Microsoft

Create reports in Power BI Desktop
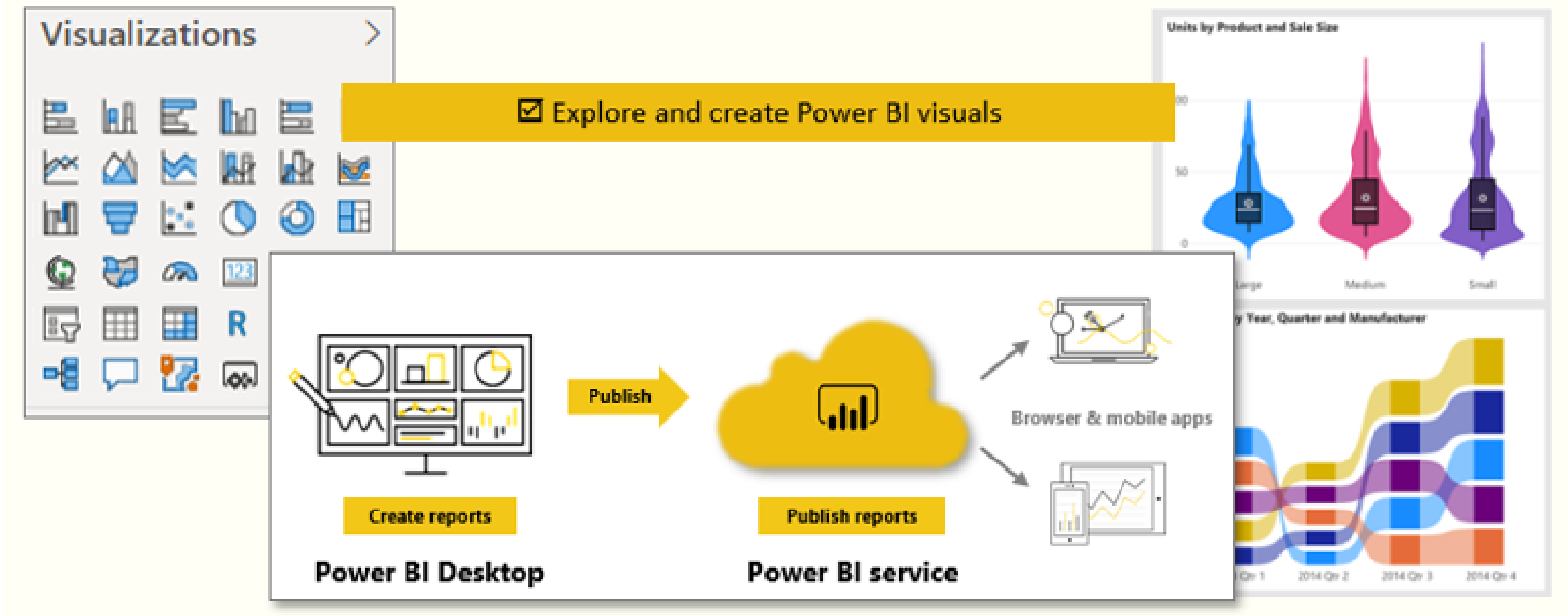
aka.ms/PL300-5

