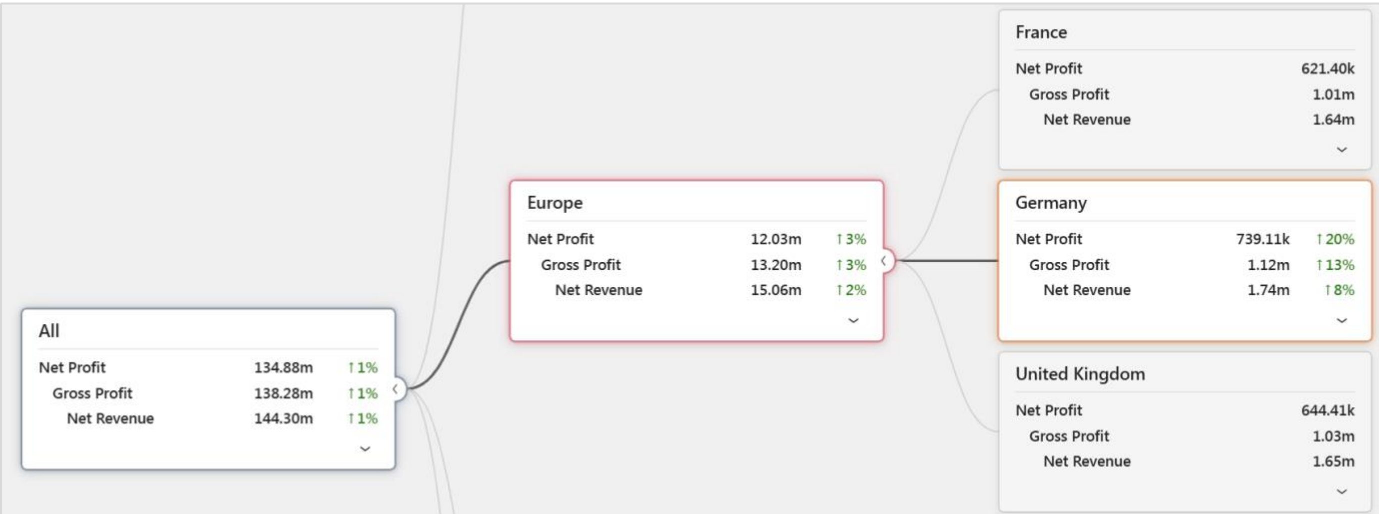


v. In the Measure Simulation dropdown, simulate the following under Gross Revenue:

