Charts and Plots in Power-BI

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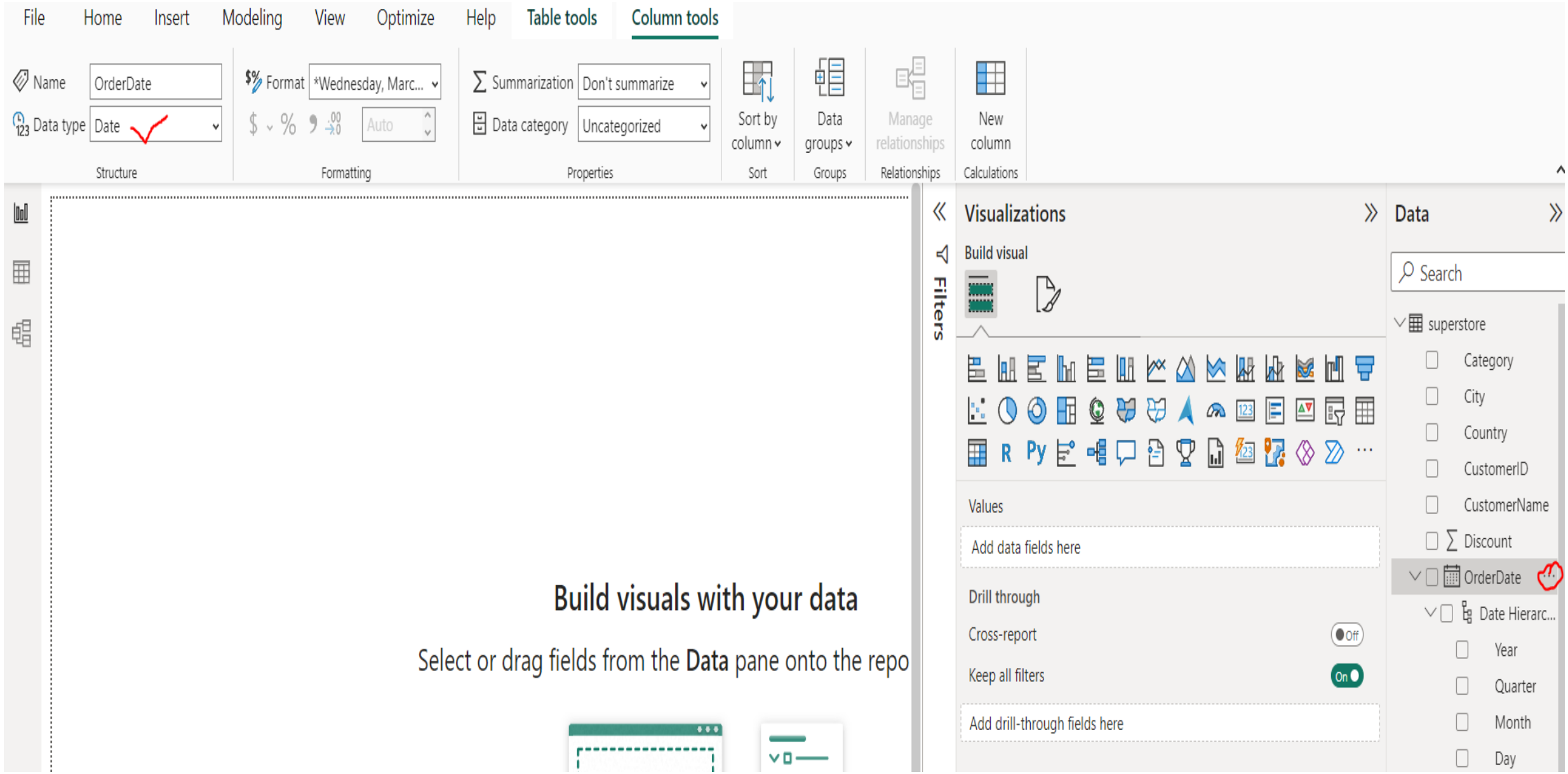
YouTube: https://youtube.com/@shekhar1605?si=wDlorRovkMmeFosR

GitHub: https://github.com/Purnendu16/Analytics

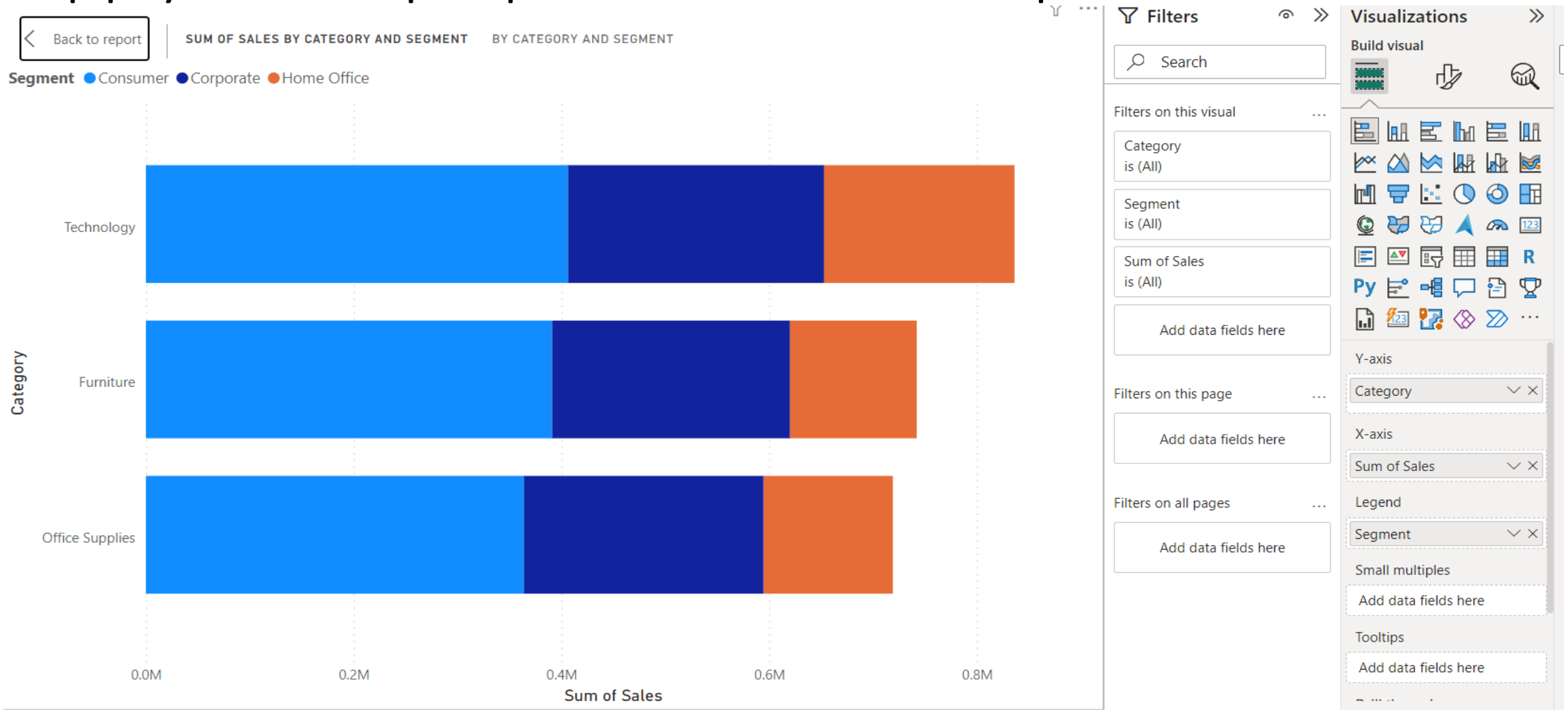
Convert OrderDate from Text to Date and then expand



Fields and their values

1) If you are using Legends then don’t use Secondary y axis.
2) Secondary y axis will take Continuous values and when u use it don’t use Legends and legends will always take Categorical data.
3) In Y axis and in Secondary Y-axis use Continuous Data (Metric) and in Legends use Categorical data(Non-Metric).
4) In Small Multiples we will take Categorical data.
5) Legends will bifurcate a single chart in different regions suppose where as Multiples will bifurcate the charts in multiple sub graphs region wise.
6) Tooltips allow you to display additional information or details about a data point when a user hovers over it. This can include numerical values, percentages, or any other relevant details.
7) So Tooltips can be for both metric(Continuous data) and non-metric data (Categorical data).

Create Stacked Bar Chart with Y-axis as Category, X-Axis as Sum of Sales, Legend as Segment and apply all the properties learned in previous class.



Create 2 Cards: 1) Sum of Quantity 2) Sum of Sales

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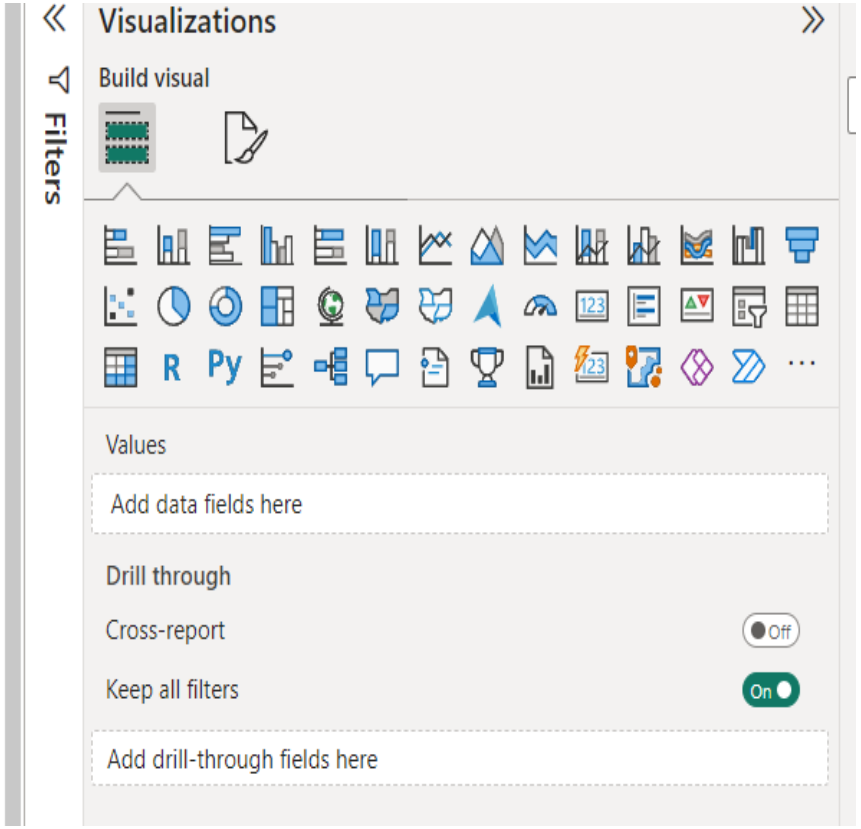
38K

Sum of Quantity

2.30M

Sum of Sales



Create a KPI for Values as Sum of Profit and trend axis as Year

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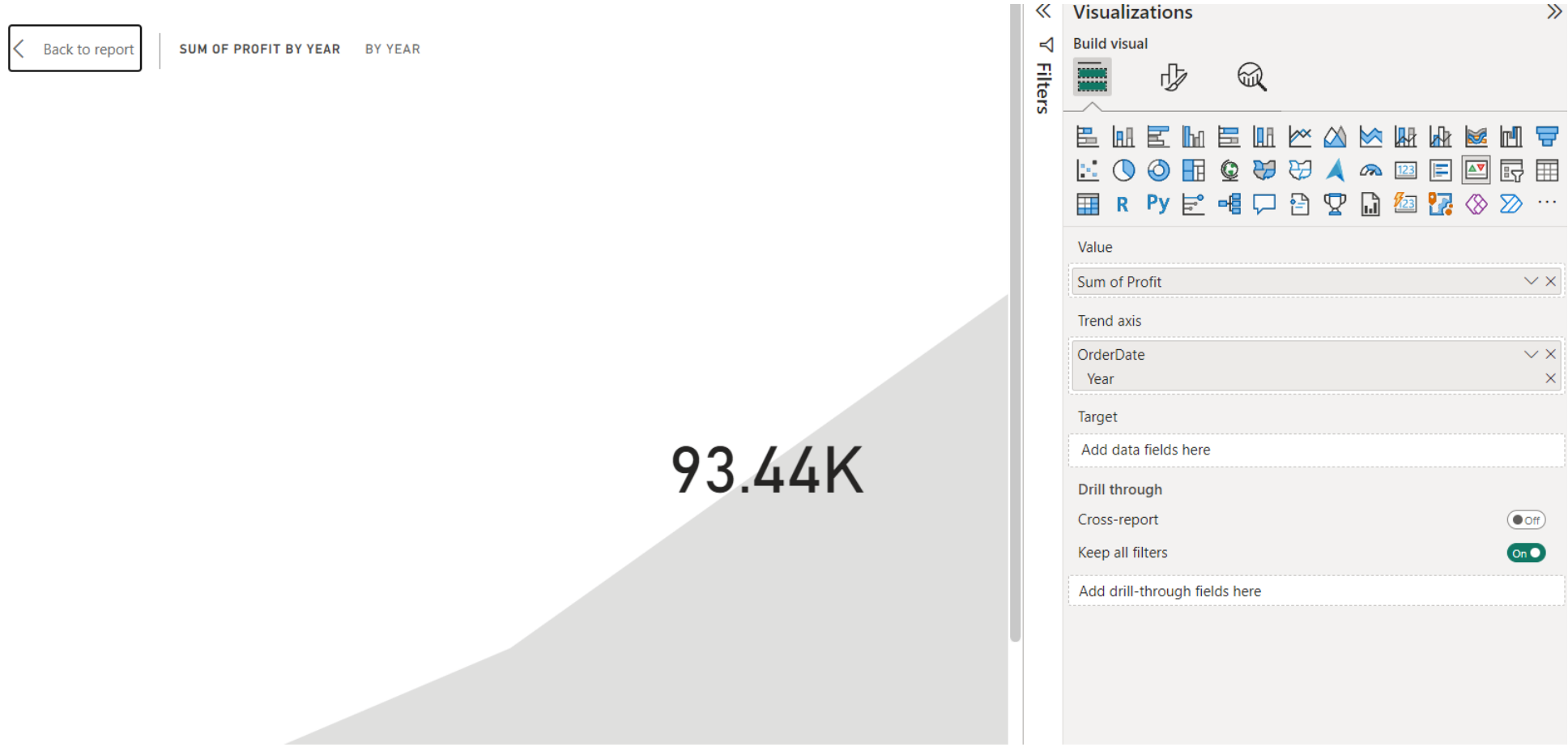

Create a Matrix, with Rows as Category, Column as OrderDate(Year) and values as Sum of Profit and Sum of Sales.

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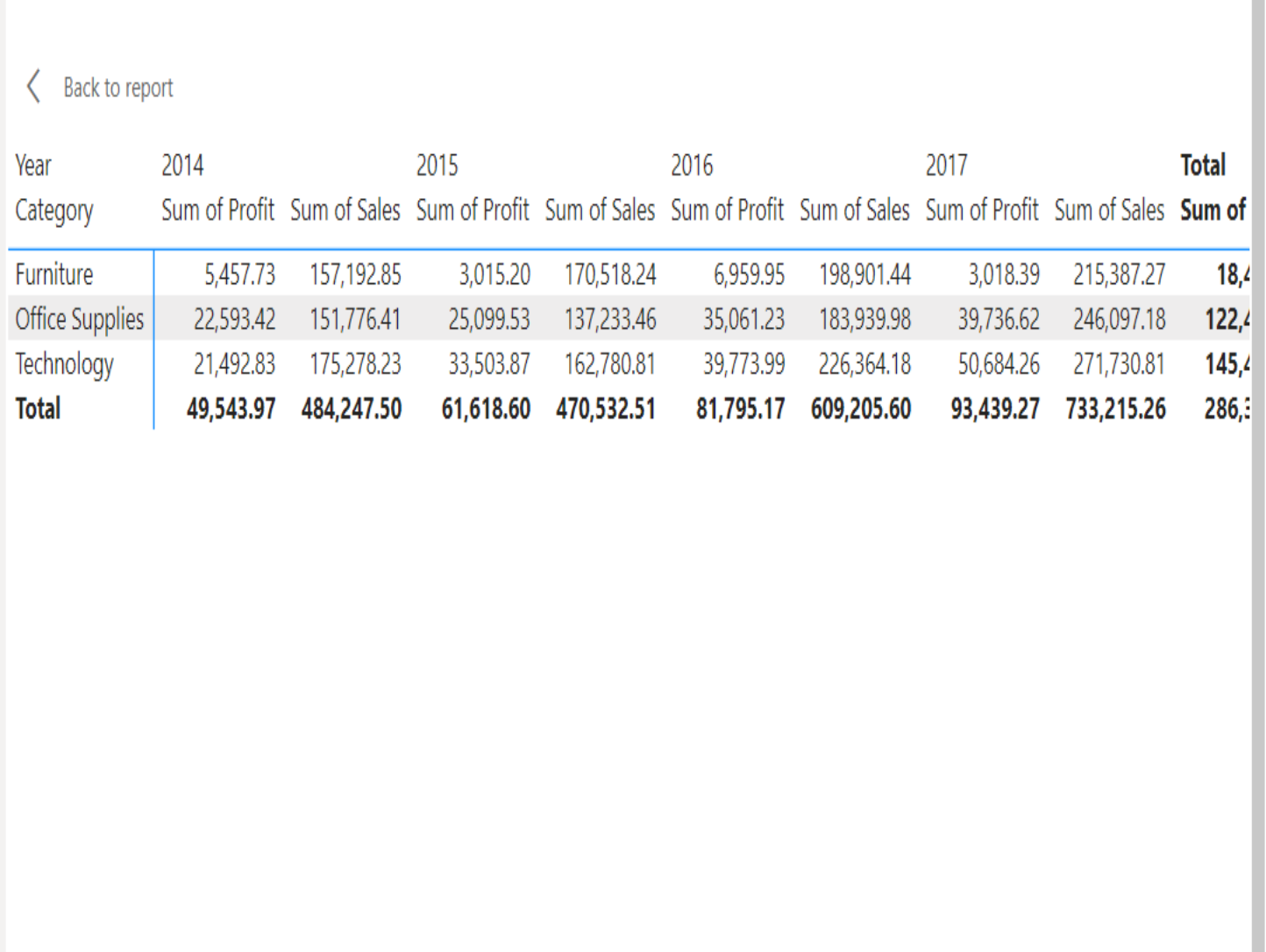
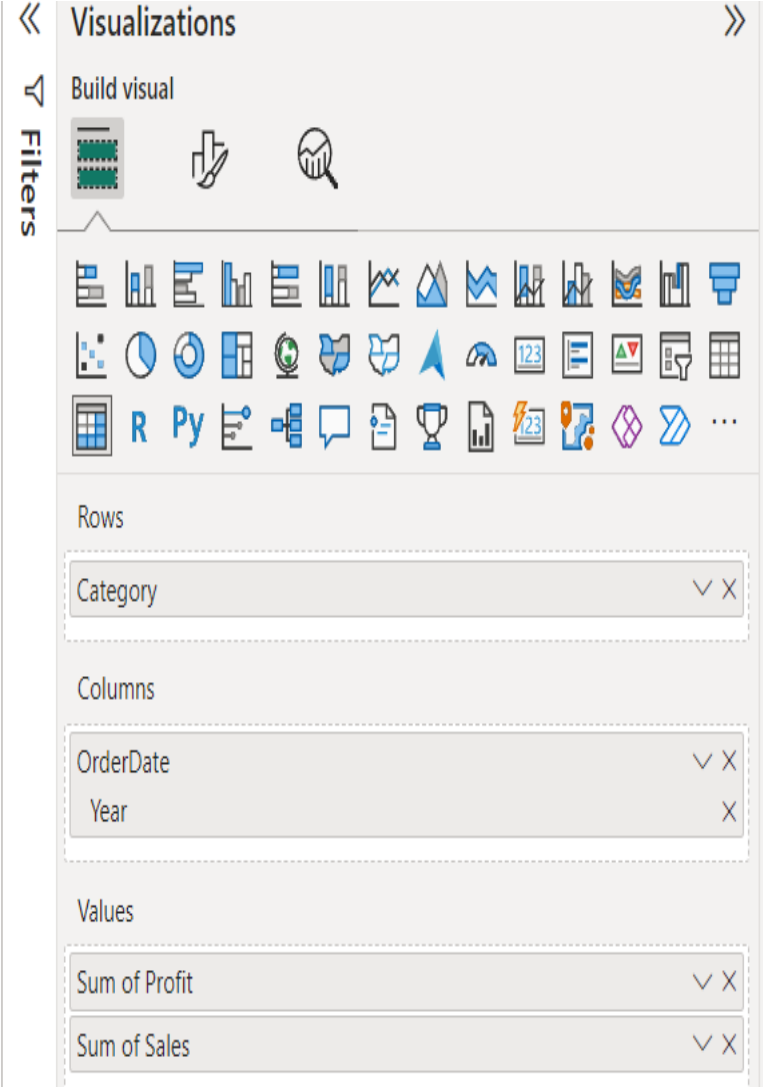


