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DA ASSIGNMENT – 4

I uploaded the Global Superstore dataset and Superstore dataset on the tableau desktop and created the following visualizations using basic calculations and lod expressions.

- **BASIC CALCULATIONS IN TABLEAU (Superstore dataset)**

1) Profit Margin by Product Sub-Category

- Drag "Sub-Category" to the Rows shelf and "Profit" and "Sales" to the Columns shelf.
- Create a calculated field with a formula like: $[\text{Profit}] / [\text{Sales}]$ to calculate the profit margin.
- Drag the calculated field to the Columns shelf to visualize the profit margin by sub-category.

Profit Margin



$[\text{Profit}] / [\text{Sales}]$

The calculation is valid.

1 Dependency ▾

Apply

OK

Visualization :

Place this Calculated field ,Sales,Profit on the "Rows " shelf and the "Sub-Category" on the "Columns" shelf to create the chart.



2) Sales Comparison by Product Category and Region:

The visualization will show the sales for each product category and region, colored by the percentage of sales. This visualization is useful for comparing sales across different product categories and regions.

✕

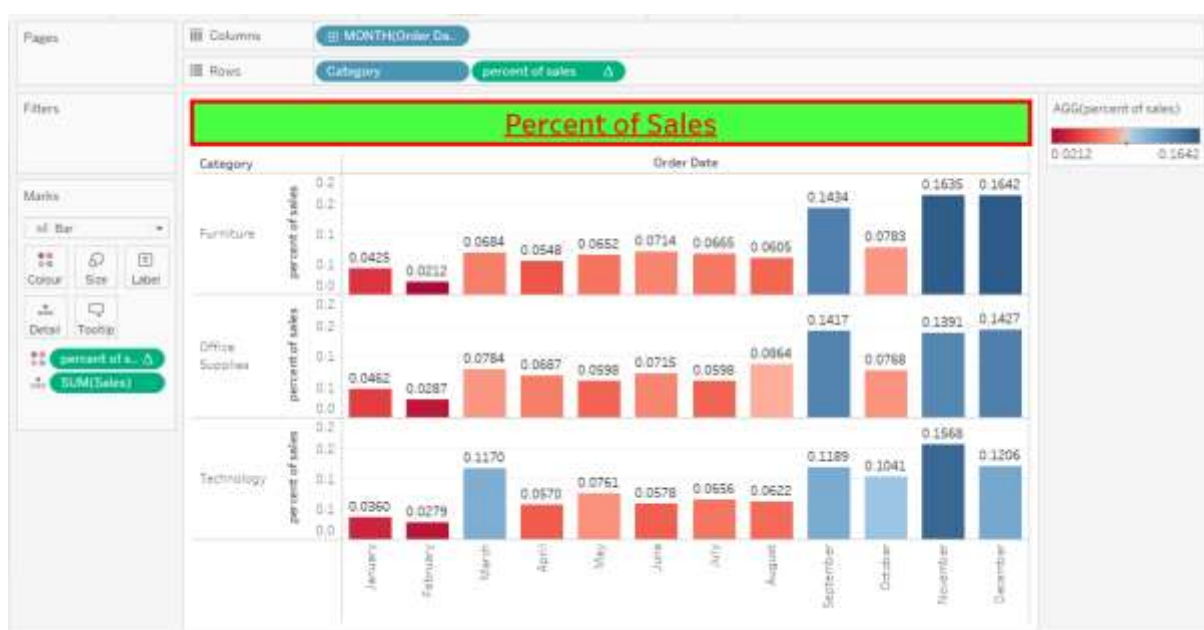
Totals summarise values from Table (across).
`SUM([Sales]) / TOTAL(SUM([Sales]))`

Default Table Calculation

The calculation is valid.
 1 Dependency ▼
 Apply
OK

Visualization :

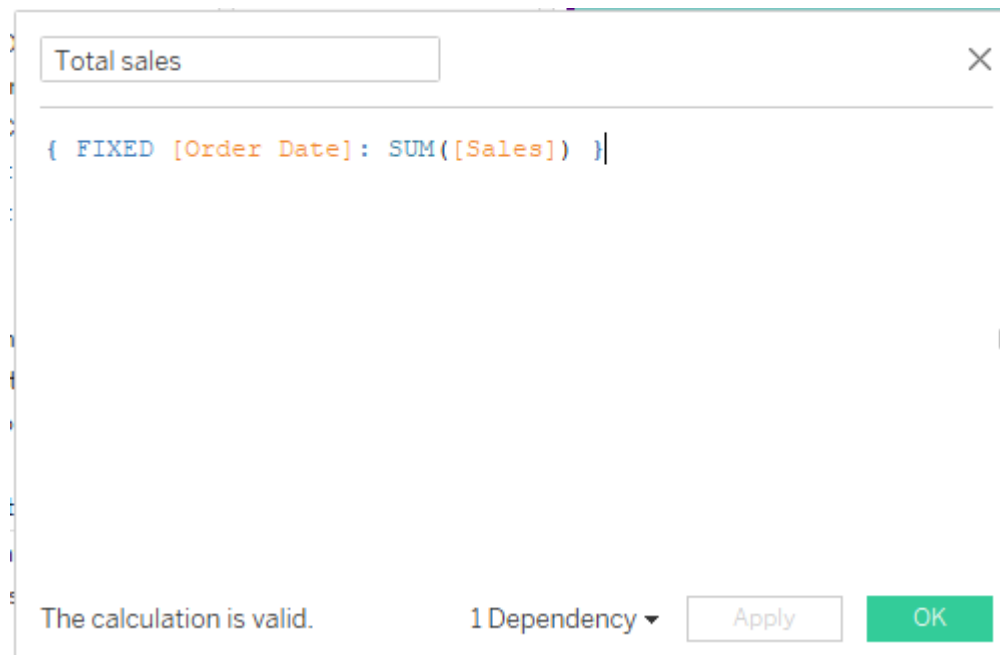
- Drag the Product Category field to the Rows shelf.
- Drag the Region field to the Columns shelf.
- Drag the Sales field to the Text shelf.
- Drag the Percent of Sales calculated field to the Color shelf.