- Sales Volume: 5%
- Avg Selling Price: 2%
- Discounts and Returns: −5%

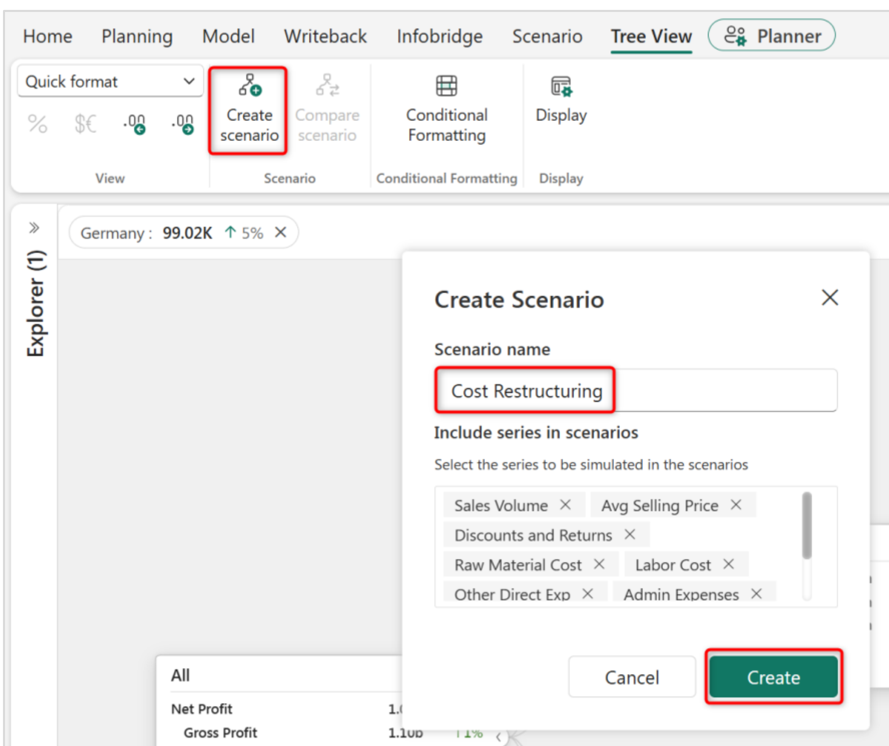


vi. Observe that the Germany card updates in real time — Net Profit, Gross Profit, and Net Revenue show the upward variance indicators as each input is adjusted. The Europe and All cards also update to reflect the change. Close the simulation dialog.



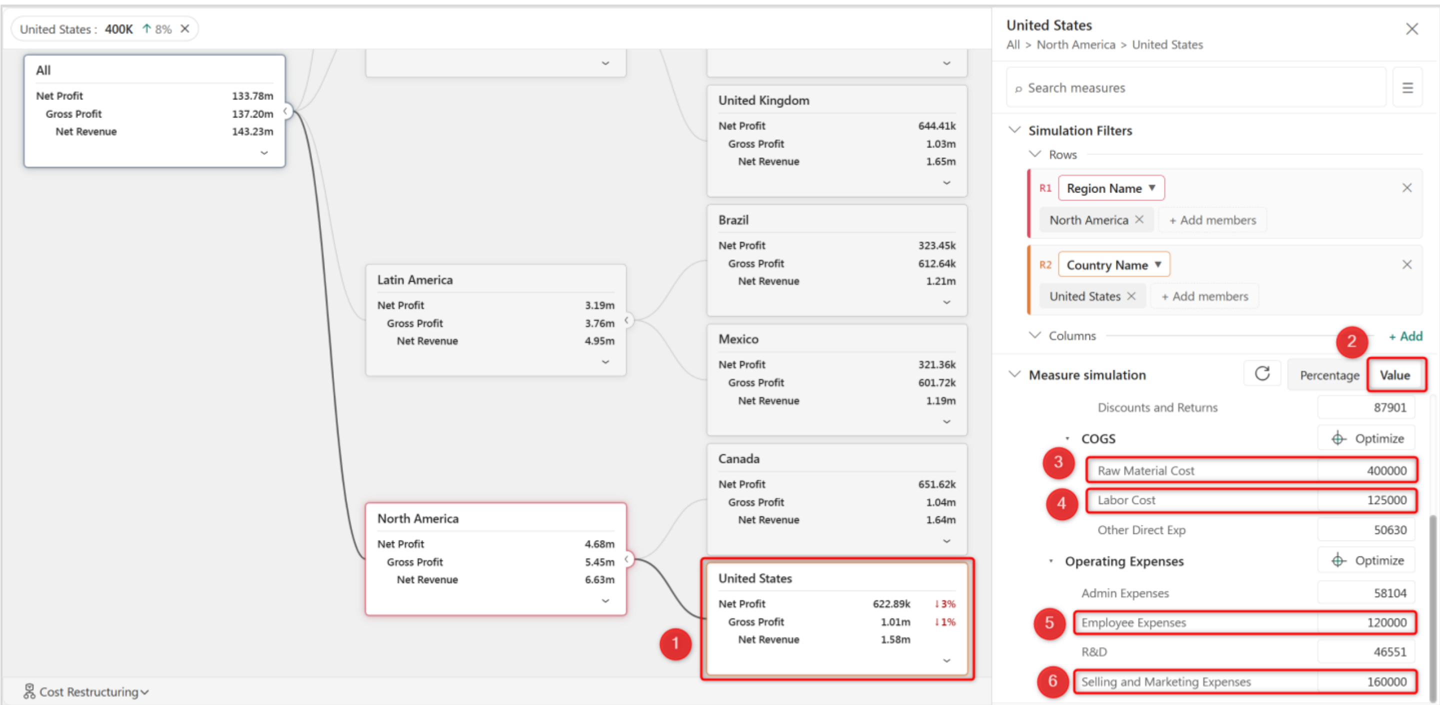
4. Create the Cost Restructuring scenario

i. Click Create Scenarios from the ribbon. Name it Cost Restructuring, ensure all measures in the model are included in the series, and click Create.