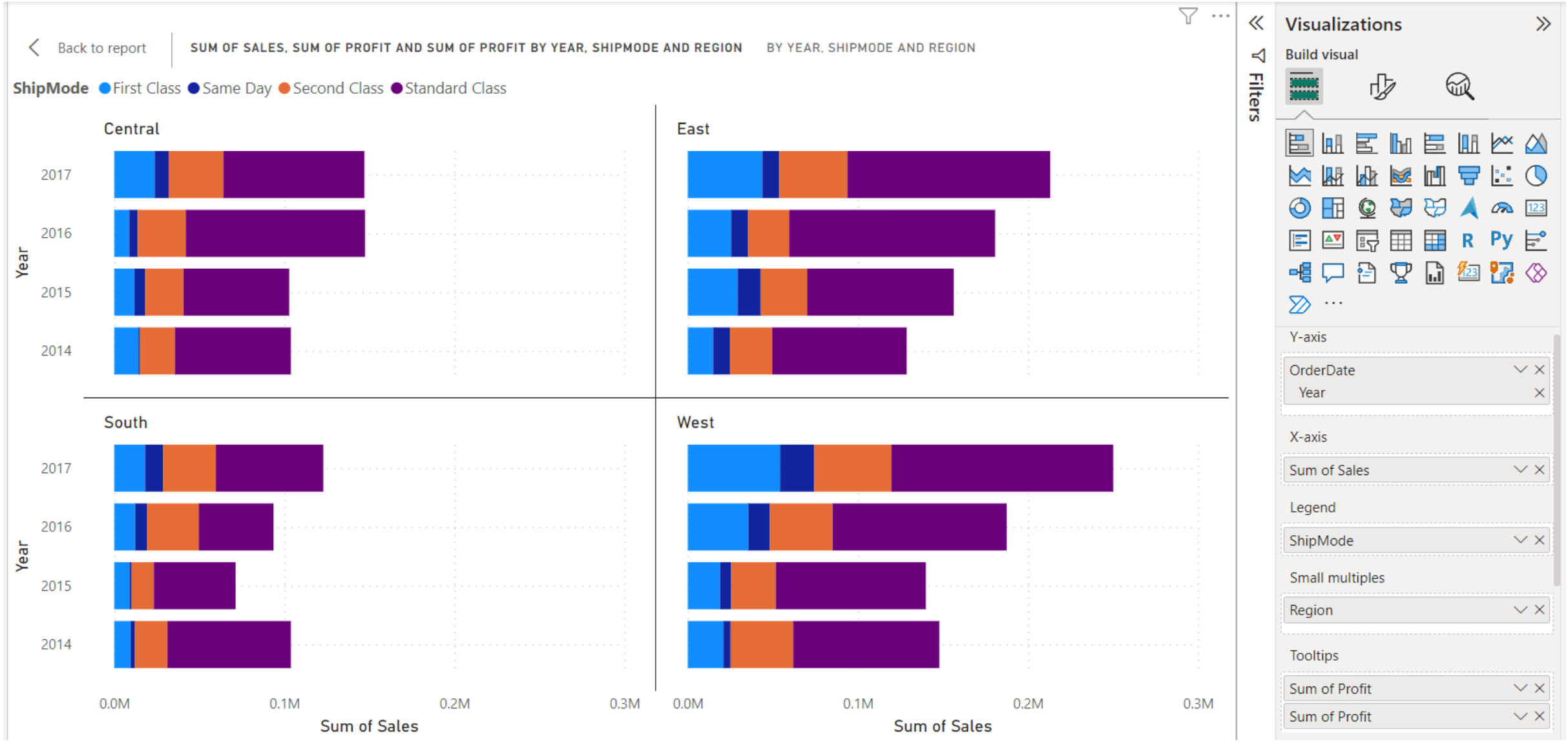
Year	2014		2015		2016		2017		Total
Category	Sum of Profit	Sum of Sales	Sum of Profit	Sum of Sales	Sum of Profit	Sum of Sales	Sum of Profit	Sum of Sales	Sum of
Furniture	5,457.73	157,192.85	3,015.20	170,518.24	6,959.95	198,901.44	3,018.39	215,387.27	18,4
Office Supplies	22,593.42	151,776.41	25,099.53	137,233.46	35,061.23	183,939.98	39,736.62	246,097.18	122,4
Technology	21,492.83	175,278.23	33,503.87	162,780.81	39,773.99	226,364.18	50,684.26	271,730.81	145,4
Total	**49,543.97**	**484,247.50**	**61,618.60**	**470,532.51**	**81,795.17**	**609,205.60**	**93,439.27**	**733,215.26**	**286,3**



Create a Matrix, with Rows as Category, Column as OrderDate(Year & Month) and values as Sum of Profit and Sum of Sales, and then drill up and drill down.

Create a stacked bar chart of Year wise sum of sales with categorical input of ShipMode and further has more input of Sum of Profit and Sum of quantity.

Create a stacked bar chart of Year wise sum of sales with categorical input of ShipMode and include small multiples of region further add more information Sum of Profit and Sum of quantity.



Create a stacked column chart of Year wise sum of sales with categorical input of region further add more information Sum of Profit and Sum of quantity.

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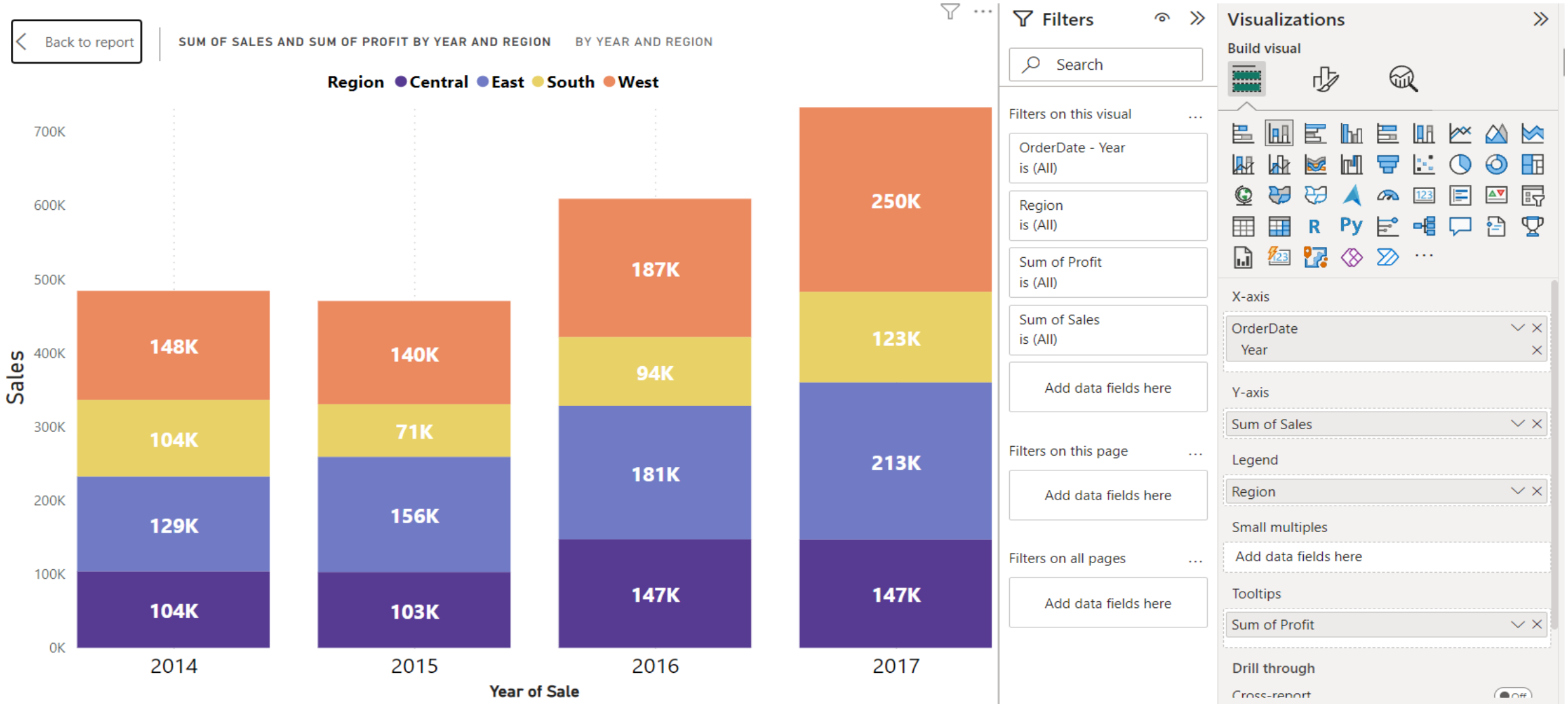

Create a Area chart of Year wise sum of sales with secondary input of Sum of Profit further add more information in ToolTips Sum of Profit and Sum of quantity and see whether graph changes?

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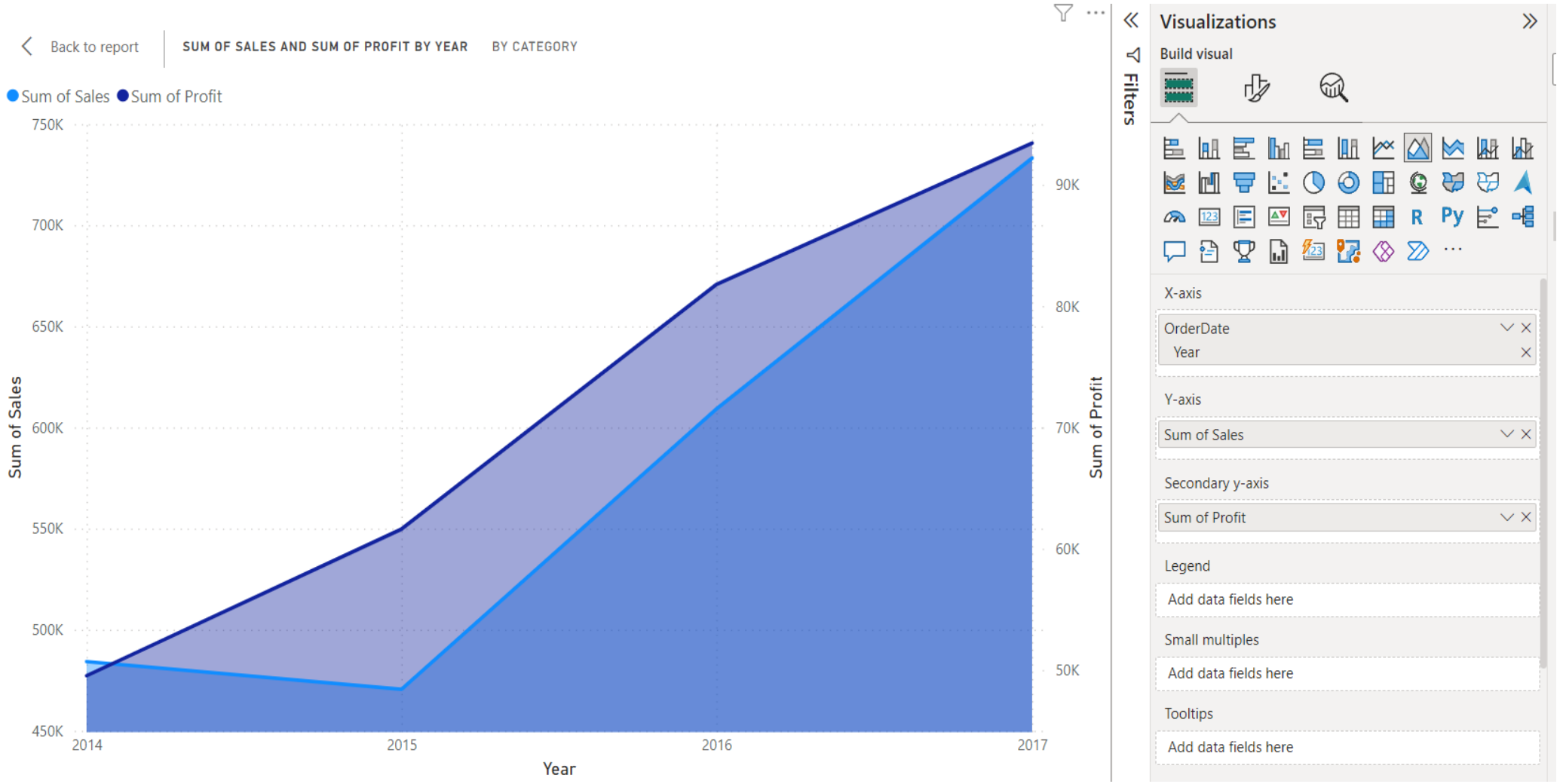

Create a stacked area chart of Year wise sum of sales, Average of Profit with small multiples input of region further add more information Sum of Profit and Sum of quantity.

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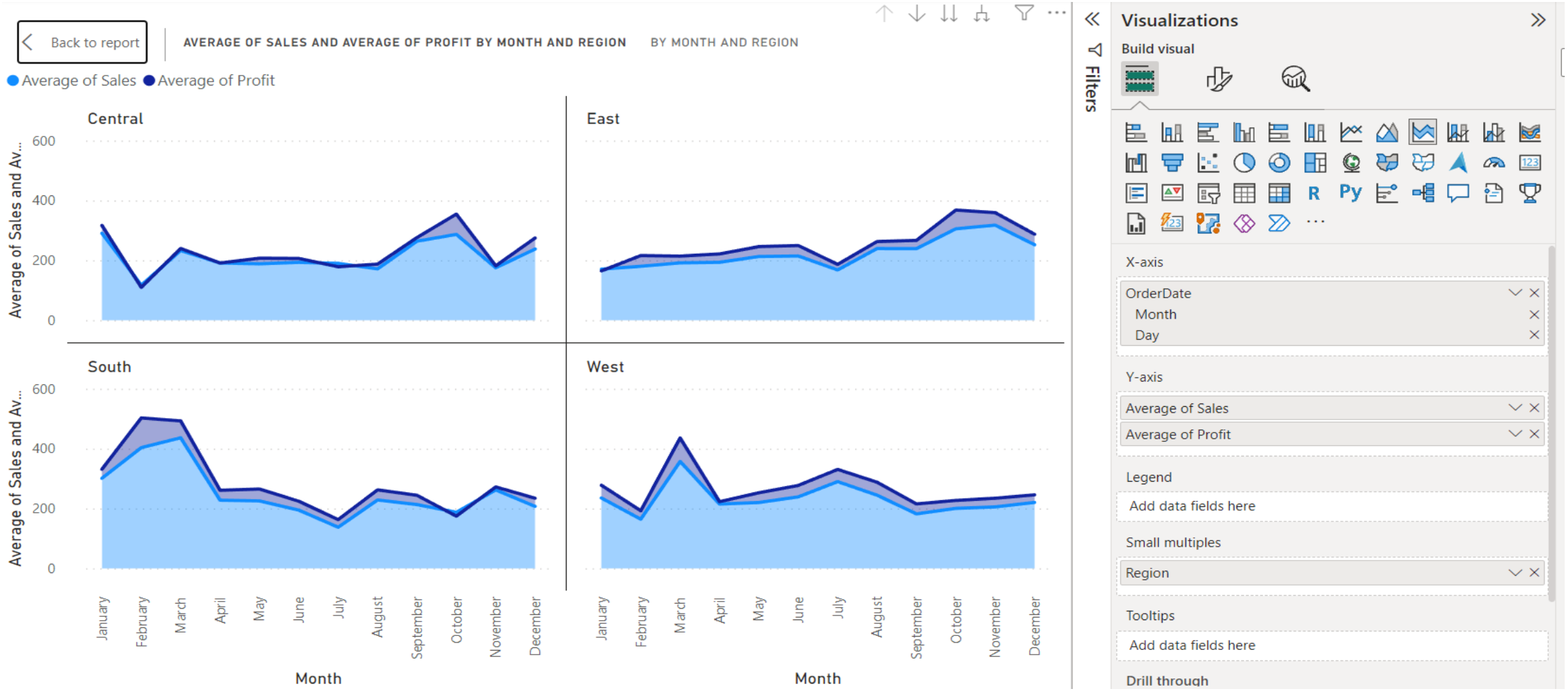

Create a line and stacked column chart of Year wise(order date(year) Vs [sum of sales(column), line y-axis input (sum of Profit)]and column legend (region).

