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Creating a Data Module called *Global Superstore* dataset

Basic Calculations: Using pre built functions provided by Tableau we try to create new 'Calculated fields'

1) **Yearly Sales:** Group sales by year.

Calculation Formula: SUM(IF YEAR([Order Date]) = YEAR(TODAY()) THEN
[Sales]
END)

yearly sales

×

SUM(IF YEAR([Order Date]) = YEAR([Order Date])
| THEN [Sales] END)

AGG(yearly sales)

2,259,451

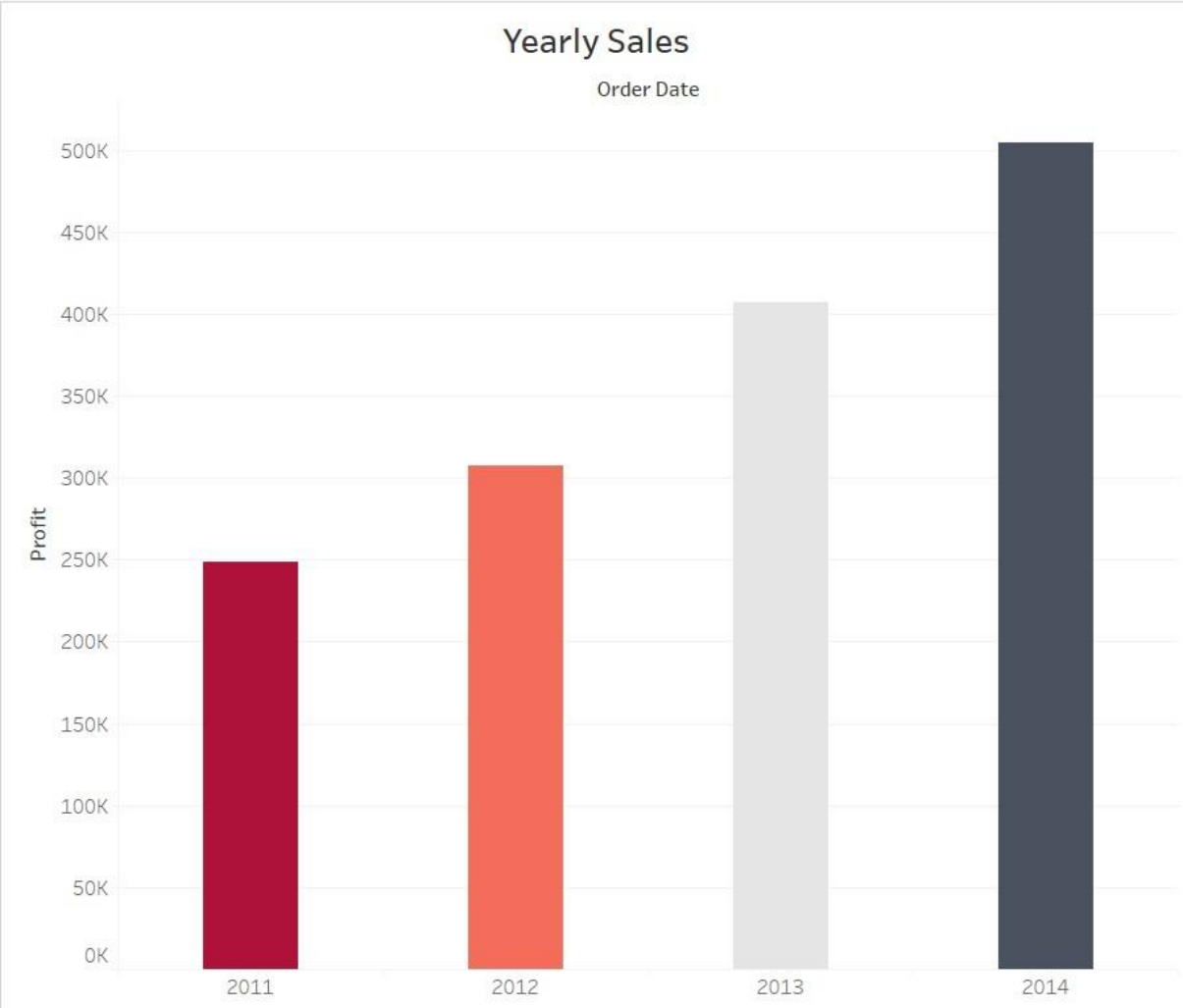
4,299,866

The calculation is valid.

1 Dependency ▾

Apply

OK



2) **Top N Products by Sales:** Find the top N products by sales.