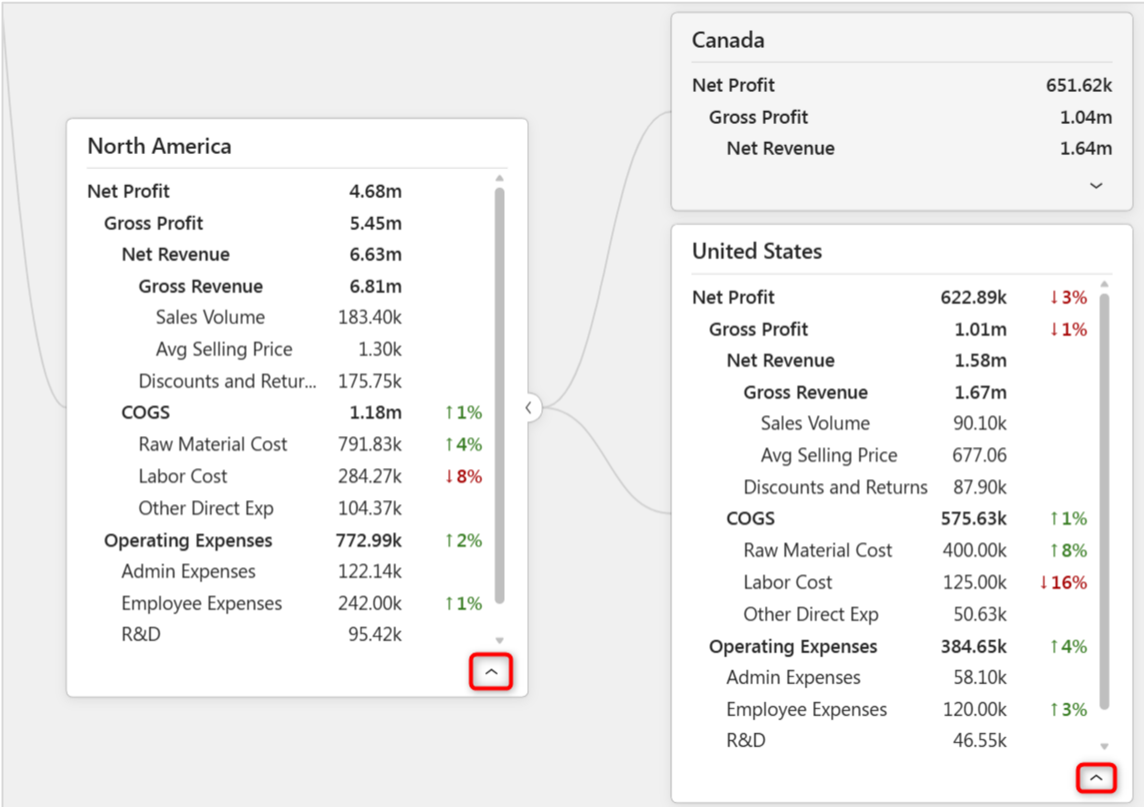


ii. Confirm you can see the new scenario in the bottom left. Under the North America region, select the United States card. The simulation dialog box opens. Select Value. Scroll down and simulate the following under COGS and Operating Expenses:

- Raw Material Cost: 400k
- Labor Cost: 125k
- Employee Expenses: 120k
- Selling and Marketing Expenses: 160k