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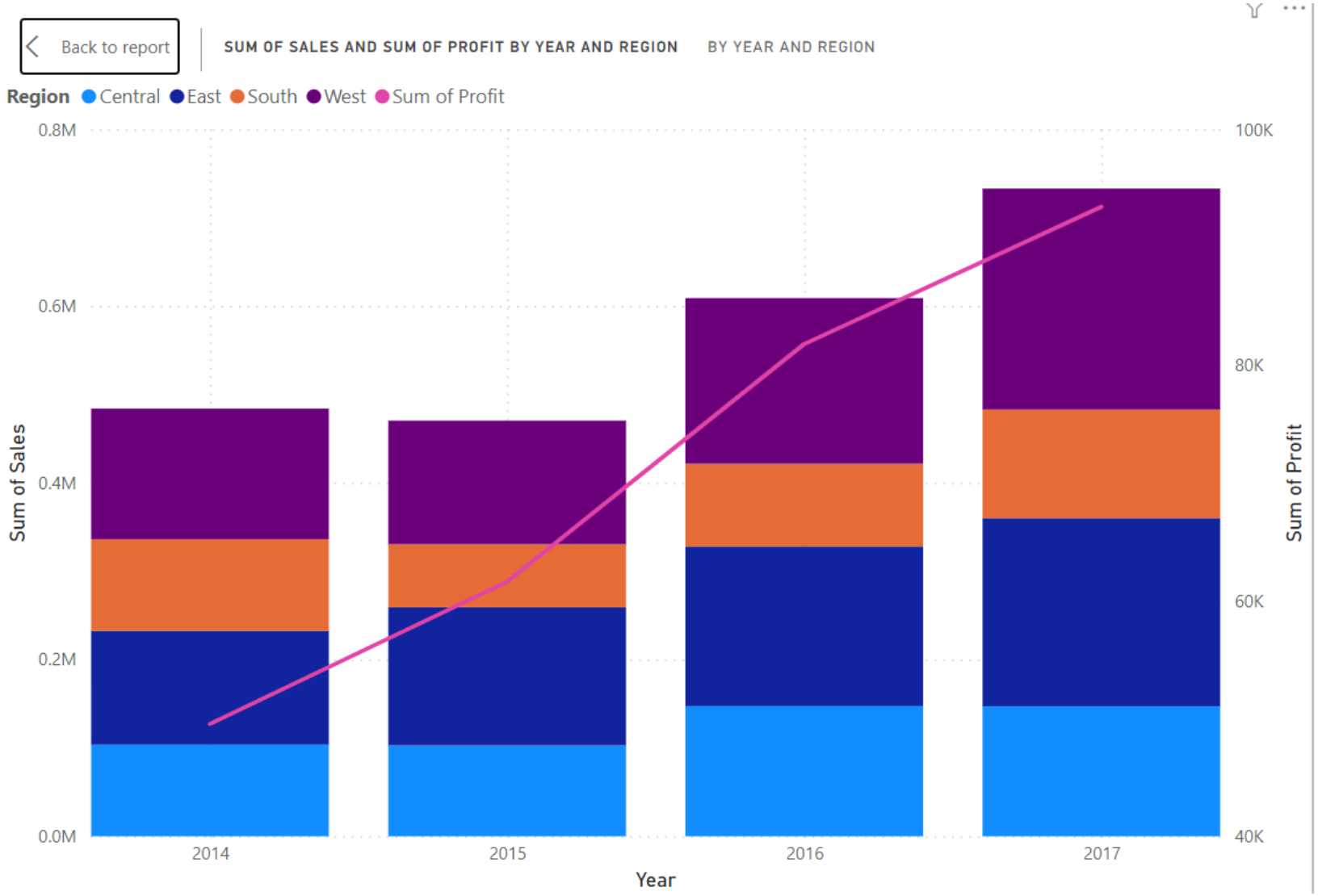

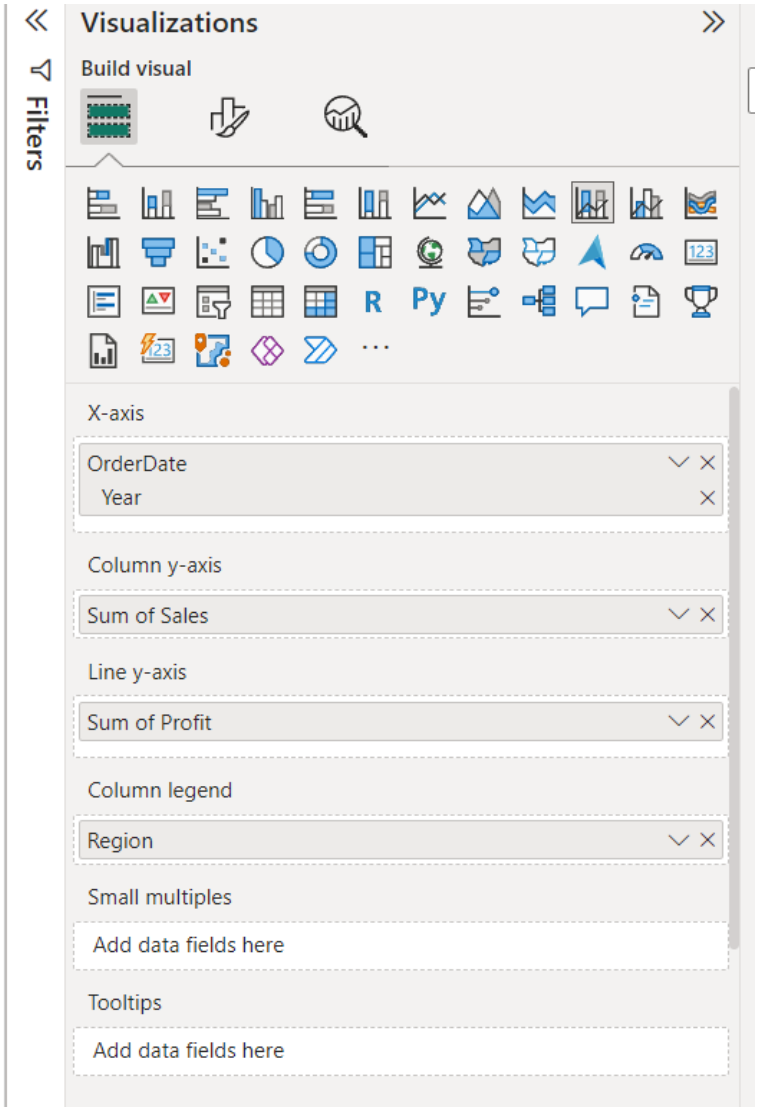

Create a line and stacked column chart of Year wise(order date(year) and ShipDate(Month)) Vs [sum of sales(column), line y-axis input (sum of Profit)]and column legend (region).

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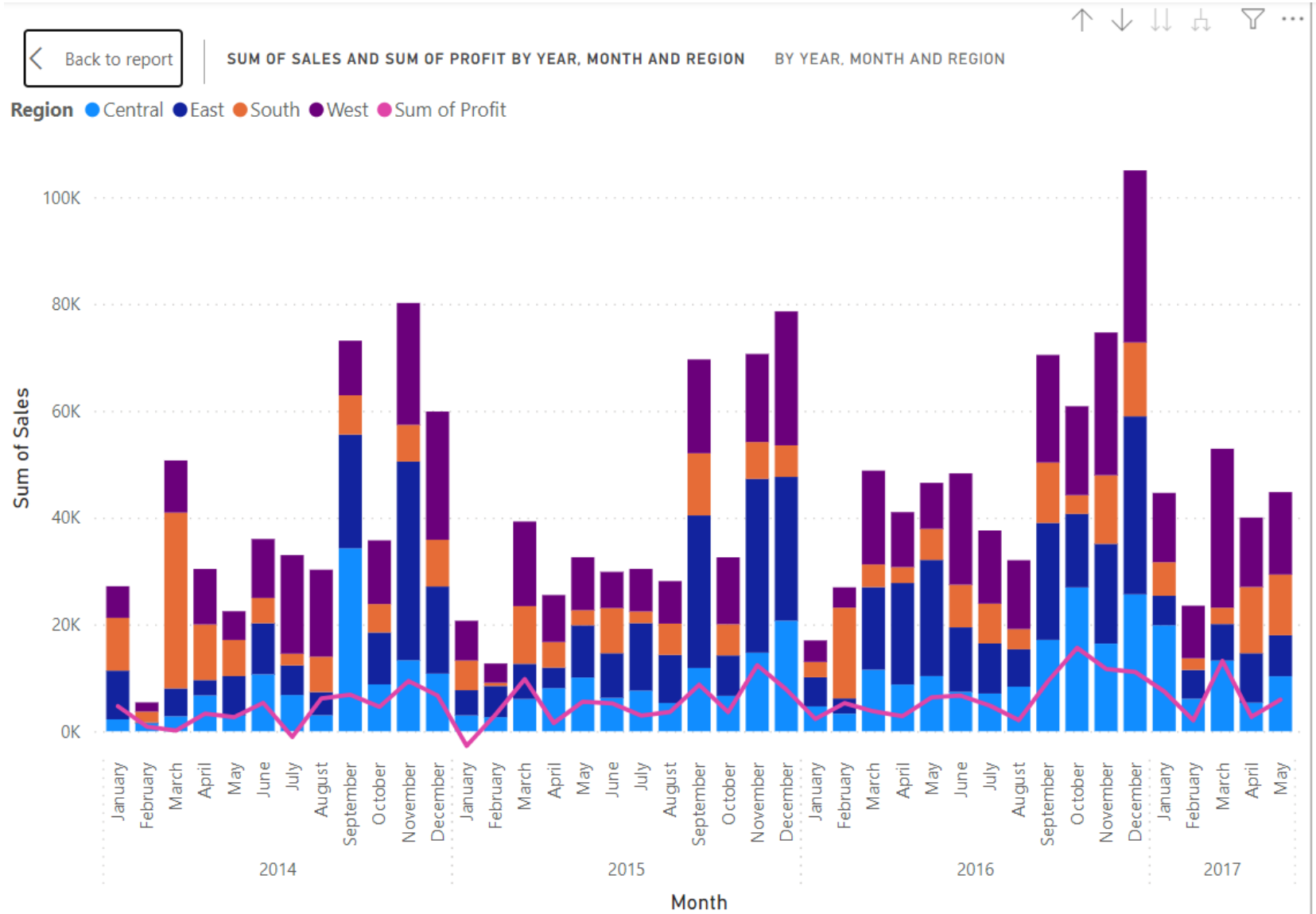

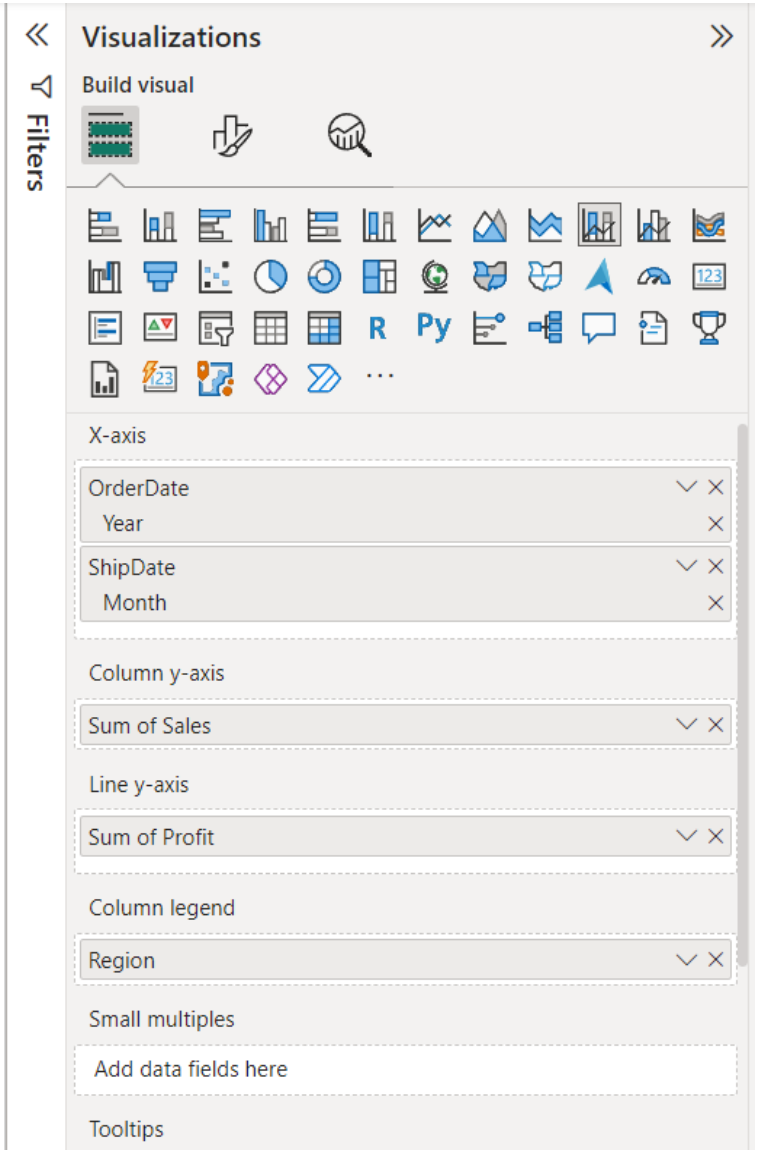

Create a Ribbon chart of order date Vs sum of sales, legend (region).

