

Power BI DAX Measures Reference

1 Base Measures

TotalRevenue = CALCULATE(SUM(Sales[TotalSales]))

Explanation: Calculates total sales across all products.

Purpose: Base metric for profit and margin calculations.

TotalCost = CALCULATE(SUM(Sales[Cost]))

Explanation: Total cost of products sold.

Purpose: Used to compute Profit and Profit Margin.

TotalQuantity = CALCULATE(SUM(Sales[Quantity]))

Explanation: Total quantity sold.

Purpose: Understand volume contribution of products/categories.

Profit = VAR Revenue = [TotalRevenue]

VAR Cost = [TotalCost]

RETURN CALCULATE(SUMX(ALLMeasures,Revenue-Cost))

Explanation: Calculates net profit = Revenue – Cost.

Purpose: Central measure for KPIs and analysis.

Profit Margin = VAR REVENUE = [TotalRevenue]

VAR PROF = [Profit]

VAR COST = [TotalCost]

RETURN IF(REVENUE-COST , DIVIDE(PROP, REVENUE,0))

Explanation: Percentage of profit relative to revenue.

Purpose: Assess profitability at product or category level.

Profit Margin Arrow = IF([Profit Margin]=BLANK(),BLANK(),

SWITCH(TRUE(),

[Profit Margin] > 0.05, "▲",

[Profit Margin] >= 0, "►",

"▼"

))

Explanation: Visual indicator for margin:

- ▲ >5%: Good margin
- ► 0–5%: Weak margin
- ▼ <0%: Loss
- **Purpose:** Quick visual insight for decision-making.

Quantity % =

DIVIDE([TotalQuantity],CALCULATE([TotalQuantity],ALL(Sales)),0)

Explanation: Each product's contribution to total sales quantity.

Purpose: Understand product impact on overall volume.

Cost % = DIVIDE([TotalCost],CALCULATE([TotalCost],ALL(Sales)))

Explanation: Sets a revenue target (150% of current total).

Purpose: Benchmark for improvement potential.

Total Loss Arrow = IF([Total Profit]<0,"▼",BLANK())

Explanation: Visual indicator if overall loss occurs.

Purpose: Highlight risk areas.

2 Loss Analysis Measures (Profit Margin < 0)

Total cost = CALCULATE([TotalCost],Sales[Profit Margin]<0)

Total Profit = CALCULATE([Profit],Sales[Profit Margin]<0)

Total Quantity = CALCULATE([TotalQuantity],Sales[Profit Margin]<0)

TotalSales = CALCULATE([TotalRevenue],Sales[Profit Margin]<0)

Explanation: Aggregates cost, profit, quantity, and sales for loss-making products only.

Purpose: Focus analysis on critical problem areas.

3 Time Intelligence Measures

Current MTD = TOTALMTD([TotalRevenue],DateTable[Date])

Current QTD = TOTALQTD([TotalRevenue],DateTable[Date])

Current YTD = TOTALYTD([TotalRevenue],DateTable[Date])

Explanation: Sum of sales for the month/quarter/year to date.

Purpose: Monitor current performance and trends.

Previous MTD Logic = IF(MONTH(MAX(DateTable[Date])) = 1,

BLANK(),

CALCULATE([TotalRevenue],

PREVIOUSMONTH(DATESMTD(DateTable[Date])))

Explanation: Avoids calculating previous month if current month is January.

Purpose: Prevent errors in time comparison.

4 What-If Analysis Measures

Sales What if = [TotalRevenue] * (1+'Sales Parameter'[Price Change]/100)

Explanation: Simulates sales after a percentage price increase.

Purpose: Evaluate impact of pricing changes on revenue.

Profit What if = [Sales What if]-[TotalCost]

Explanation: Calculates profit under the simulated scenario.

Purpose: Assess profitability improvements.

MarginProfit-What if = DIVIDE([Profit What if],[Sales What if],0)

Explanation: Profit margin after price change scenario.

Purpose: Measure success of What-If intervention.

Profit Arrow = IF('Calcaltion For What If'[What if Profit For Intraction]=BLANK(),BLANK(),

SWITCH(TRUE(),

```
'Calcalcution For What If'[What if Profit For Intraction]>0,"▲",
'Calcalcution For What If'[What if Profit For Intraction]>-57000,"▶",
"▼"))
```

Explanation: Visual cue for scenario outcome:

- ▲ Profit positive
- ▶ Limited improvement
- ▼ Still negative

Purpose: Quickly identify recovery status.

What if Profit For Intraction = CALCULATE('What-if Sales-Analsis'[Profit What if],Sales[Profit Margin]<0)

Explanation: Focuses on loss-making products only.

Purpose: Key measure for recovery scenarios.

5 Metric Selector

```
Metric Selector ={  
    ("Revenue", NAMEOF('ALLMeasures'[TotalRevenue]), 0),  
    ("Quantity", NAMEOF('ALLMeasures'[TotalQuantity]), 1),  
    ("Cost", NAMEOF('ALLMeasures'[TotalCost]), 2)  
}
```

Explanation: Allows dynamic switching of the KPI visual between Revenue, Quantity, or Cost.

Purpose: Interactive reporting flexibility.

6 Price Change Parameter

Sales Parameter = GENERATESERIES(1,20, 1)

Price Change = SELECTEDVALUE('Sales Parameter'[Parameter])

Explanation: Creates a slider from 1–20% to simulate price increases.

Purpose: Interactive input for What-If scenarios.