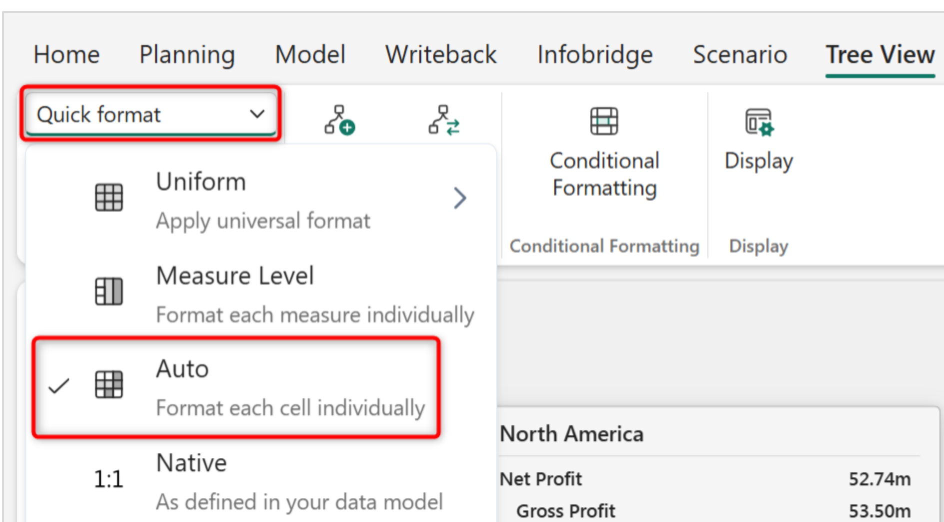


iv. Click on the down arrow in the United States card and North America cards. Observe that the cards updates in real time — the full P&L cascade is visible on the card, showing how the restructured cost inputs flow through COGS, Operating Expenses, Gross Profit, and Net Profit.