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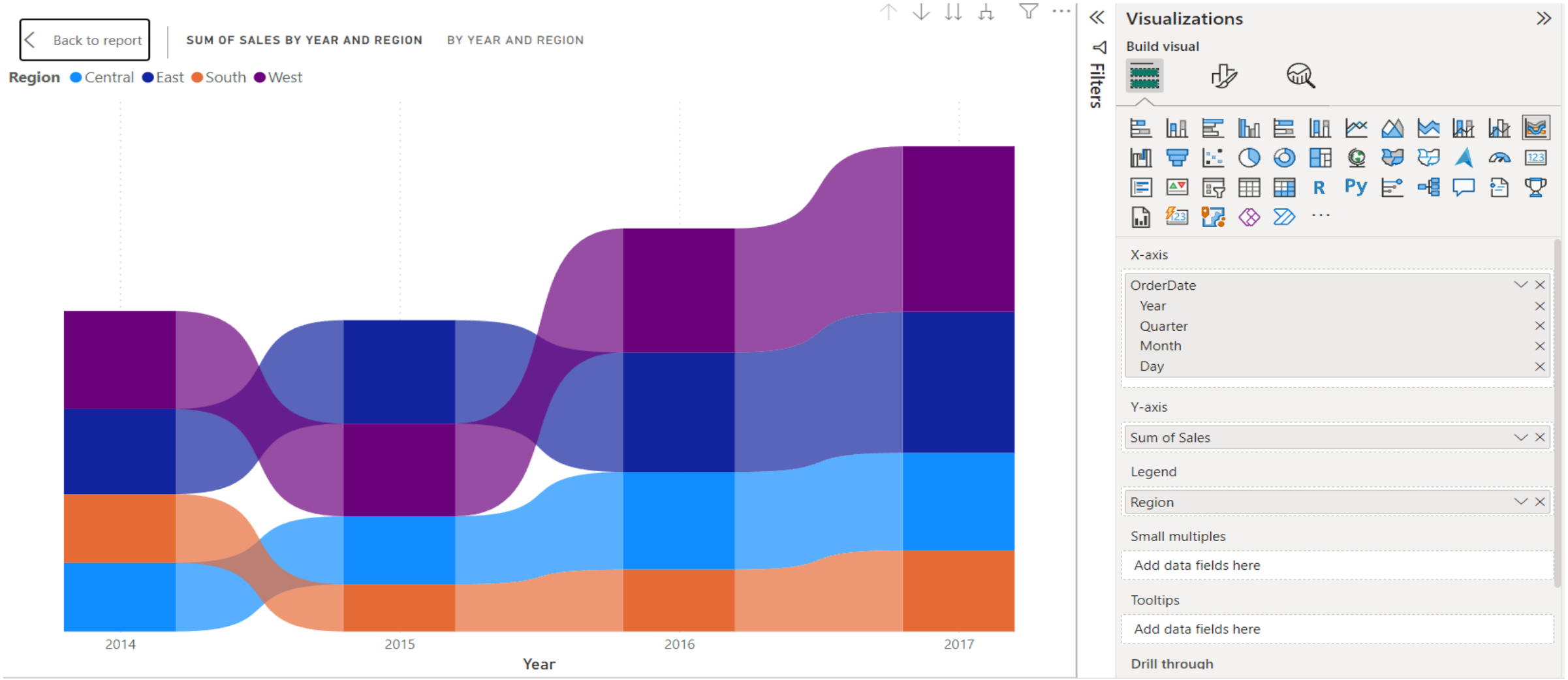
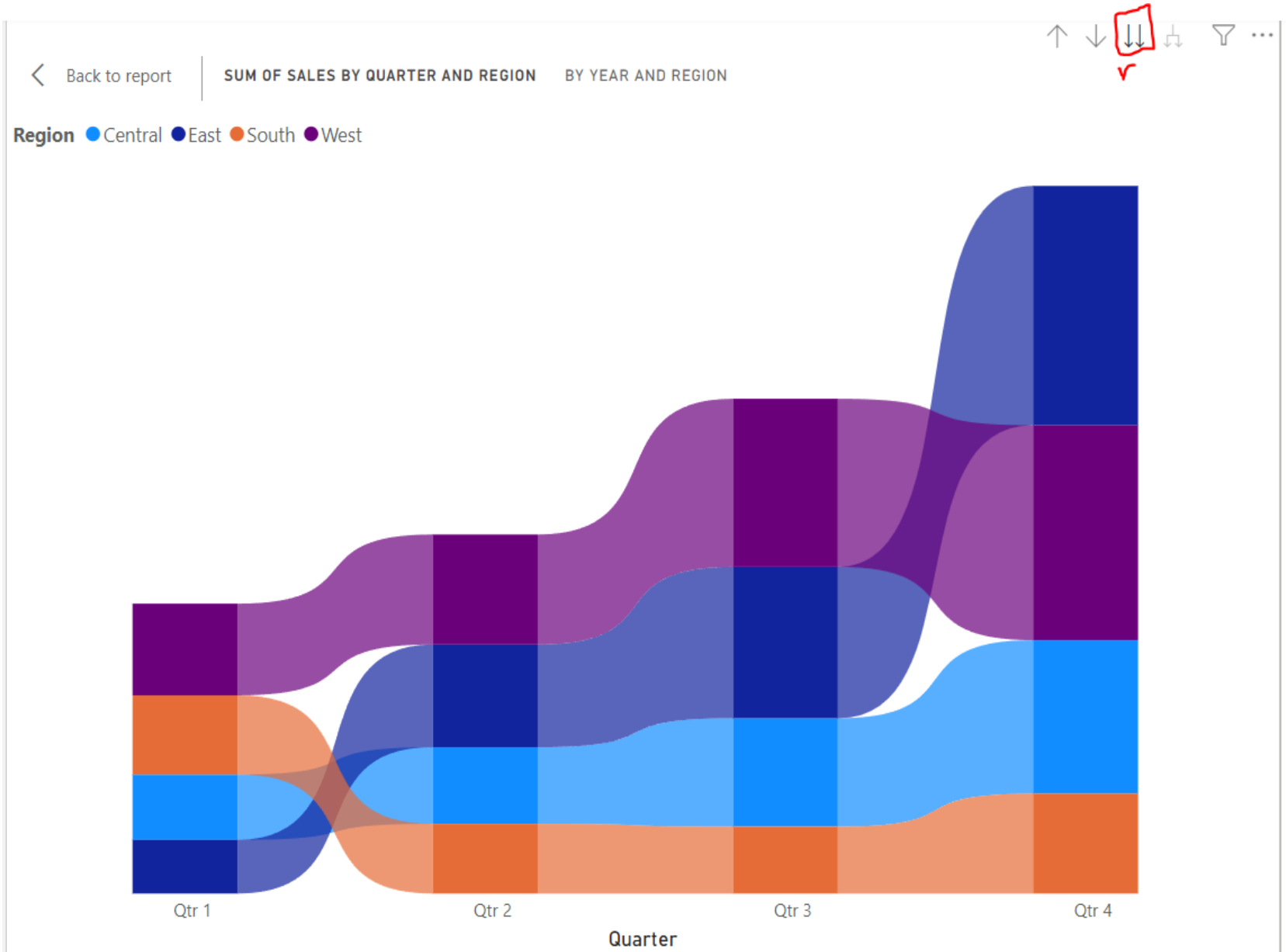
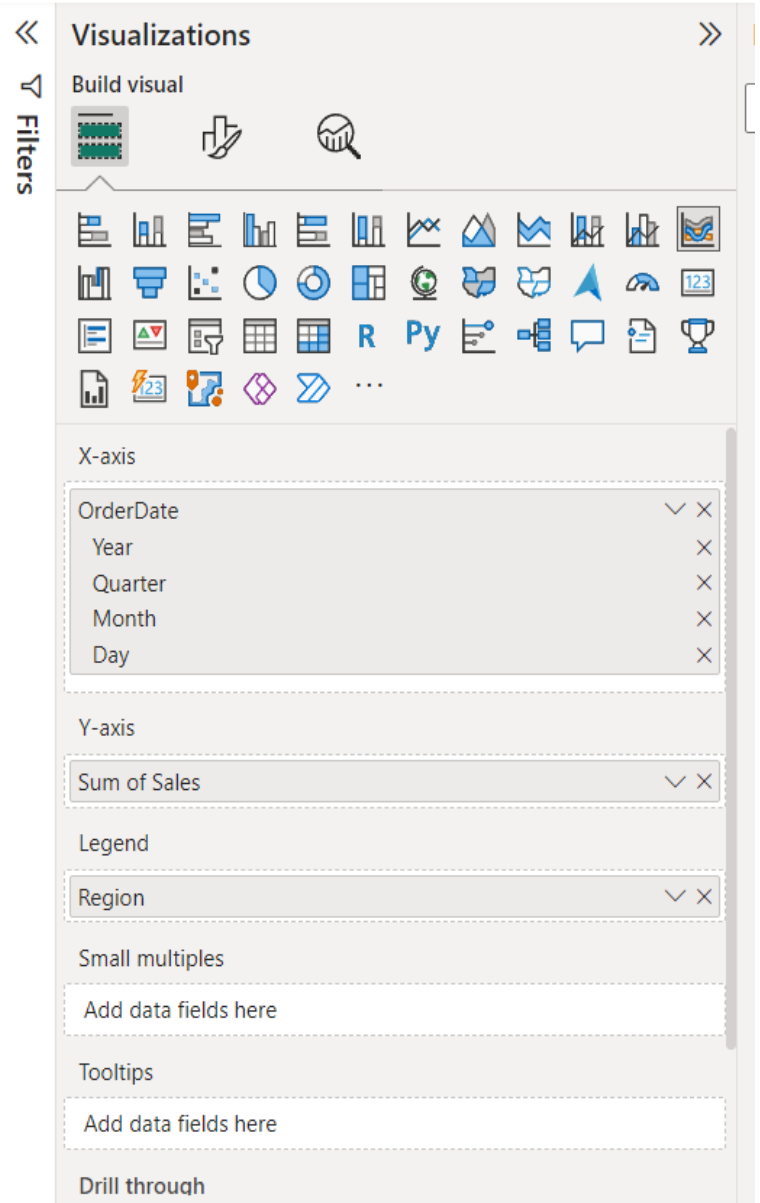


Now Drill it down to Quarter wise, month wise and then datewise and even analyse.





Create a waterfall chart of Category OrderDate, Breakdown it with ShipDate and Y-axis as Sum of Sales.

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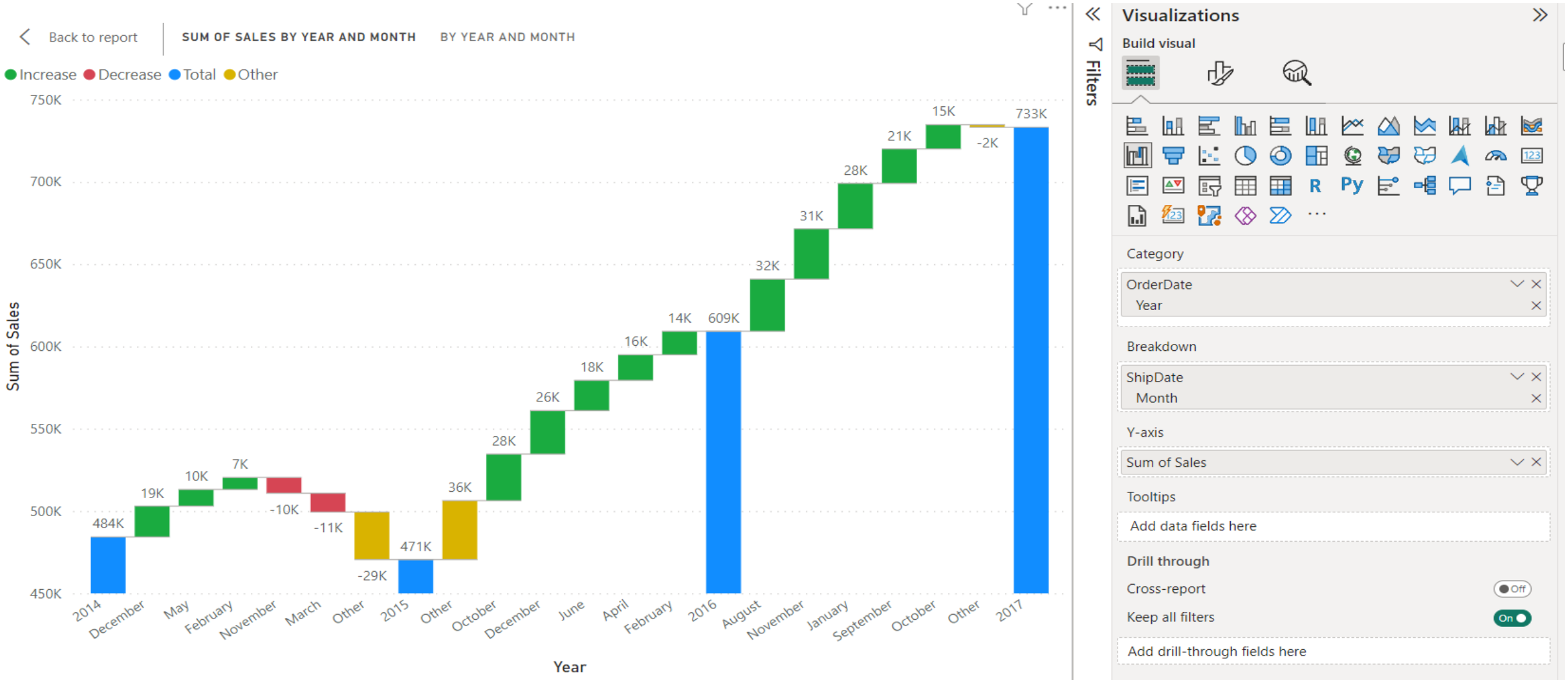

Create a Pie chart having Legend as region Values as Sum of Sales

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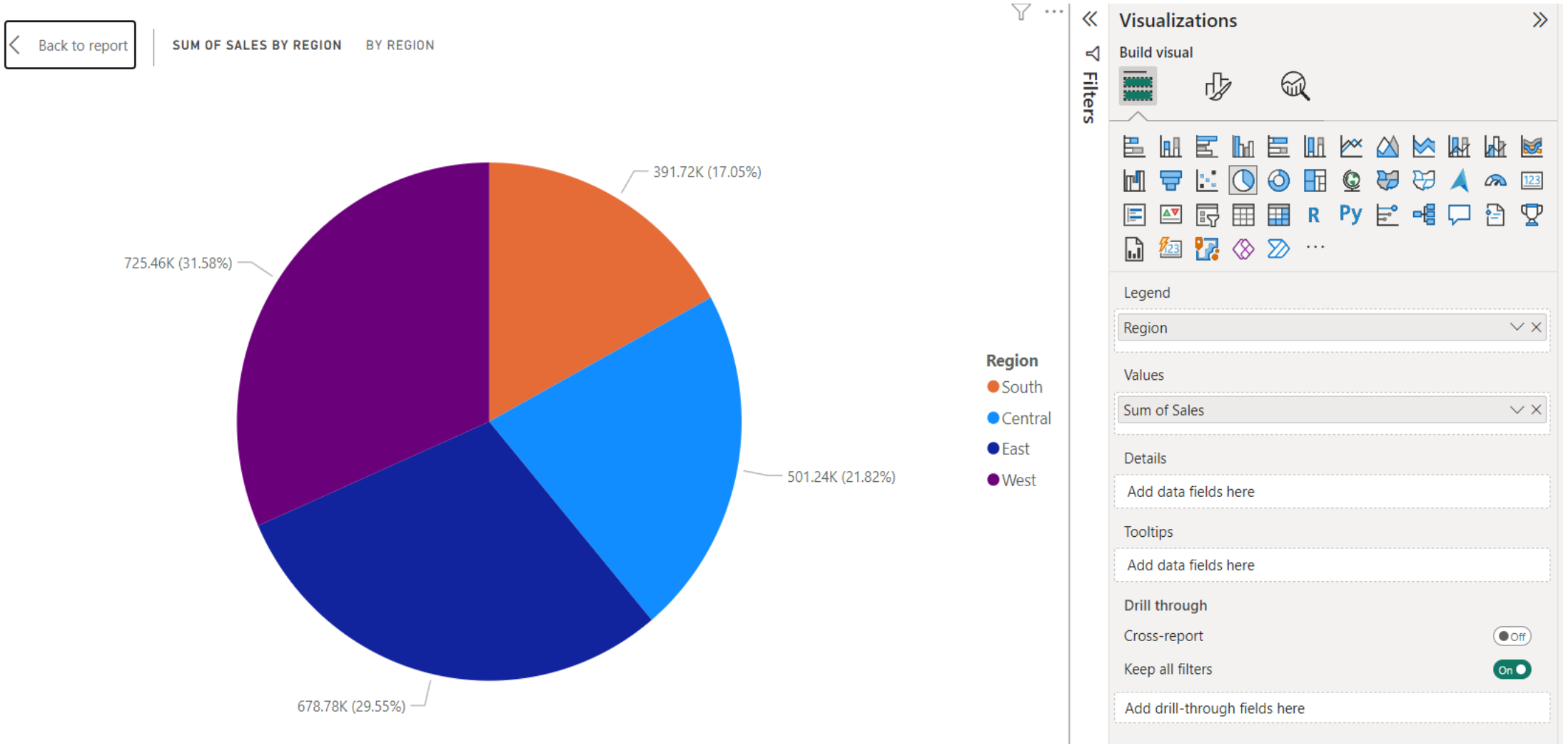
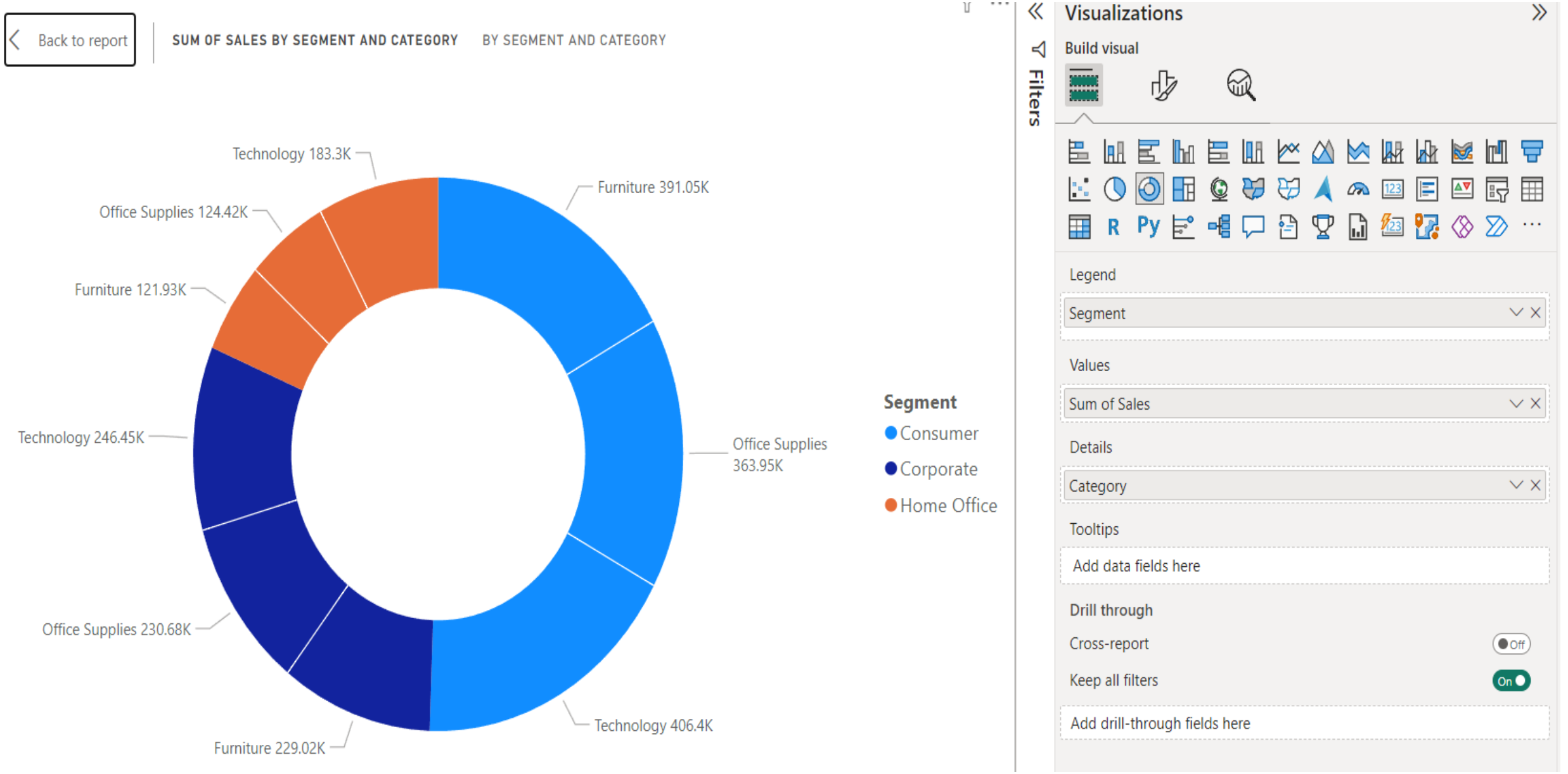


Create a Donut chart having Legend as Segment, Values as Sum of Sales, and Details as Category

Create a Pie chart having Legend as Segment, Values as Sum of Sales, and Details as Category