Calculation Formula: { FIXED [Product Name] : SUM([Sales]) }

products by sales

×

{ FIXED [Product Name] : SUM([Sales]) }

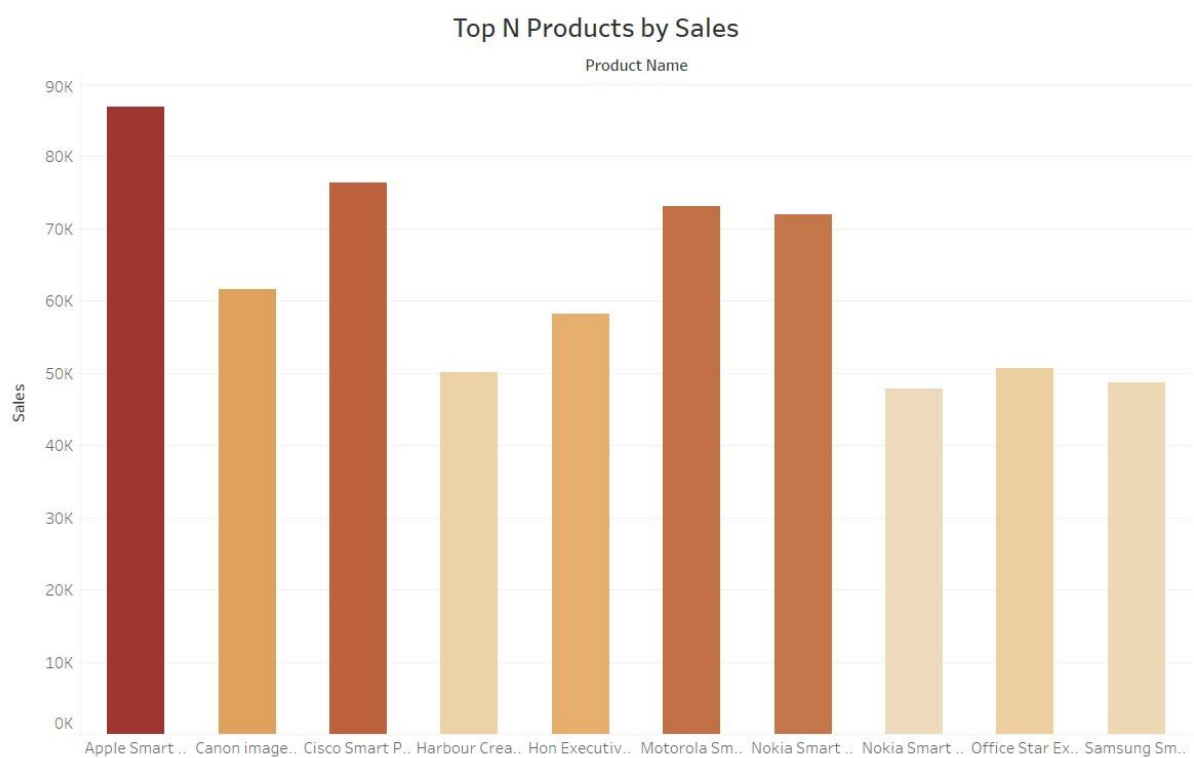
The calculation is valid. 1 Dependency ▾

Apply

OK

SUM(products by sales)

47,878 86,936



3) **Average Profit per Sale:** Calculate the average profit per sale.

Calculation Formula: $\text{SUM}([\text{Profit}]) / \text{COUNTD}([\text{Order ID}])$

avg profit per sale

×

SUM([Profit])/COUNTD([Order ID])

▶

The calculation is valid.