- **LOD EXPRESSIONS IN TABLEAU (Global Superstore dataset)**

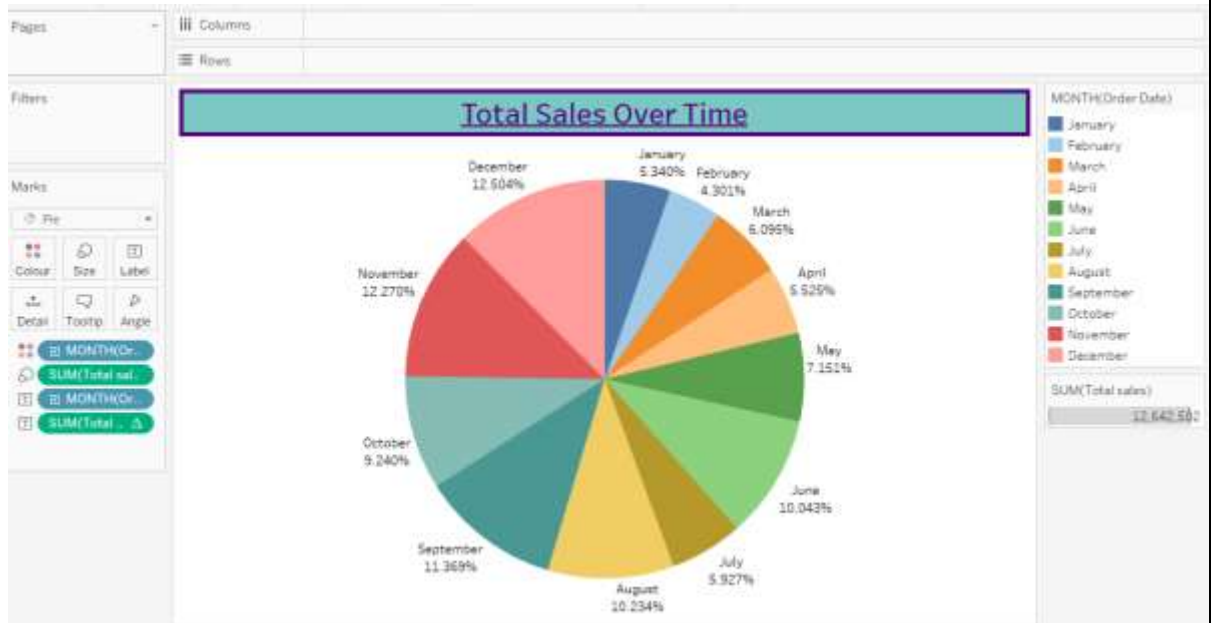
1) Calculating the Running Total Sales Over Time

To create a chart that shows the running total of sales over time, you can use an LOD expression to ignore the date dimension and calculate the cumulative sales:



Visualization :

Place this calculated field on the "Columns" shelf and the "Order Date" on the "Rows" shelf to create the pie chart. Order Date(Month) is added to color as well as labels . The Total Sales is displayed as percent of total instead of the actual number.



2) Calculating Market Share by Product Sub-Category

Suppose we want to visualize the market share of each product sub-category within its respective category. We can use an LOD expression to calculate the market share:

market share

`[Sales] / { FIXED [Category]: SUM([Sales]) }`

The calculation is valid.

1 Dependency ▼

Apply

OK

Visualization :

Place this calculated field on the "Rows" shelf and the "Category" and "Sub-Category" on the "Columns" shelf to create the column chart. Sub-Category is added to the color. The Market share is displayed as the labels.



3) Customer order frequency

Finding the number of orders each customer has made is relatively easy, but what if we wanted to know the number of customers who made one order, two orders, three orders, and so forth? To build this view, we must break up the number of customers by the number of orders made.

✕

```
{ FIXED [Customer ID] : COUNTD([Order ID]) }
```

The calculation is valid.
1 Dependency ▾
Apply
OK

VISUALIZATION :

- Bring Count Distinct of Customer ID to Rows and Color.
- Drag the Number of Orders per customer from Measures to Dimensions.
- Bring the Number of Order per Customer to Columns.



4) Sales by Subcategory.

exclude sub-cat



```
{ EXCLUDE [Sub-Category] : SUM([Sales]) }
```

The calculation is valid.

1 Dependency ▾

Apply

OK

Visualization :



5) Sales by Market

exclude exp



```
{ EXCLUDE [Market] : SUM(Sales) }
```

The calculation is valid.

1 Dependency ▾

Apply

OK

Visualization :