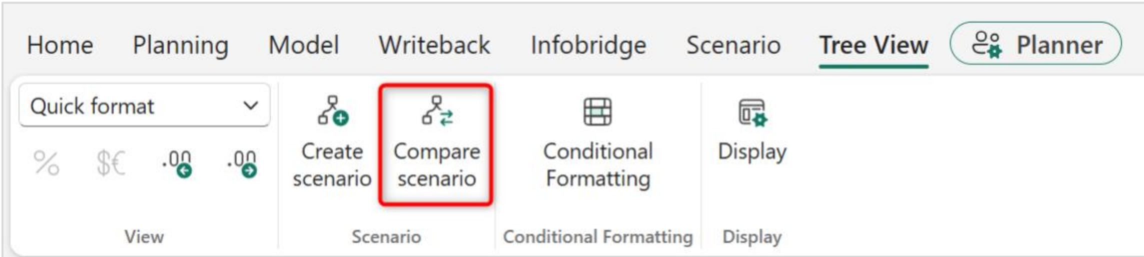


5. Compare the two scenarios

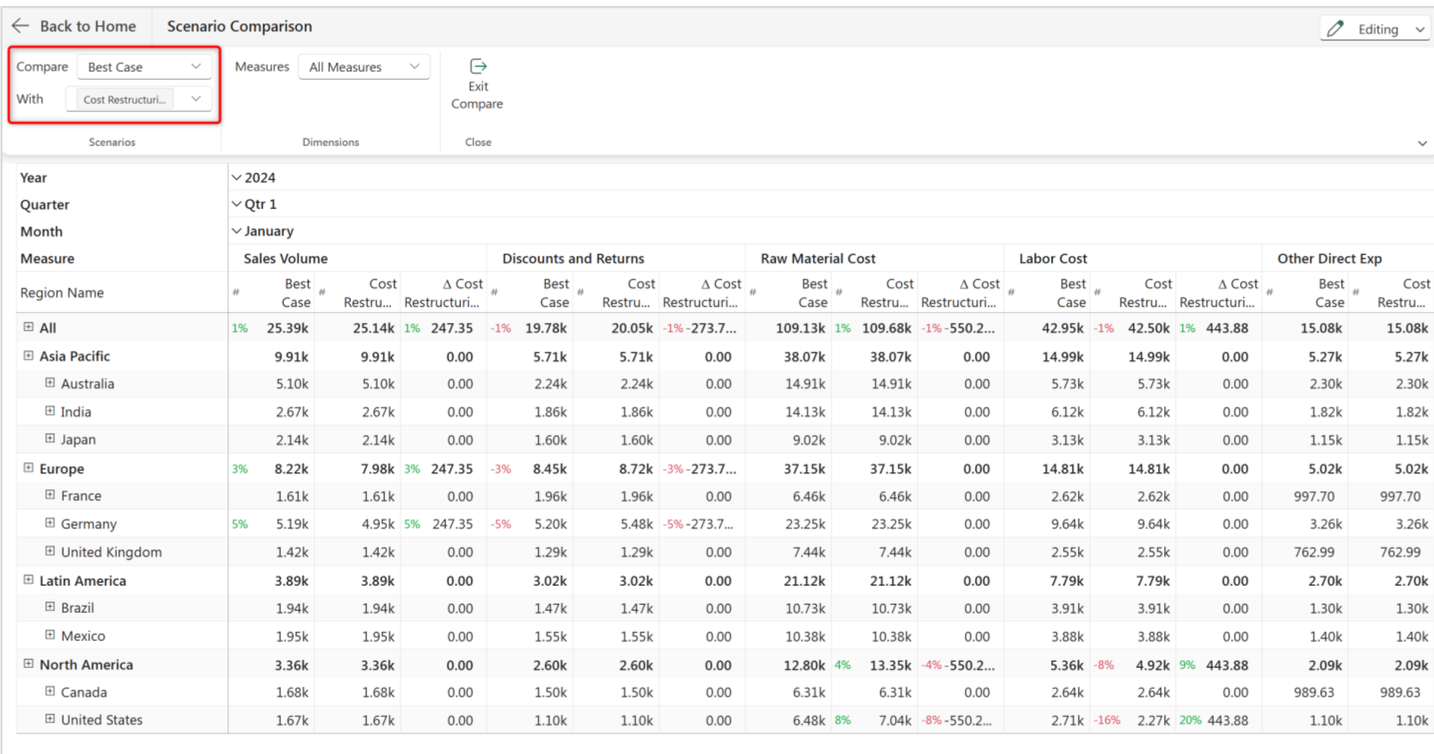
i. In the Tree View ribbon, in the Quick format dropdown, select Auto.



ii. Click Compare Scenario.



iii. Configure as follows: Compare: Best Case; With: Cost Restructuring. Observe the variance columns — the Compare view places both scenarios side by side at every level of the hierarchy, making the difference immediately visible between a revenue growth approach and a cost restructuring approach.