Create a Funnel chart having Category as Segment and Values as Sum of Sales

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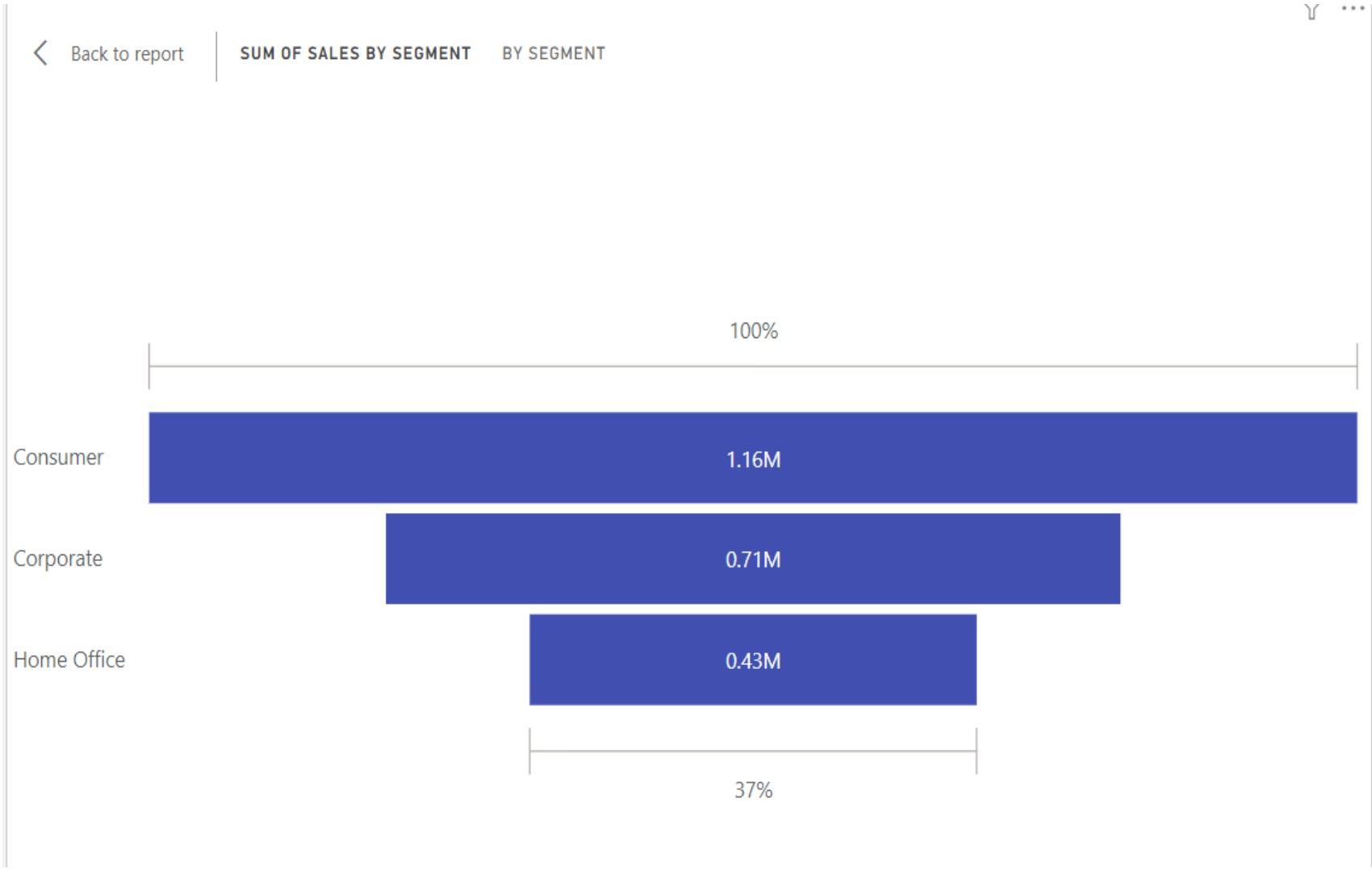
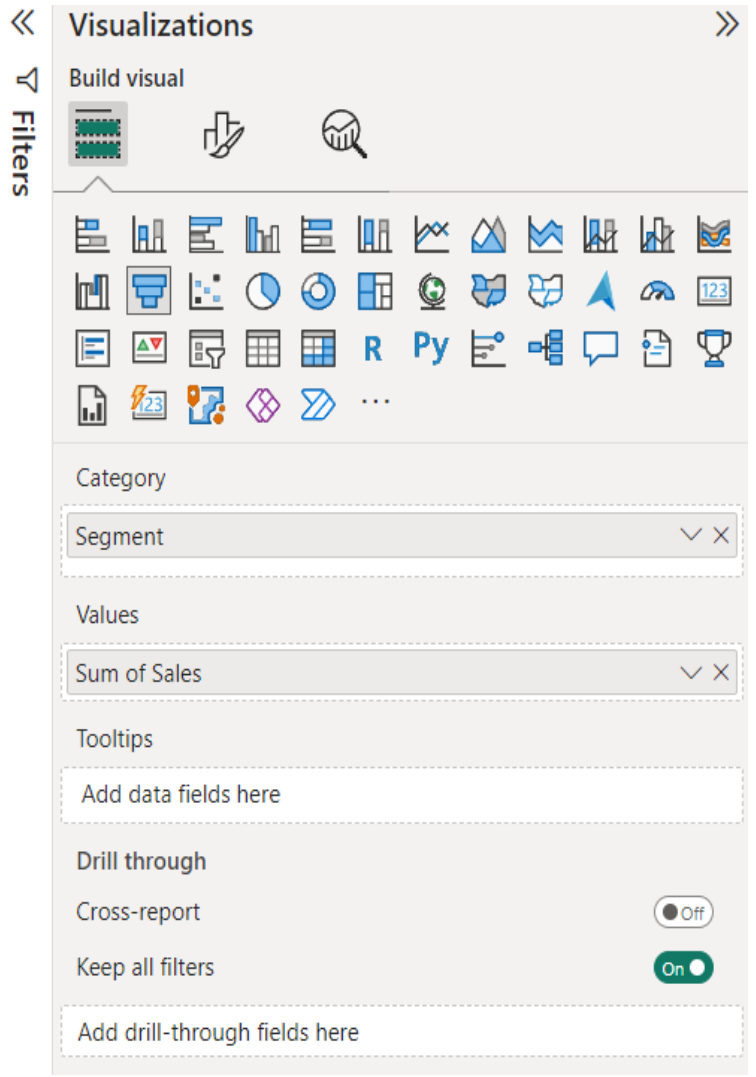
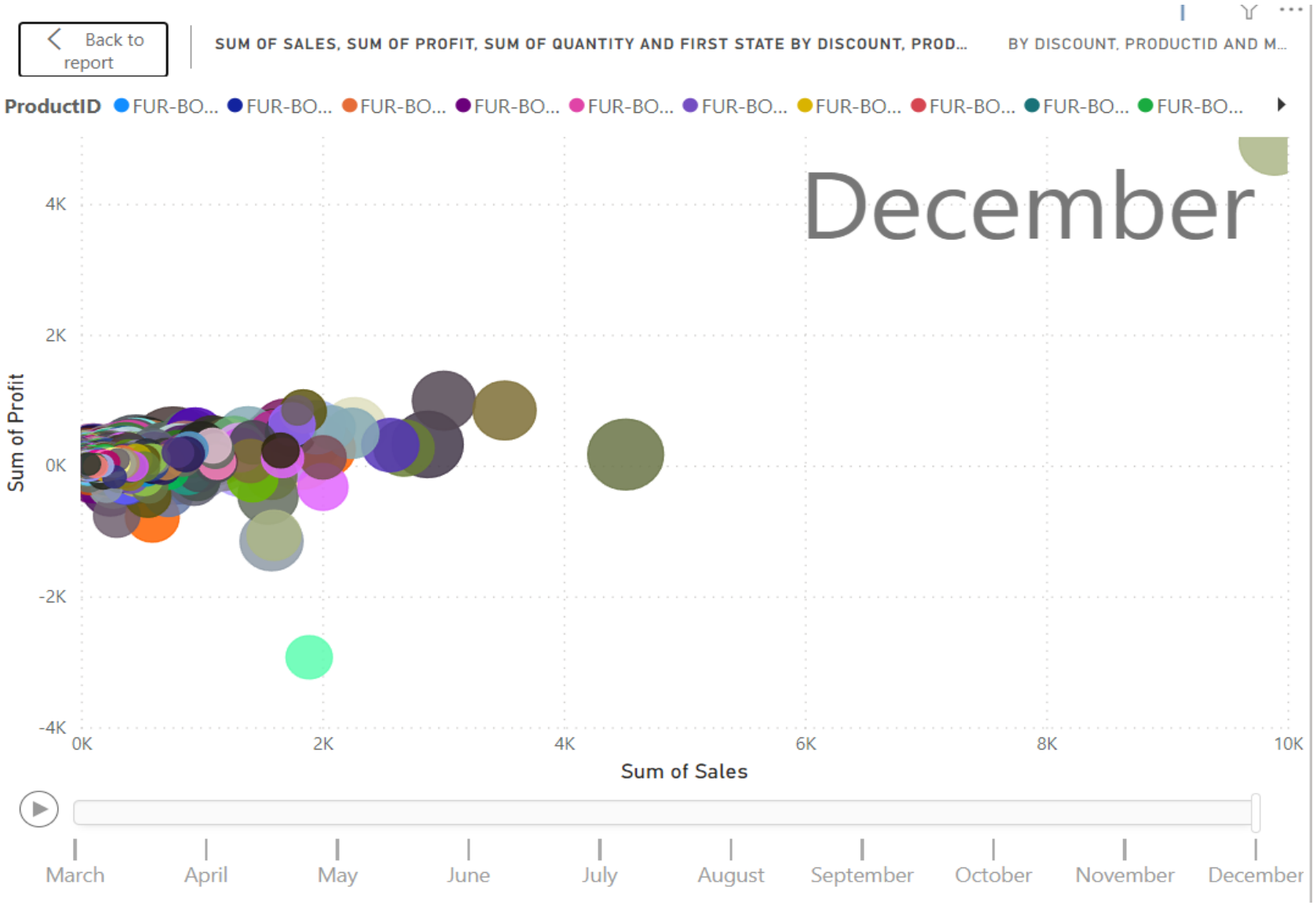
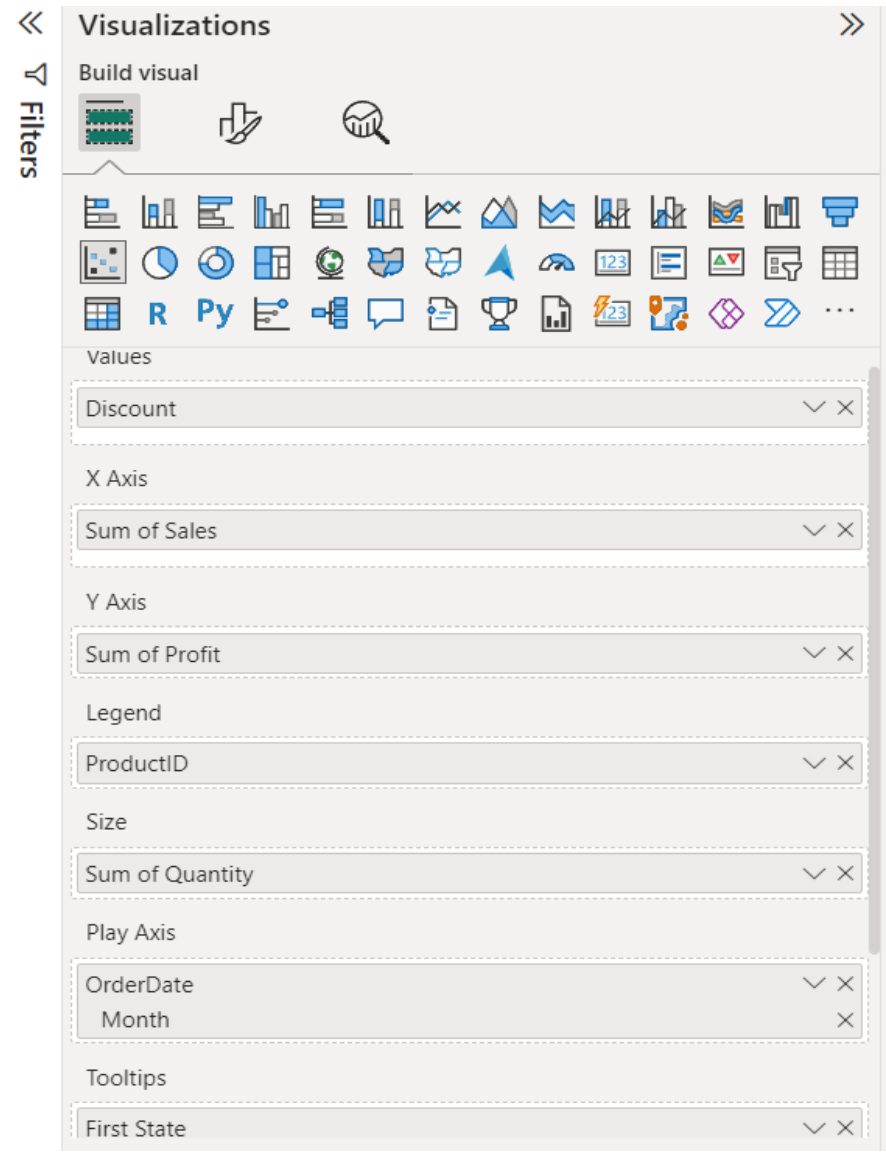




Create a Scatter plot having Values as Discount and X-axis as Sum of Sales, Y Axis as Sum of Profit, Legend as ProductID, Size as Sum of Quantity, Play Axis as OrderDate(Month), Tooltips (State)

Create a Scatter plot having Values as Discount and X-axis as Sum of Sales, Y Axis as Sum of Profit, Legend as ProductID, Size as Sum of Quantity, Play Axis as OrderDate(Month), Tooltips (State)





Create a TreeMap having Category as ProductName, Values as Sum of Sales and Tooltips as Sum of Profit

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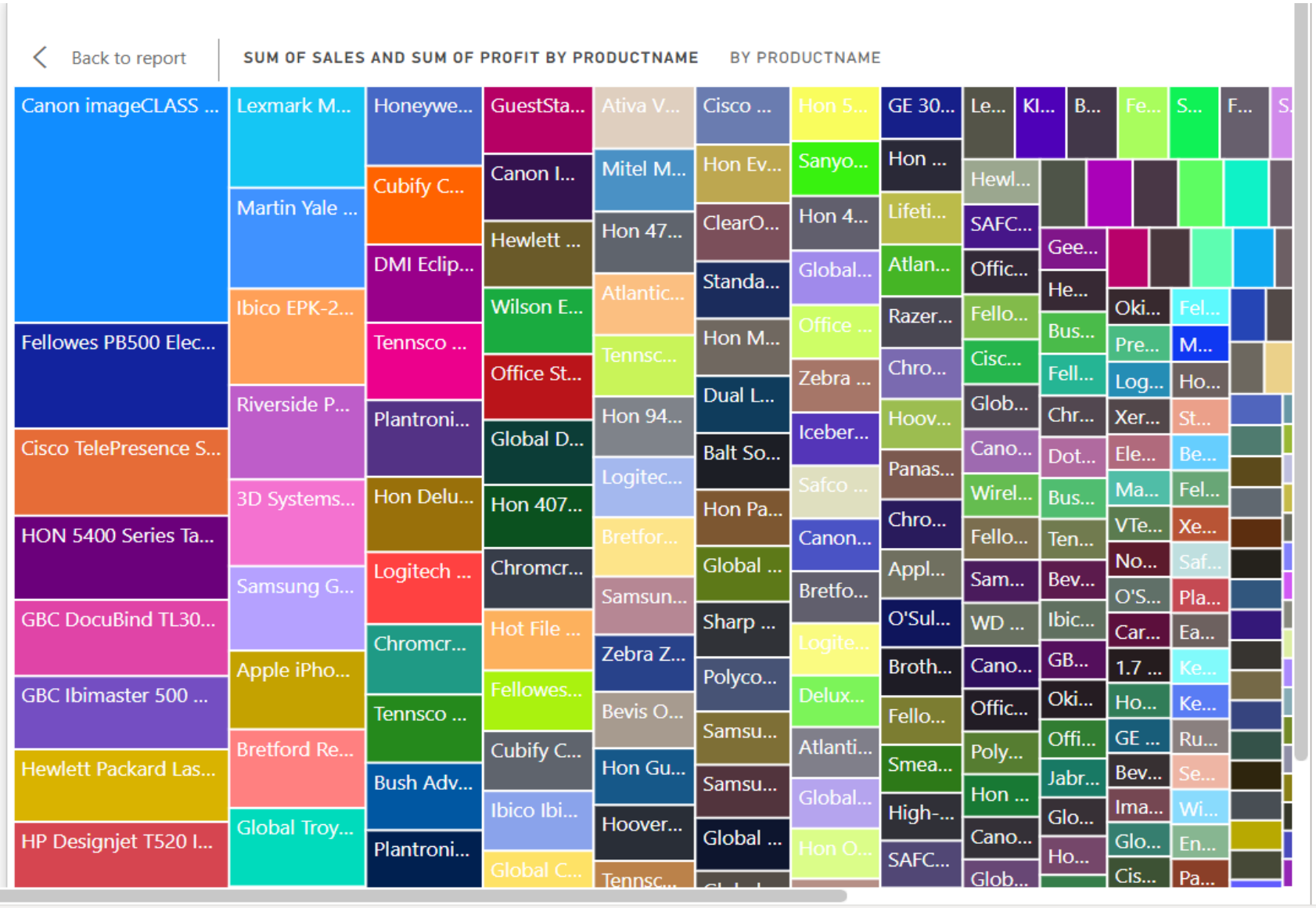
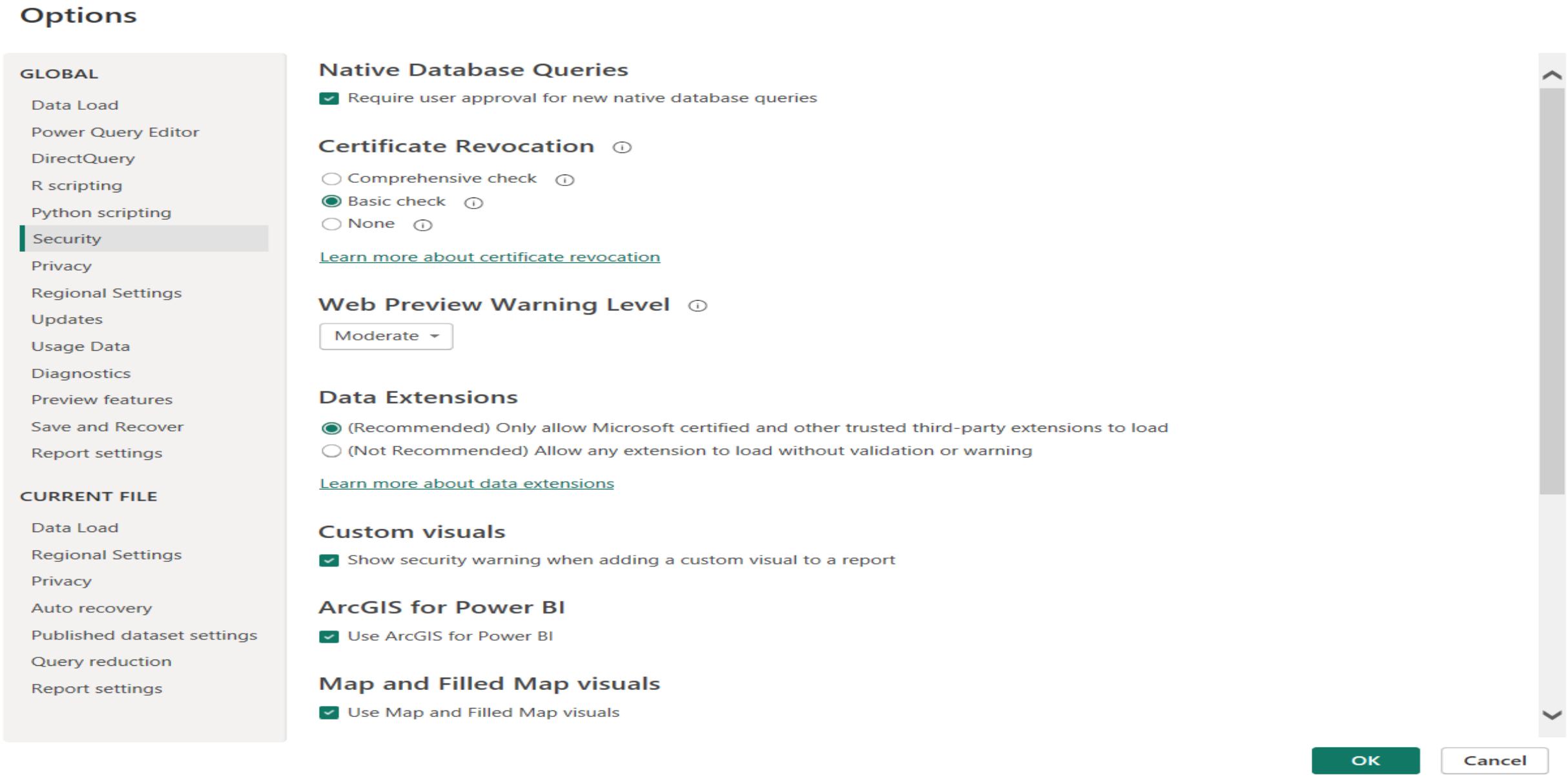