Agenda

- Work with visuals

- Report layout and interactions

- Navigation and filtering
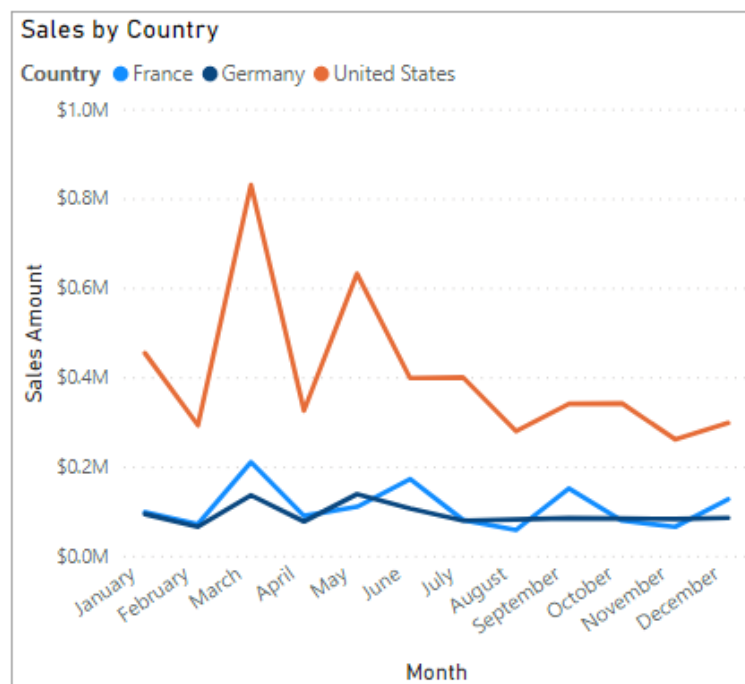
- Report design elements
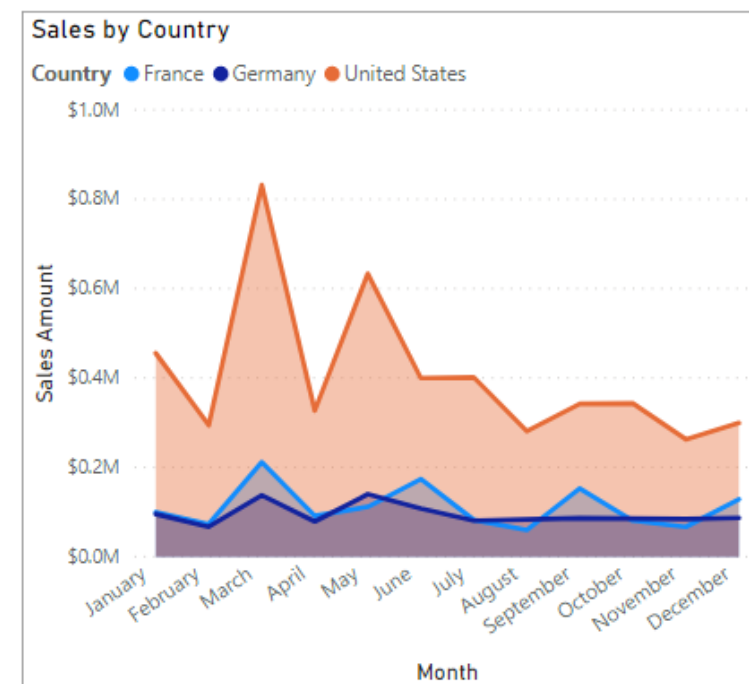
Work with visuals

Add visualizations to reports

☑ Explore and create Power BI visuals

Publish

Create reports

Power BI Desktop

Publish reports

Power BI service

Browser & mobile apps

Units by Product and Sale Size

Year, Quarter and Manufacturer

Choose effective visualizations

Country	Sales Amount
United States	$7,390,464
France	$773,445
Germany	$493,628
Total	**$8,550,077**