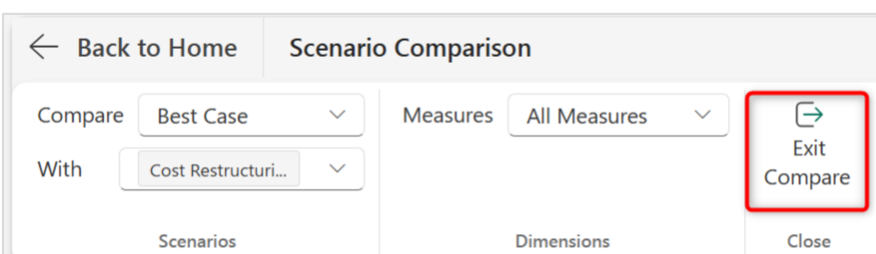


Year: 2024
Quarter: Qtr 1
Month: January

Measure	Sales Volume			Discounts and Returns		
Region Name	Best Case	Cost Restru...	Δ Cost Restructuri...	Best Case	Cost Restru...	Δ Cost Restructuri...
All	1% 25.39k	25.14k	1% 247.35	-1% 19.78k	20.05k	-1% -273.7...
Asia Pacific	9.91k	9.91k	0.00	5.71k	5.71k	0.00
Australia	5.10k	5.10k	0.00	2.24k	2.24k	0.00
India	2.67k	2.67k	0.00	1.86k	1.86k	0.00
Japan	2.14k	2.14k	0.00	1.60k	1.60k	0.00
Europe	3% 8.22k	7.98k	3% 247.35	-3% 8.45k	8.72k	-3% -273.7...
France	1.61k	1.61k	0.00	1.96k	1.96k	0.00
Germany	5% 5.19k	4.95k	5% 247.35	-5% 5.20k	5.48k	-5% -273.7...
United Kingdom	1.42k	1.42k	0.00	1.29k	1.29k	0.00
Latin America	3.89k	3.89k	0.00	3.02k	3.02k	0.00
Brazil	1.94k	1.94k	0.00	1.47k	1.47k	0.00
Mexico	1.95k	1.95k	0.00	1.55k	1.55k	0.00
North America	3.36k	3.36k	0.00	2.60k	2.60k	0.00
Canada	1.68k	1.68k	0.00	1.50k	1.50k	0.00
United States	1.67k	1.67k	0.00	1.10k	1.10k	0.00

Measure	Raw Material Cost			Labor Cost			Other Direct Exp	
Region Name	Best Case	Cost Restru...	Δ Cost Restructuri...	Best Case	Cost Restru...	Δ Cost Restructuri...	Best Case	Cost Restru...
All	109.13k	1% 109.68k	-1% -550.2...	42.95k	-1% 42.50k	1% 443.88	15.08k	15.08k
Asia Pacific	38.07k	38.07k	0.00	14.99k	14.99k	0.00	5.27k	5.27k
Australia	14.91k	14.91k	0.00	5.73k	5.73k	0.00	2.30k	2.30k
India	14.13k	14.13k	0.00	6.12k	6.12k	0.00	1.82k	1.82k
Japan	9.02k	9.02k	0.00	3.13k	3.13k	0.00	1.15k	1.15k
Europe	37.15k	37.15k	0.00	14.81k	14.81k	0.00	5.02k	5.02k
France	6.46k	6.46k	0.00	2.62k	2.62k	0.00	997.70	997.70
Germany	23.25k	23.25k	0.00	9.64k	9.64k	0.00	3.26k	3.26k
United Kingdom	7.44k	7.44k	0.00	2.55k	2.55k	0.00	762.99	762.99
Latin America	21.12k	21.12k	0.00	7.79k	7.79k	0.00	2.70k	2.70k
Brazil	10.73k	10.73k	0.00	3.91k	3.91k	0.00	1.30k	1.30k
Mexico	10.38k	10.38k	0.00	3.88k	3.88k	0.00	1.40k	1.40k
North America	12.80k	4% 13.35k	-4% -550.2...	5.36k	-8% 4.92k	9% 443.88	2.09k	2.09k
Canada	6.31k	6.31k	0.00	2.64k	2.64k	0.00	989.63	989.63
United States	6.48k	8% 7.04k	-8% -550.2...	2.71k	-16% 2.27k	20% 443.88	1.10k	1.10k

iv. Click Exit Compare to return to the standard view.



Fabric Plan

Outcomes

✓ MeasureModel semantic model connected to a new Plan app following the E1 Part 1 setup flow

✓ Measure Model planning sheet created with all Fact Transactions measures assigned to Values

✓ Measure Model configured — six formula measures created (Gross Revenue, Net Revenue, COGS, Gross Profit, Operating Expenses, Net Profit) organized into a parent-child P&L hierarchy

✓ P&L hierarchy visualized in Measures in Rows layout

✓ Best Case scenario created — Germany revenue growth simulated with Net Profit updating in real time across Germany, Europe, and All

✓ Cost Restructuring scenario created — United States cost inputs restructured with the full P&L cascade updating in real time across North America and All

✓ Both scenarios compared side by side — impact of revenue growth vs cost restructuring visible at every level of the hierarchy