For Maps Change the following Setting, click OK, Save ur Power-Bi as Practice_report and then restart ur power BI



Create a Map having Location as City, Legend as Segment, Bubble Size as Count of Category and Tooltips as State and Sum of Quantity

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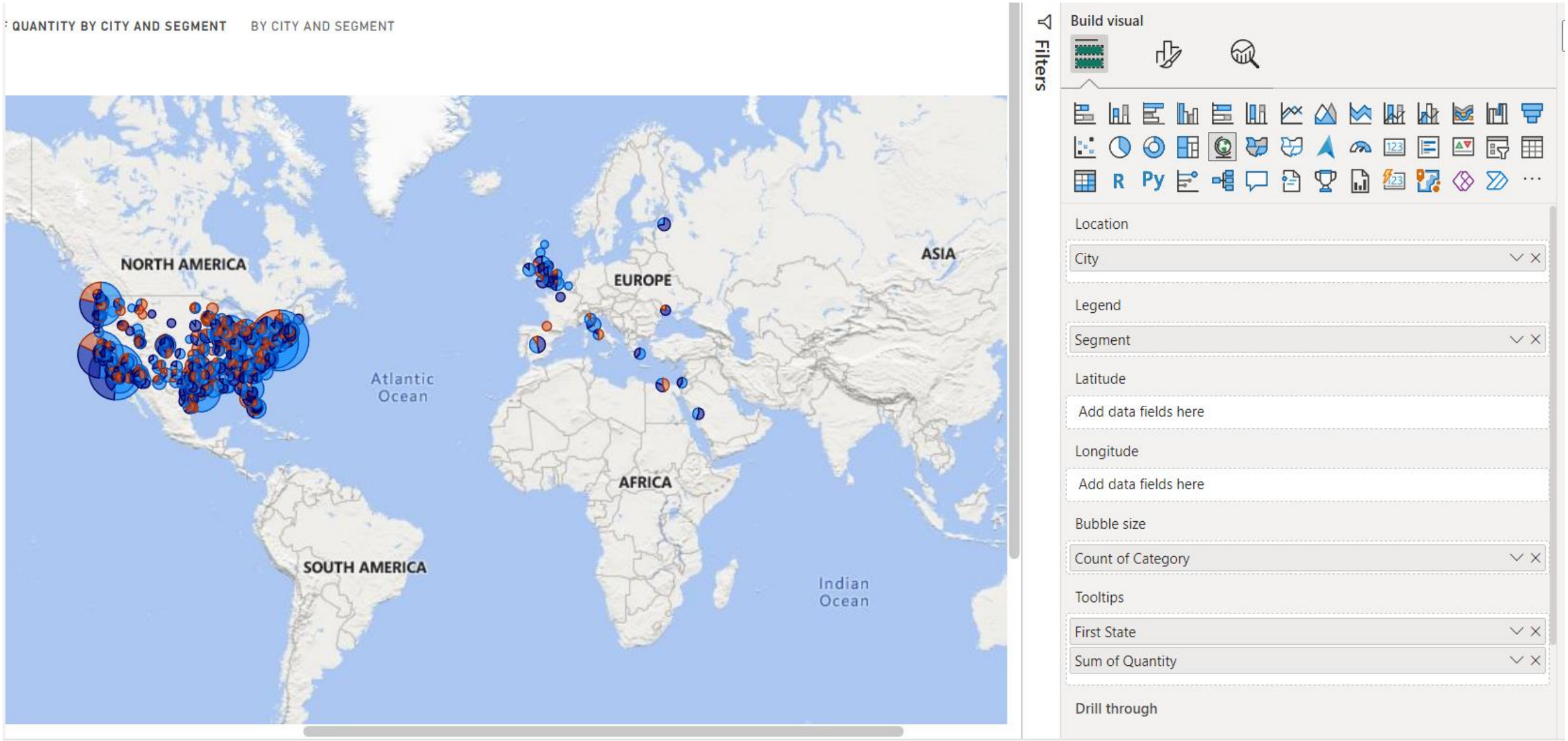

1) Create a KPI for Values as Sum of Profit and trend axis as Year, now create a Variable name **Target_Profit= SUM(Store_Sales_Data[Profit])*1.5** and

2) Then Modify its value by **Target_Profit= SUM(Store_Sales_Data[Profit])/2**

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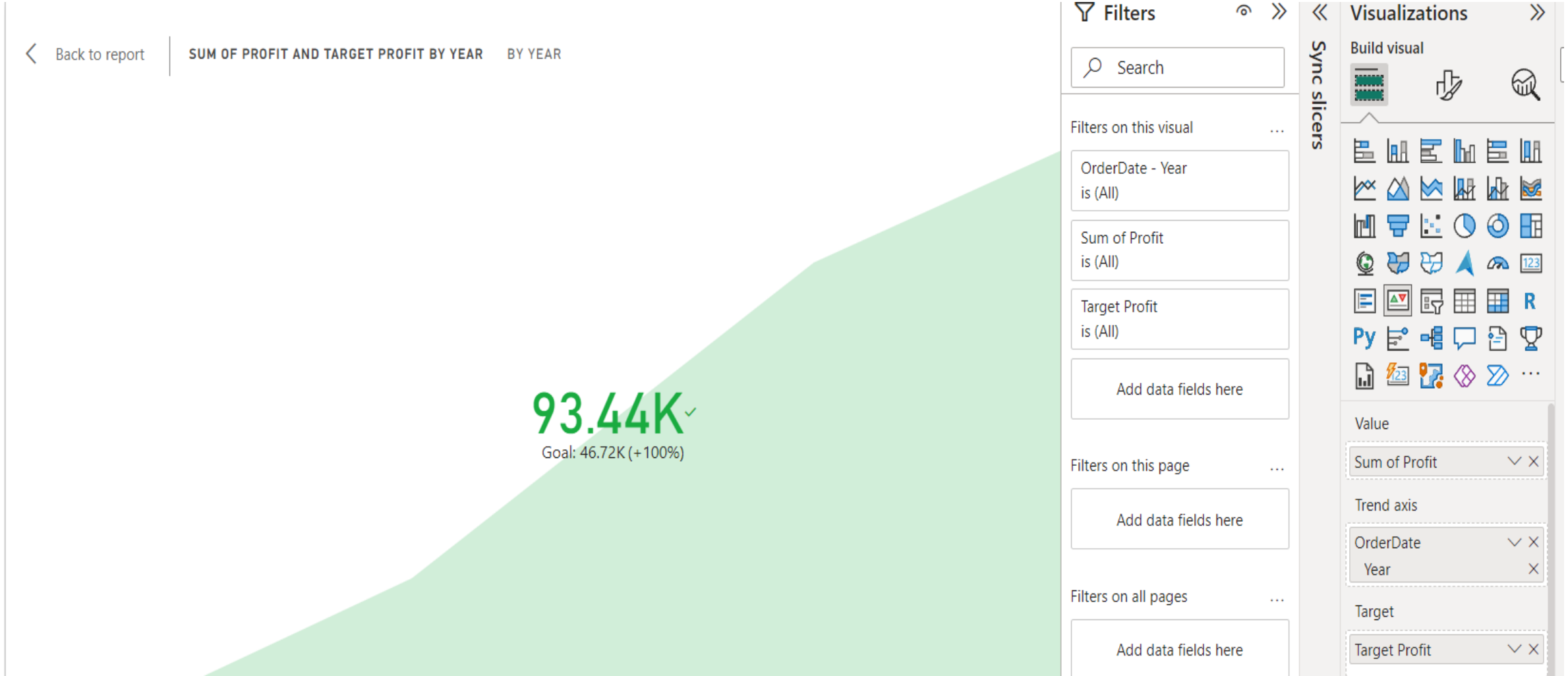

1) Create a Gauge for Values as Sum of Sales and Target Value as **Target Sales**, so create it , now create a Variable name **Target Sales= SUM(Store_Sales_Data[Sales])*1.5** and
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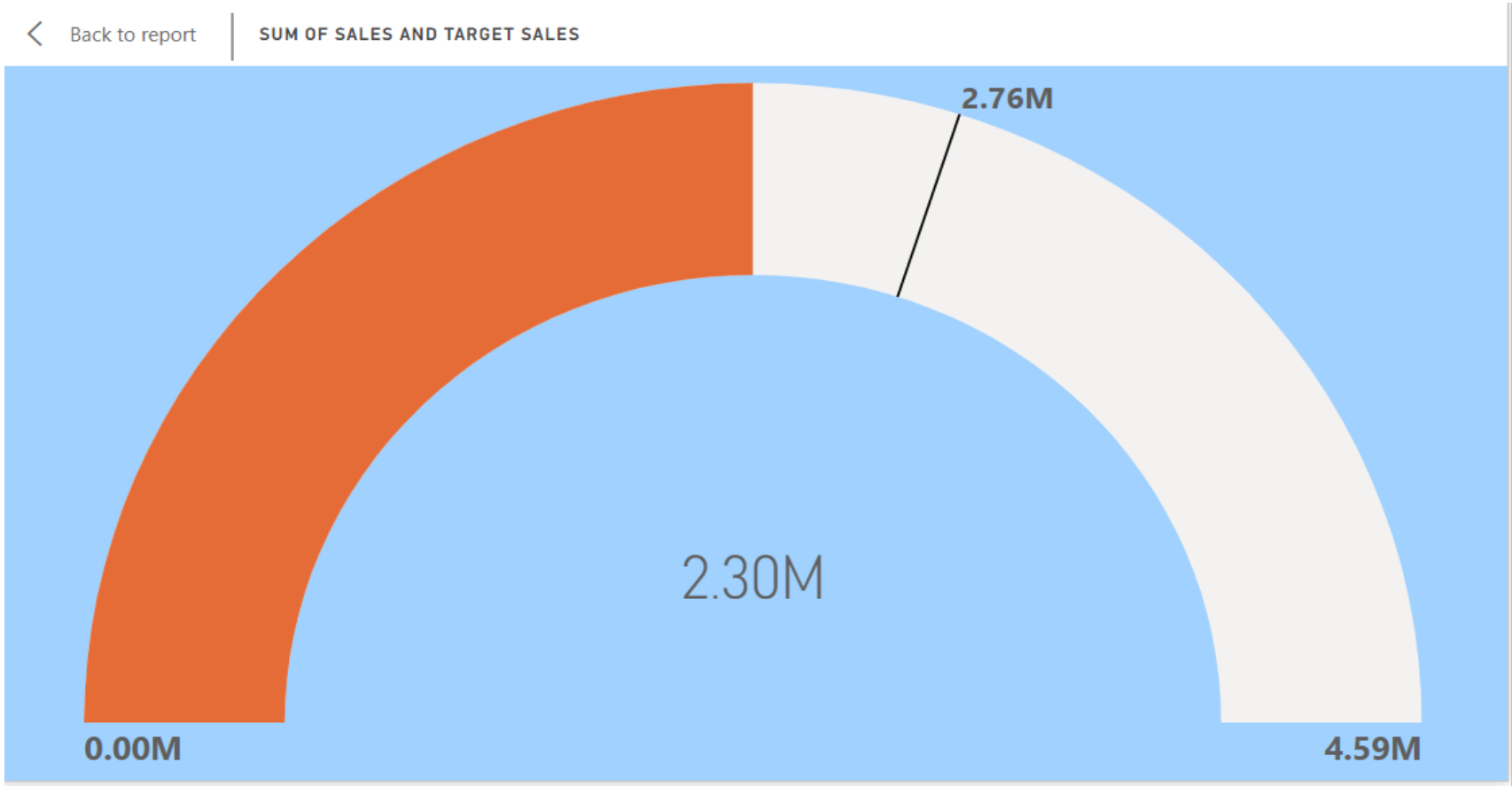
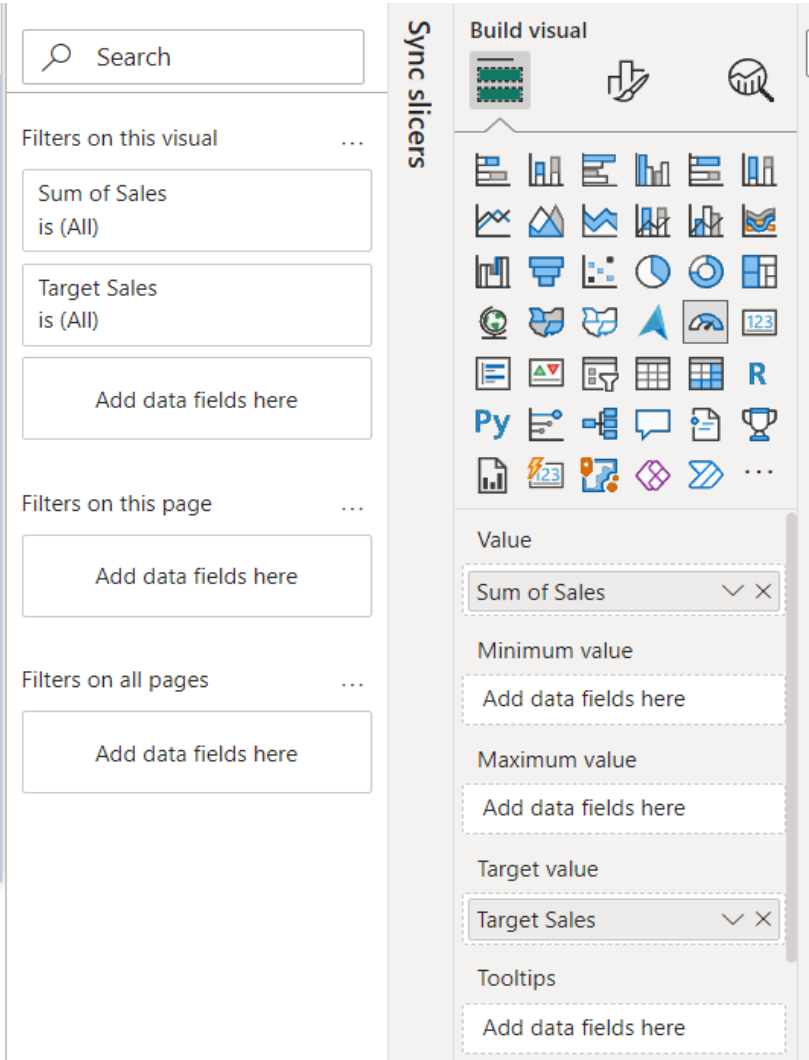
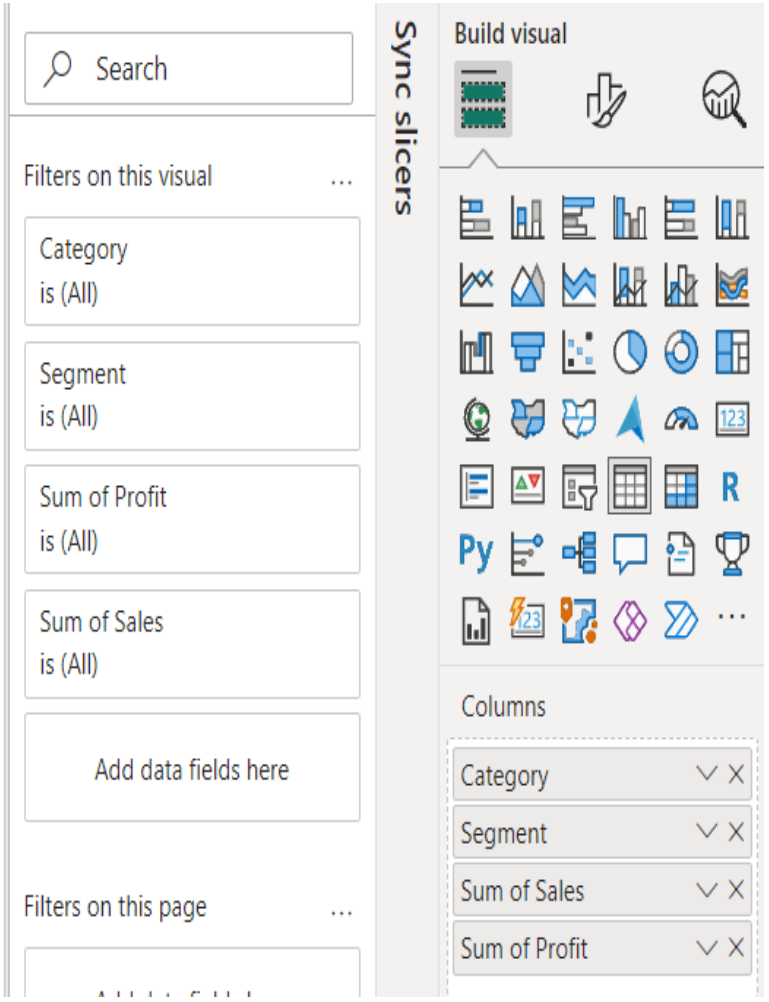




Create a table with Columns (**Category, Segment,Sales,Profit**) and format it as mentioned.