Table

Sales by Country
Country ● France ● Germany ● United States

Line Chart
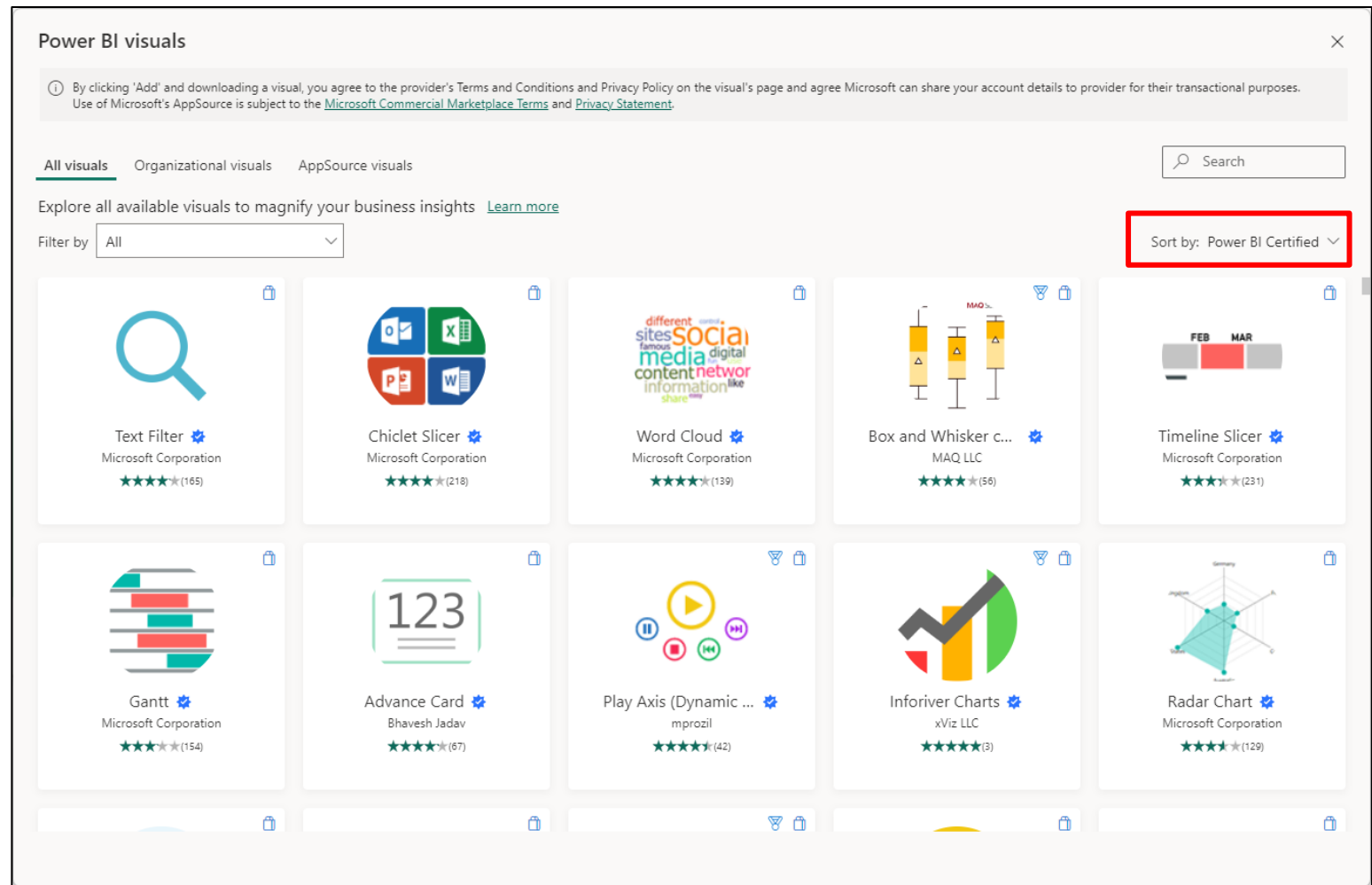