1 Dependency ▾

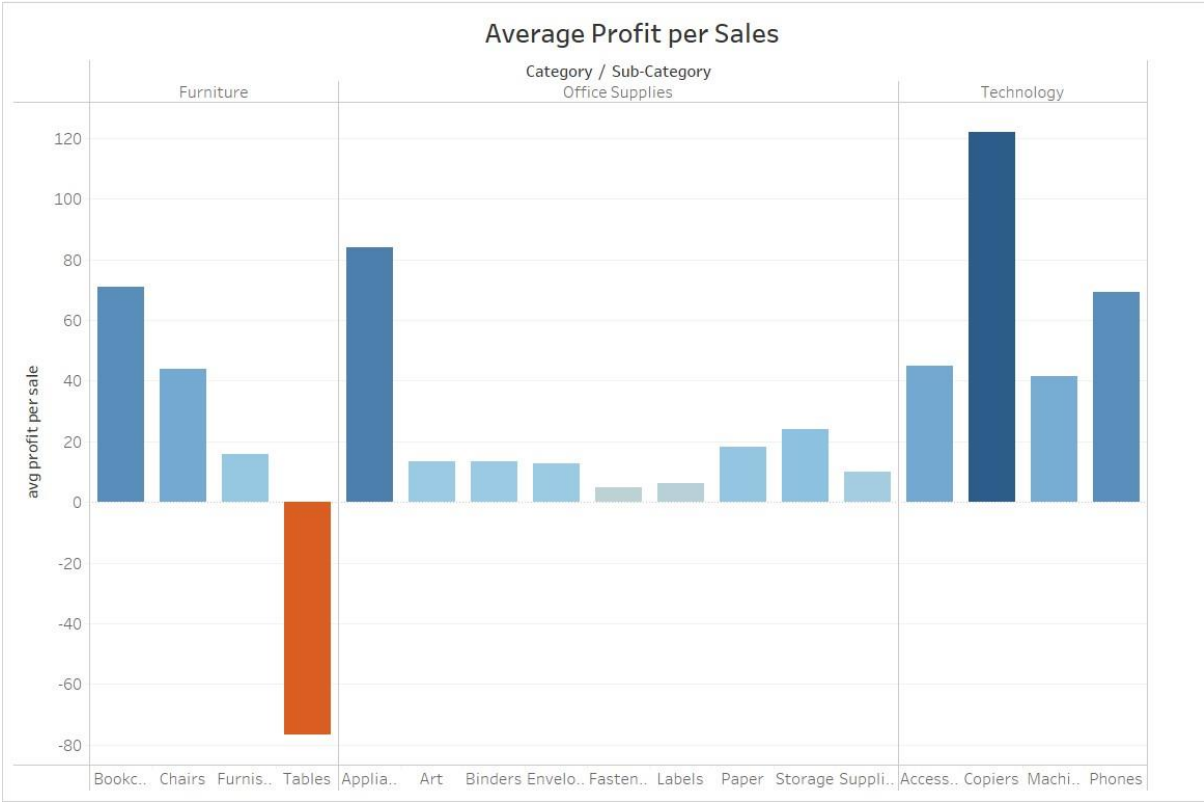
Apply

OK

AGG(avg profit per sale)

-76.7

122.0



LOD Expressions: also called as Level of Detail. These Expressions contain three main functions

- FIXED
- INCLUDE
- EXCLUDE

2)

Region-Level Profit Margin: Calculate the profit margin for each region, considering the overall profit and sales.