Back to report

Category	Segment	Sum of Sales	Sum of Profit
Furniture	Consumer	391,049.31	6,991.08
Furniture	Corporate	229,019.79	7,584.82
Furniture	Home Office	121,930.70	3,875.38
Office Supplies	Consumer	363,952.14	56,330.32
Office Supplies	Corporate	230,676.46	40,227.32
Office Supplies	Home Office	124,418.43	25,933.16
Technology	Consumer	406,399.90	70,797.81
Technology	Corporate	246,450.12	44,167.00
Technology	Home Office	183,304.02	30,490.14
Total		**2,297,200.86**	**286,397.02**



Create a Decomposition Tree having Analysis on Sales Explained by Region, Year and Category.

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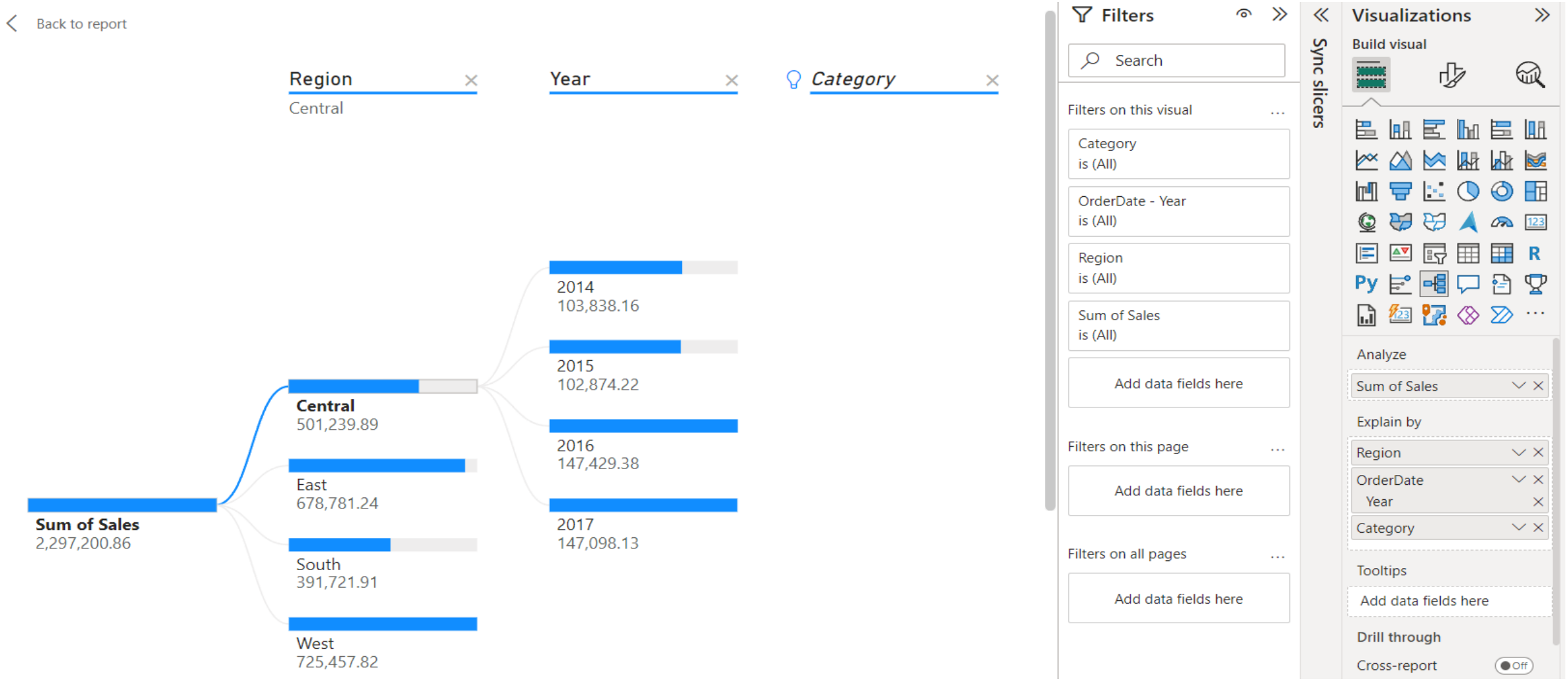
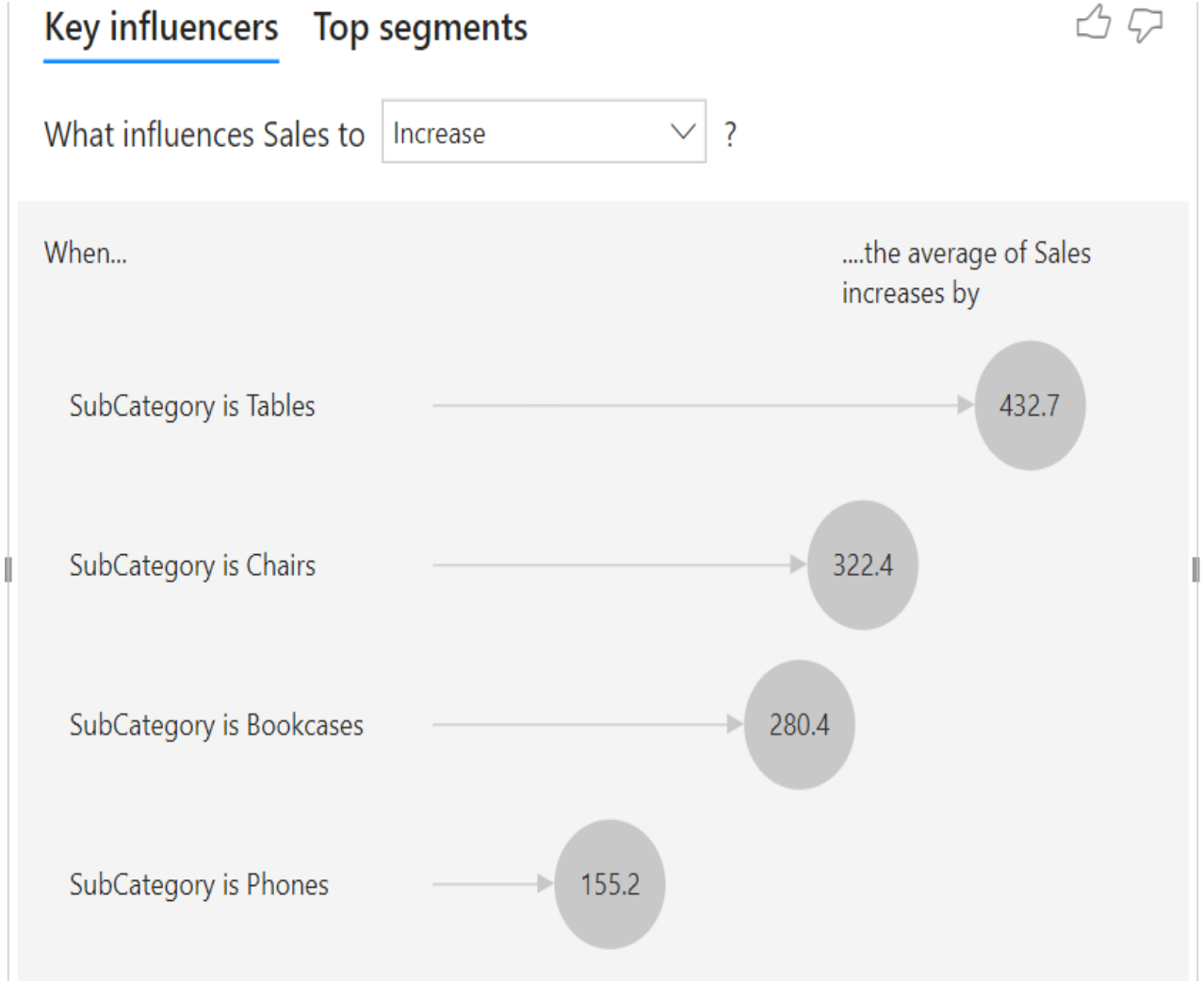
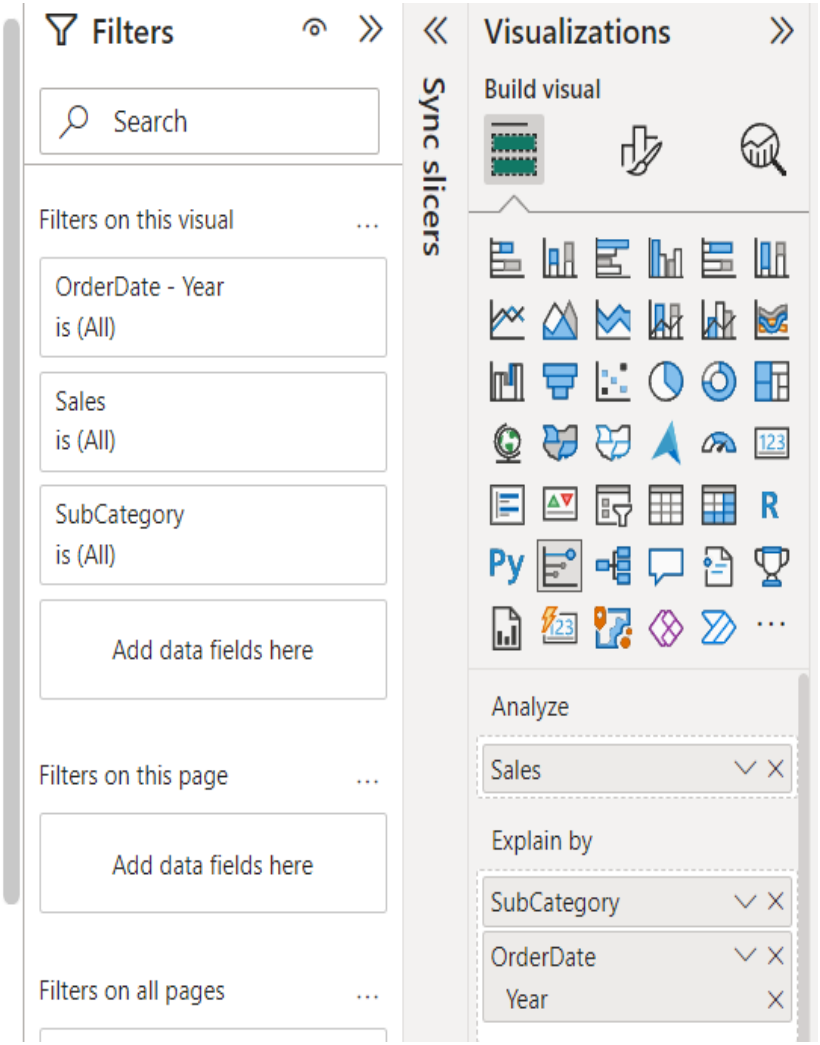


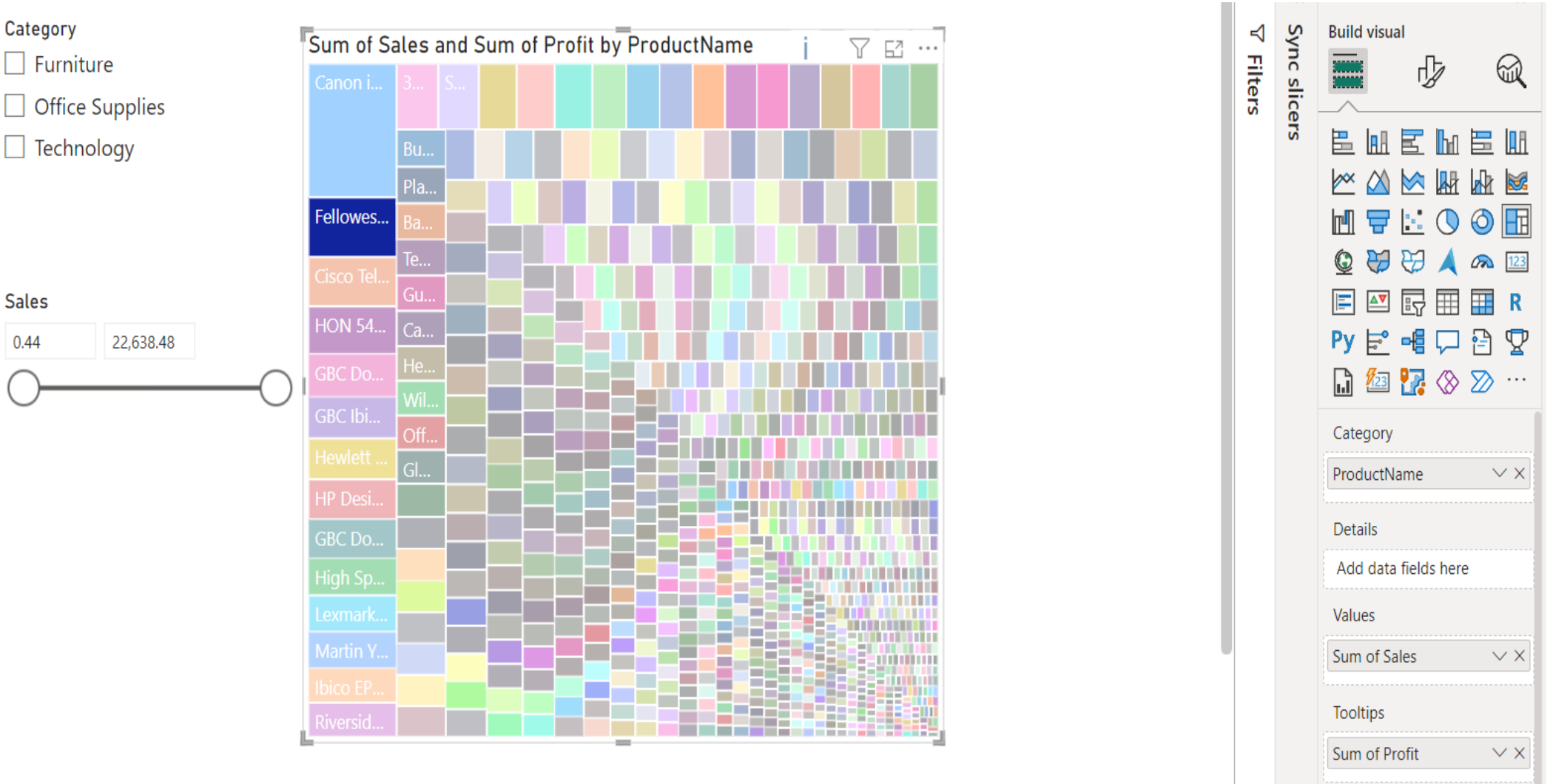
Create Key Influencer having Analysis as Sales, explained by SubCategory and Year.

Create Key Influencer having Analysis as Sales, explained by SubCategory and Year.

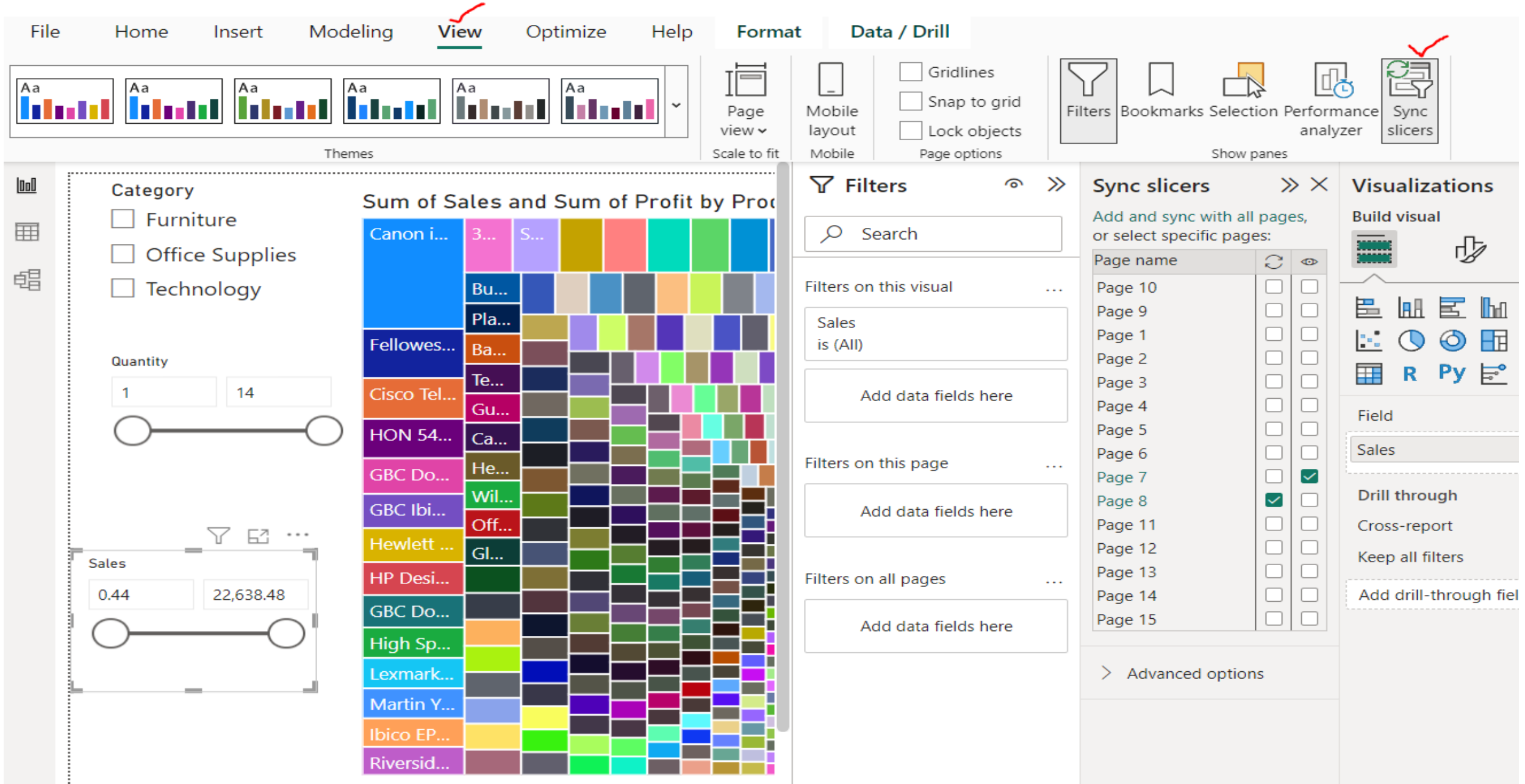




1) Slicer can Take both Categorical and Continuous Values. Put 3 Slicer of Category (Categorical), Sales(Continuous Values) and Quantity(Continuous Values).
2) Change the slicer values to see the change in TreeMap.