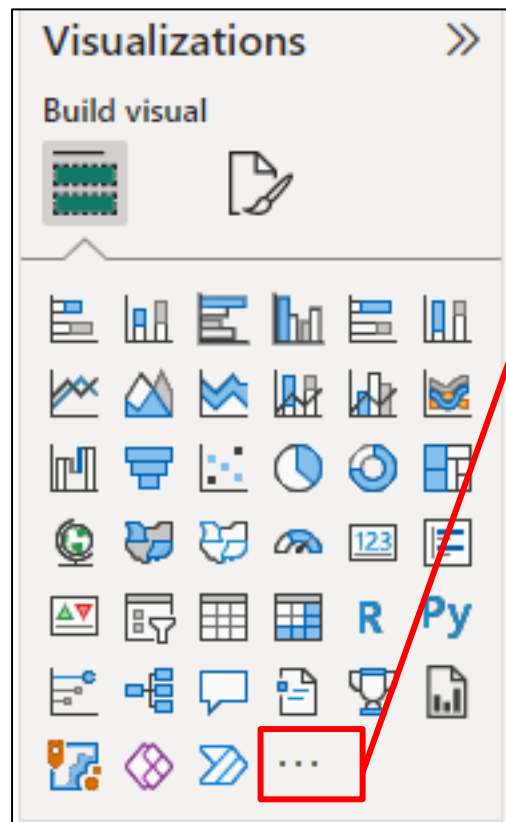Sales by Country
Country ● France ● Germany ● United States
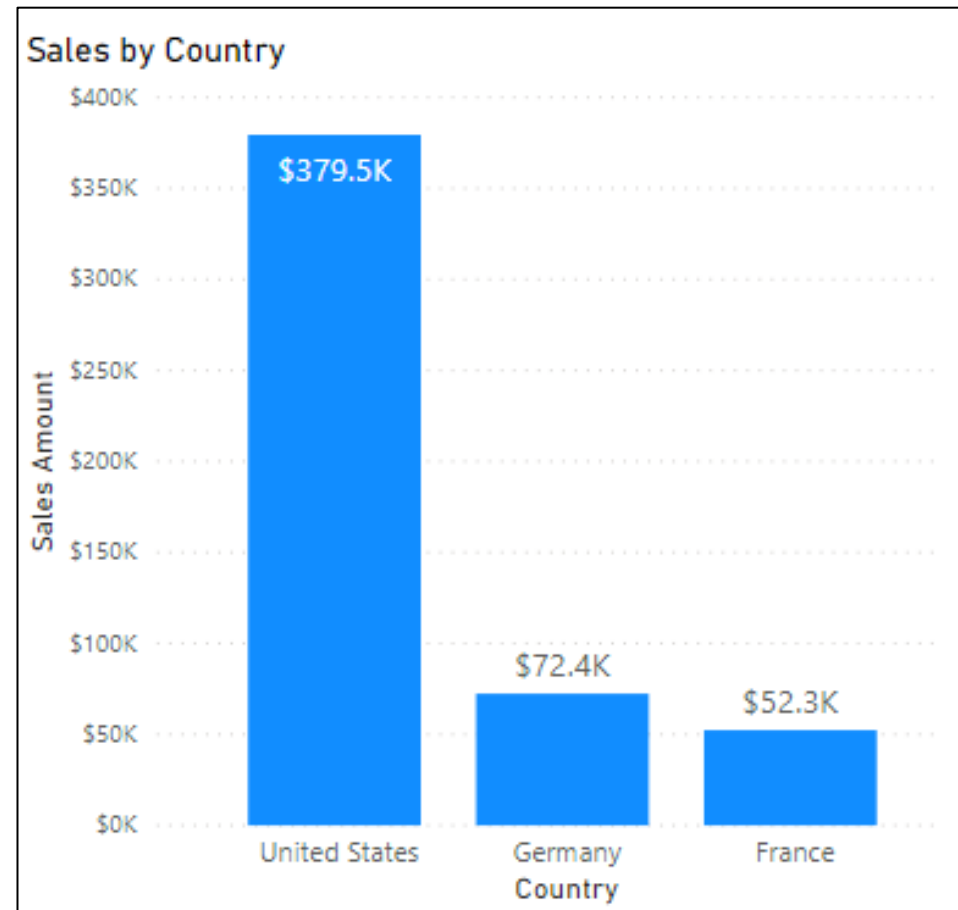
Area Chart