LOD Expression: { FIXED [Region] : SUM([Profit]) / SUM([Sales]) }

reg profit margin

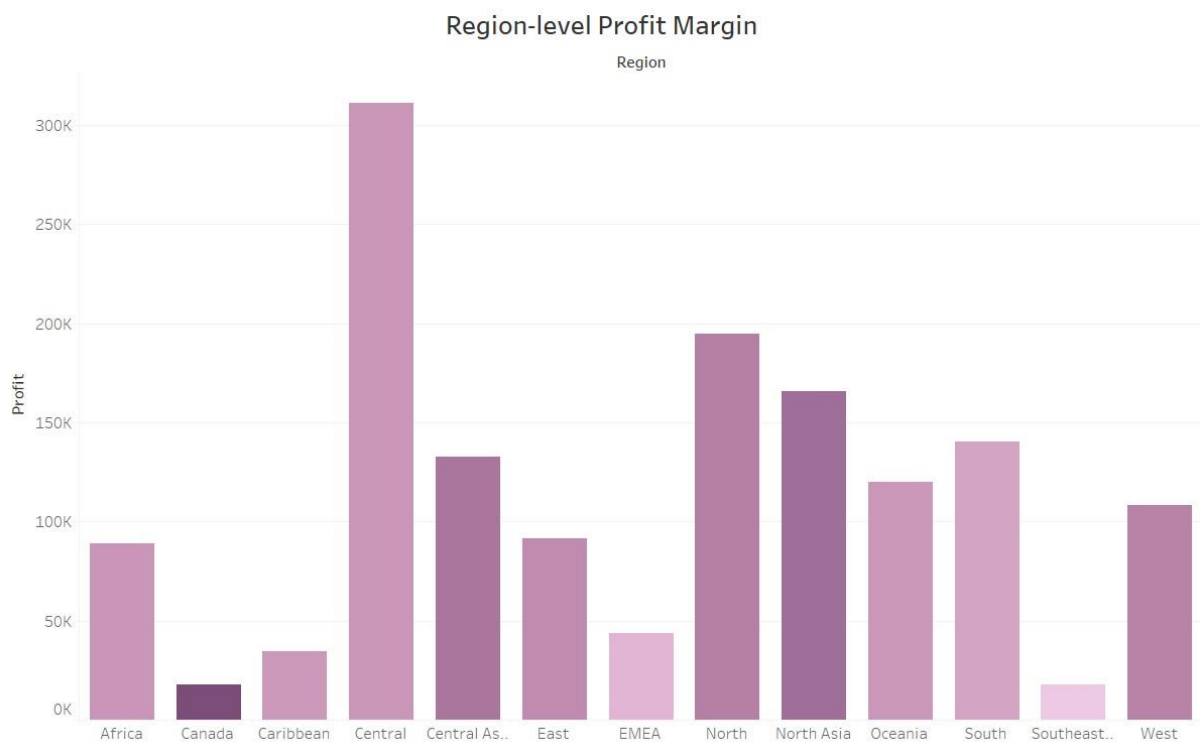
×

{ FIXED [Region] : SUM([Profit]) / SUM([Sales]) }

▶

SUM(reg profit margin)

The calculation is valid. 1 Dependency ▾ Apply OK 0.0202 0.2662



3)

Category-Level Average Profit: Calculate the average profit for each category, regardless of the dimension of your view.

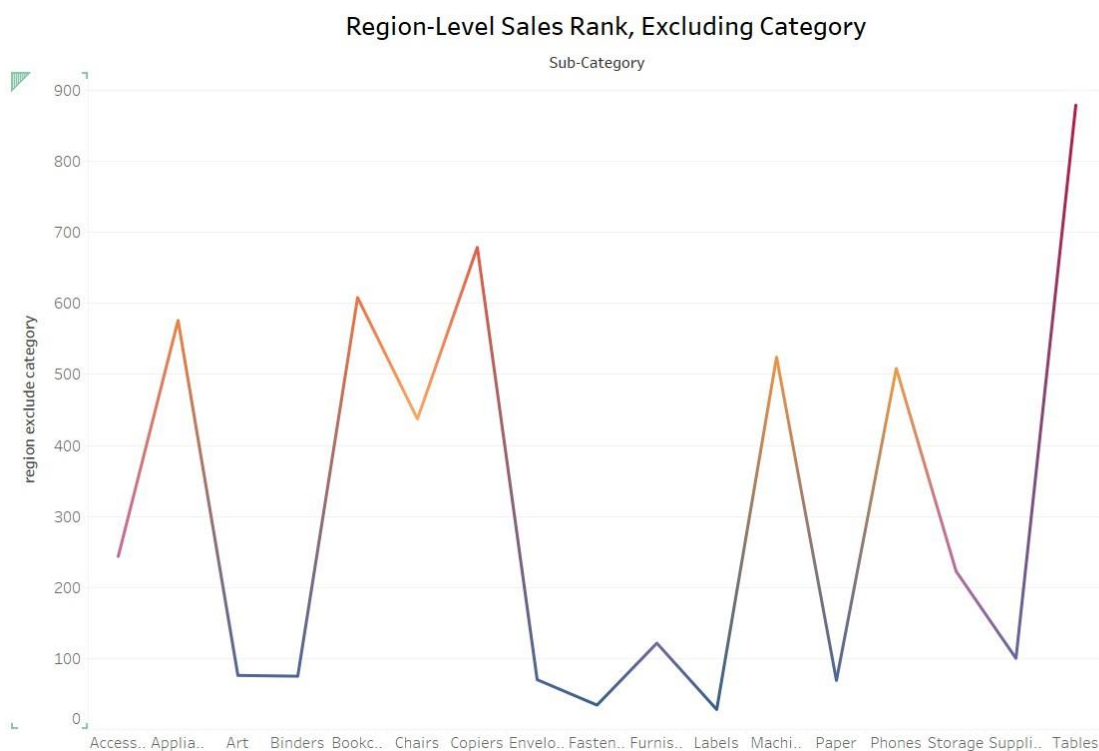
LOD Expression: { FIXED [Category] : AVG([Profit]) }



4)

Region-Level Sales Rank, Excluding Category: This ranks regions by sales while excluding the category dimension.

LOD Expression: { EXCLUDE [Category] : RANK(SUM([Sales])) }



Product Sub-Category-Level Max Sales, Including Region: This finds the maximum sales value for each product sub-category while including the region dimension.

5)

LOD Expression: { INCLUDE [Region], [Sub-Category] : MAX([Sales]) }

prod max sales

×

{ INCLUDE [Region], [Sub-Category] : MAX([Sales]) }

,

SUM(prod max sales)

16,787

69,844

The calculation is valid.

1 Dependency ▾

Apply

OK