Sync Slicers with other Pages too.



Create filled Map having Location as State, Legend as City and Tooltips as Sum of Profit, Sum of Sales, Sum of Quantity, Sum of Discount.

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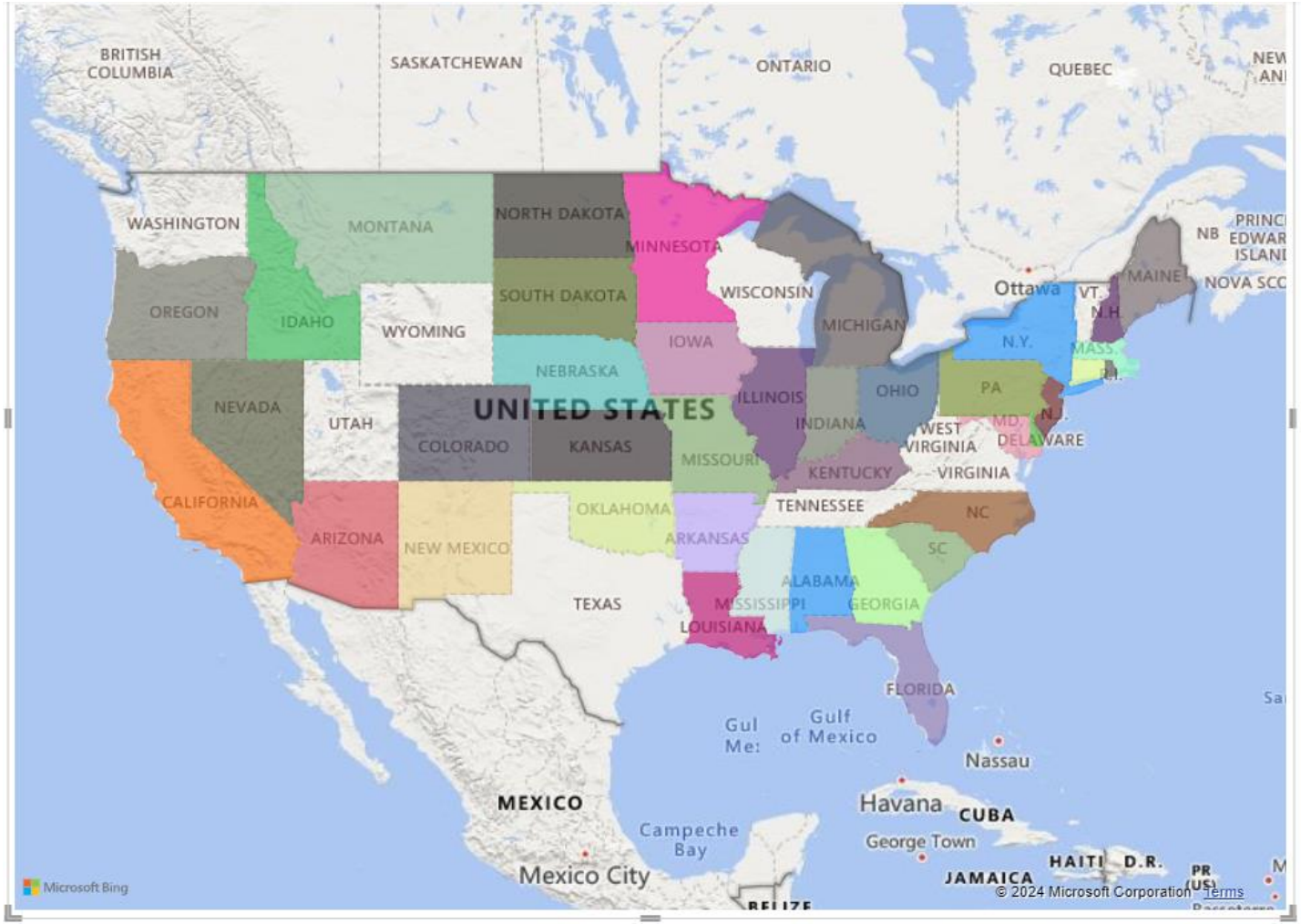

Filters

Sync slicers

Visualizations

Build visual

Location

State

Legend

City

Latitude

Add data fields here

Longitude

Add data fields here

Tooltips

Sum of Profit

Sum of Sales

Sum of Quantity

Sum of Discount

1) Create a Table with Column as Subcategory and Sum of Sales
2) Apply filter to filter Top 5 based on Sum of Profit.

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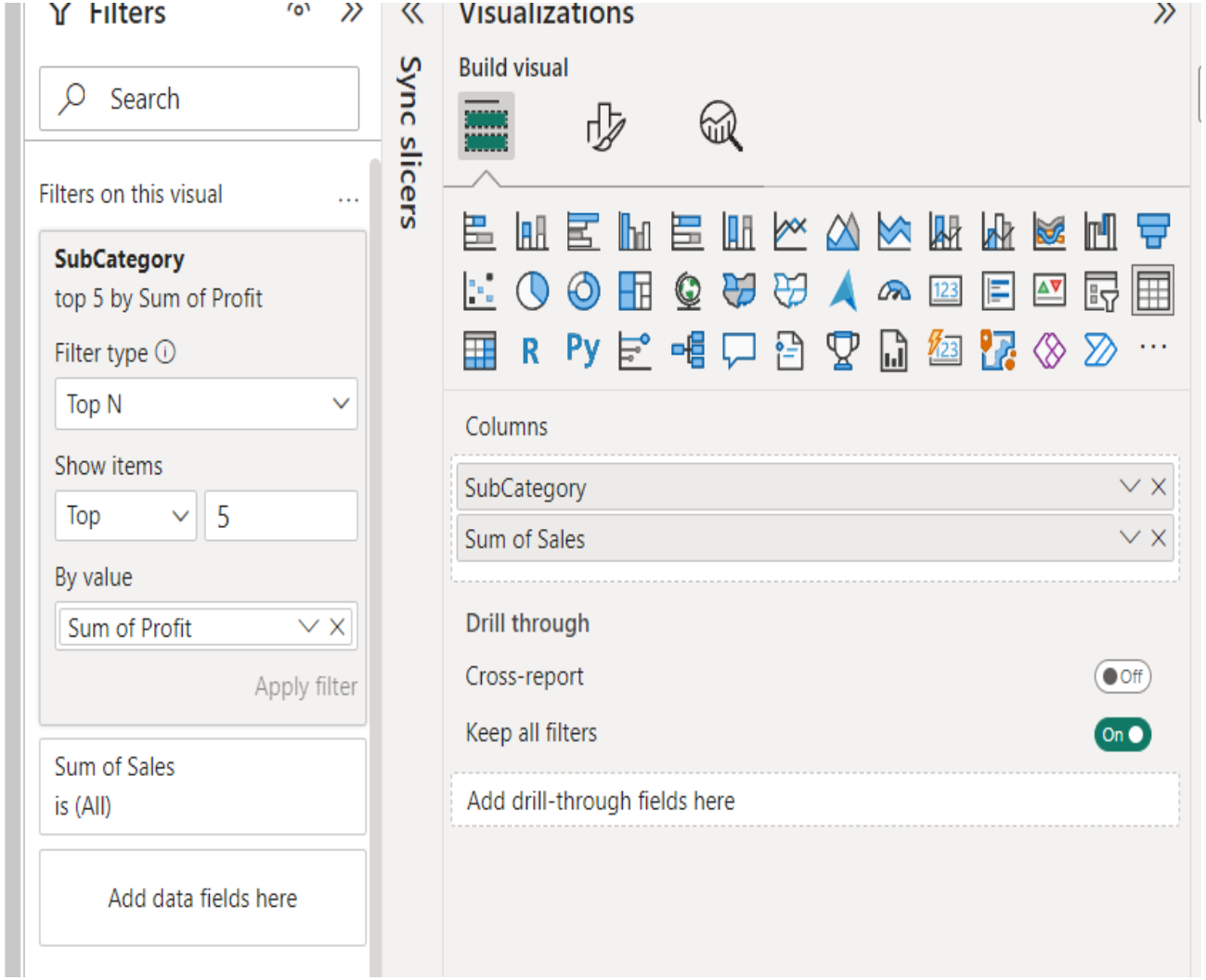
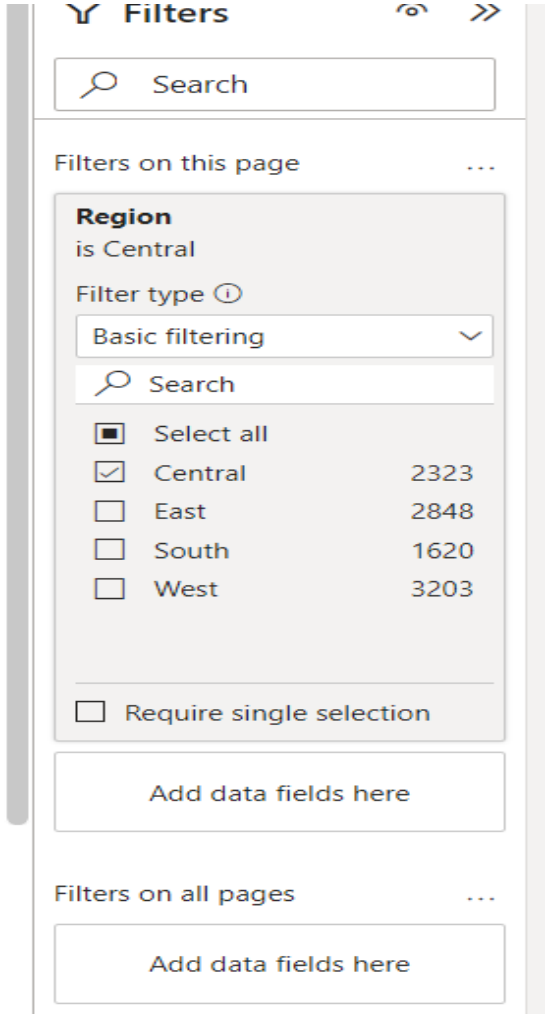
2) Apply filter to filter Top 5 based on Sum of Profit.

SubCategory	Sum of Sales
Accessories	167,380.32
Binders	203,412.73
Copiers	149,528.03
Paper	78,479.21
Phones	330,007.05
Total	**928,807.34**

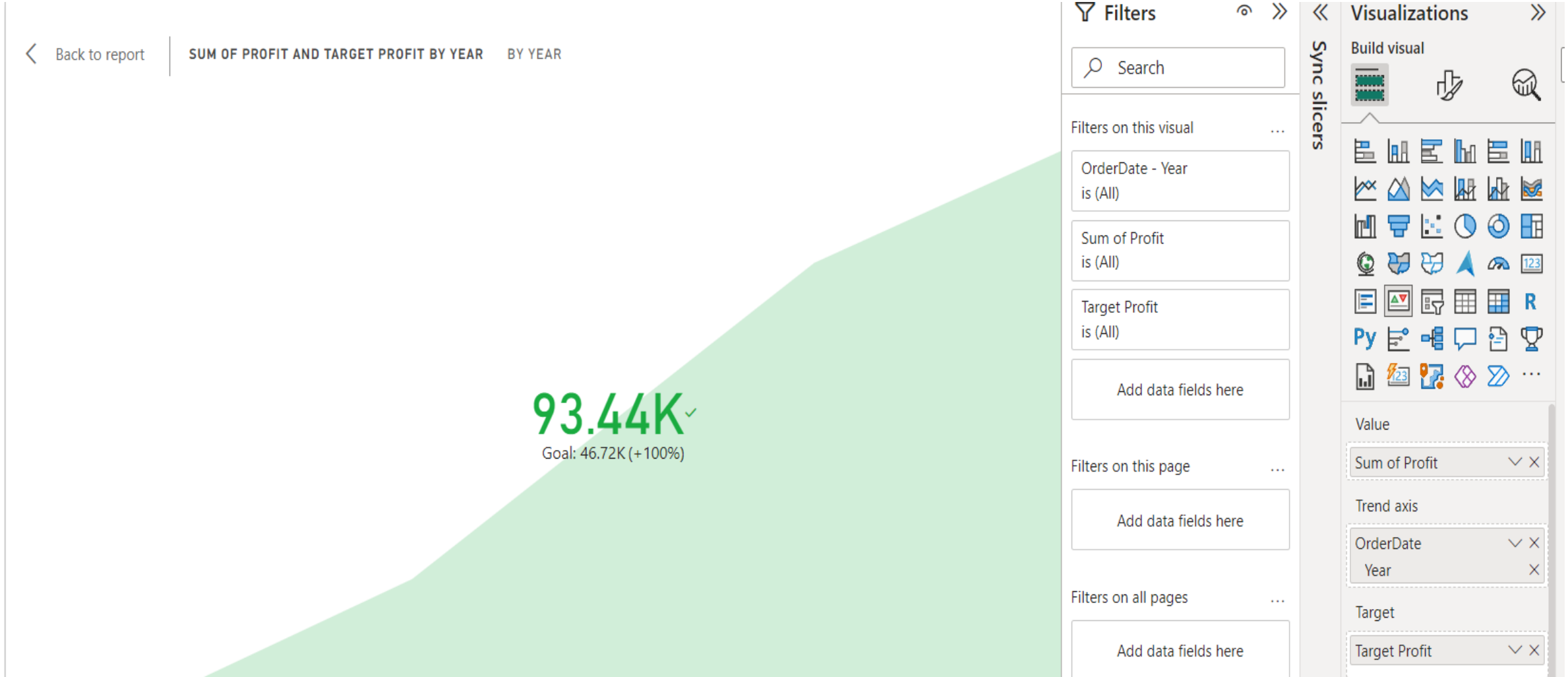


1) Create a Table with Column as Subcategory and Sum of Sales
2) Apply filter on the page:Drag and drop region

SubCategory	Sum of Sales
Accessories	33,956.08
Appliances	23,582.03
Art	5,765.34
Binders	56,923.28
Bookcases	24,157.18
Chairs	85,230.65
Copiers	37,259.57
Envelopes	4,636.87
Fasteners	778.03
Furnishings	15,254.37
Labels	2,451.47
Machines	26,797.38
Paper	17,491.90
Phones	72,403.28
Total	**501,239.89**



1) Create a KPI(Using Measure) for Values as Sum of Profit and trend axis as Year, now create a Variable name **Target_Profit= SUM(Store_Sales_Data[Profit])*1.5** and
2) Then Modify its value by **Target_Profit= SUM(Store_Sales_Data[Profit])/2**



Count of rows for South, East, West and Central

- `Count_Total_rows = COUNTROWS('superstore')`
- `South = CALCULATE([Count_Total_rows],'superstore'[Region]="South")`

- Create other Measures and create cards:

1620	2323	2848	3203
Total_rows_South	Total_Rows_Central	Total_Rows_East	Total_rows_West

Find Sum of Sales for South, East, West and Central

- Sum_Sales_South = CALCULATE(SUM(superstore[Sales]), superstore[Region] = "South")
- Sum_Sales_East = CALCULATE(SUM(superstore[Sales]), superstore[Region] = “East")
- Sum_Sales_West = CALCULATE(SUM(superstore[Sales]), superstore[Region] = “West")
- Sum_Sales_Central = CALCULATE(SUM(superstore[Sales]), superstore[Region] = “Central")

391.72K
Sum_Sales_South

678.78K
Sum_Sales_East

725.46K
Sum_Sales_West

501.24K
Sum_Salest_Central

Find Average of Profit for Each region

Activity:

Create:

1) all the charts used so far
2) change its variable
3) change the property of each chart and
4) put them in a single page as Dashboard.

Activity:

1. Divide the Table in 3 Sub-tables.
2. Clean the data and see whether every rows matches correct data format.
3. Find the Primary Key of all the tables.
4. Create relationship.
5. Create 5 Charts along with 3 slicer.
6. Format the visuals in fire and ash.

Divide the given Table in 3 Sub tables

1. Orders Table:

1. OrderID (Primary Key)
2. OrderDate
3. ShipDate
4. ShipMode
5. CustomerID (Foreign Key referencing Customers.CustomerID)
6. ProductID (Foreign Key referencing Products.ProductID)
7. Sales
8. Quantity
9. Discount
10. Profit

2. Customers Table:

1. CustomerID (Primary Key)
2. CustomerName
3. Segment
4. Country
5. City
6. State
7. PostalCode
8. Region

3. Products Table:

1. ProductID (Primary Key)
2. Category
3. SubCategory
4. ProductName

Fire and Ash background