Import custom visuals from AppSource

Format and configure visualizations

Common options:
- Title
- Background
- Border
- Font type/size/color
- Data labels
- Tooltips

Configure conditional formatting

Enhance certain visuals with dynamic color schemes.

Report layout and interactions

Design an appealing report layout
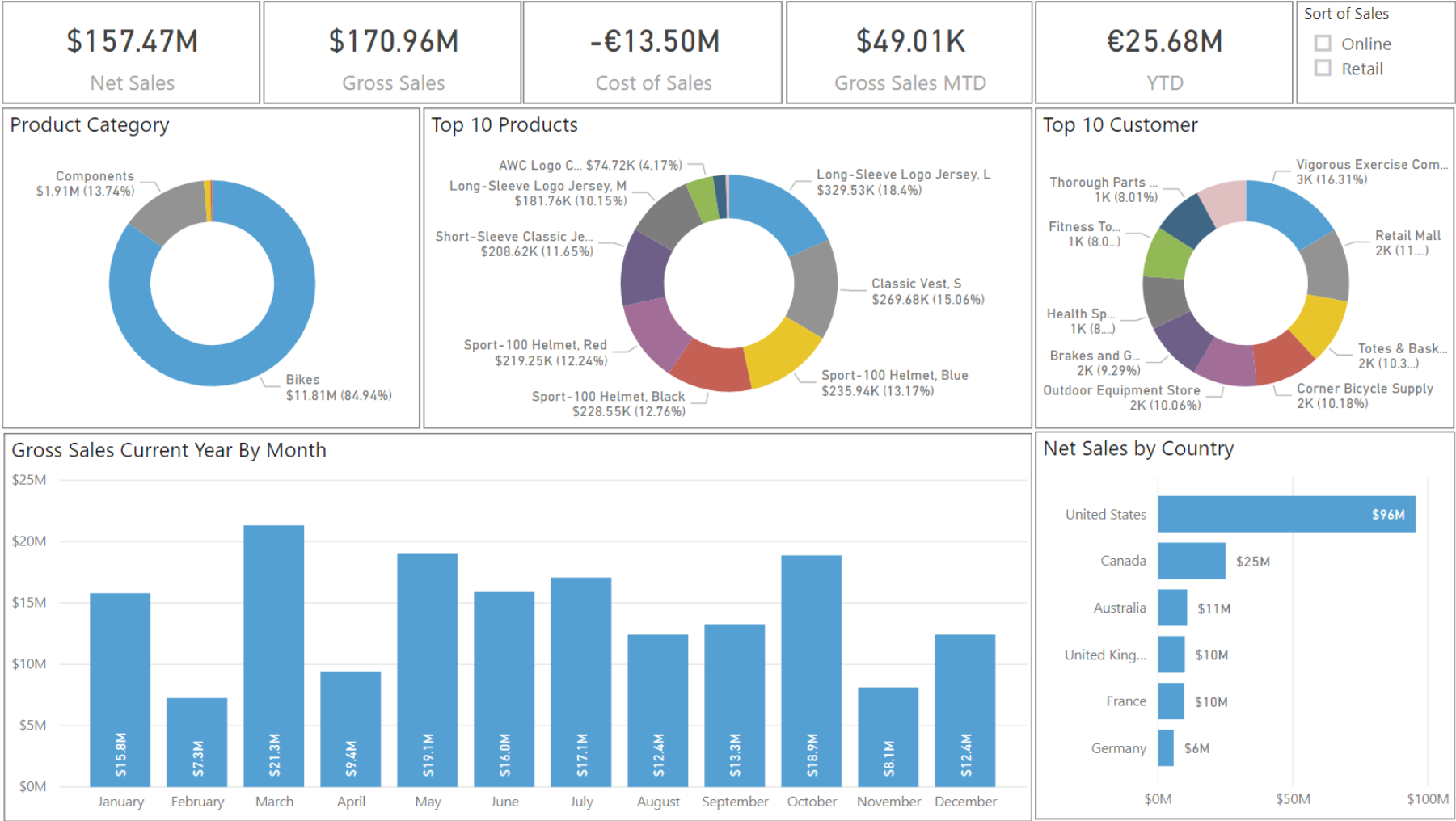
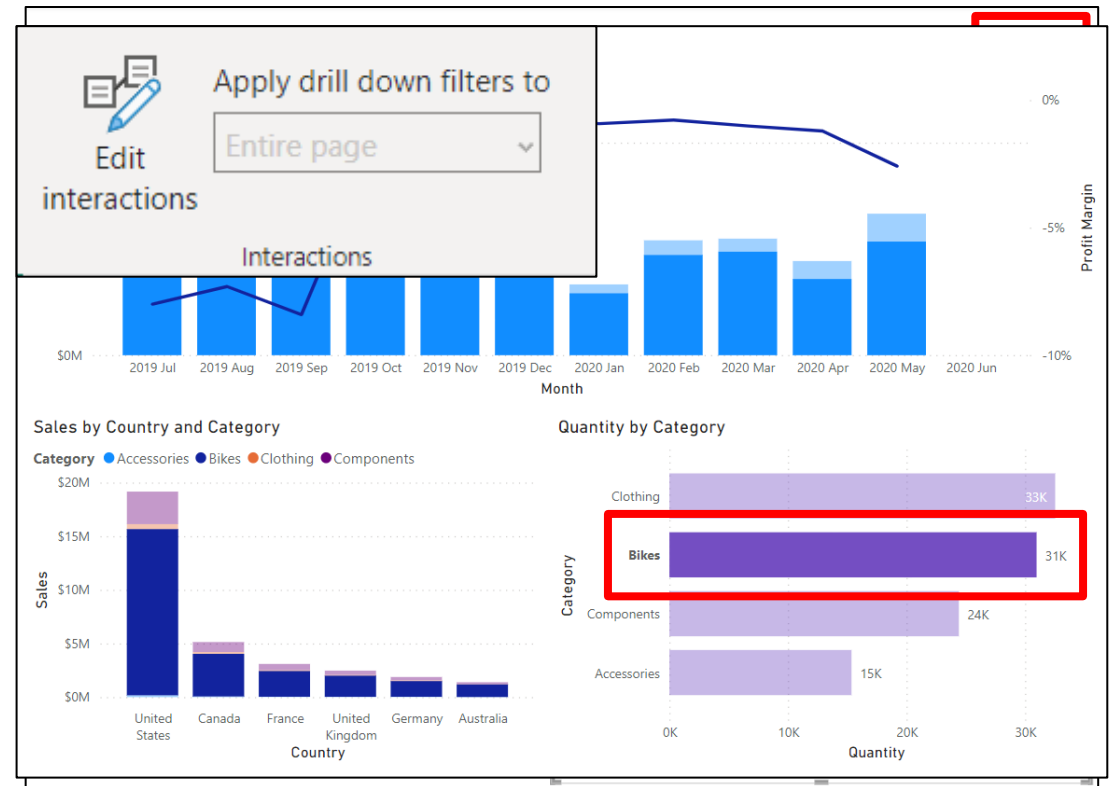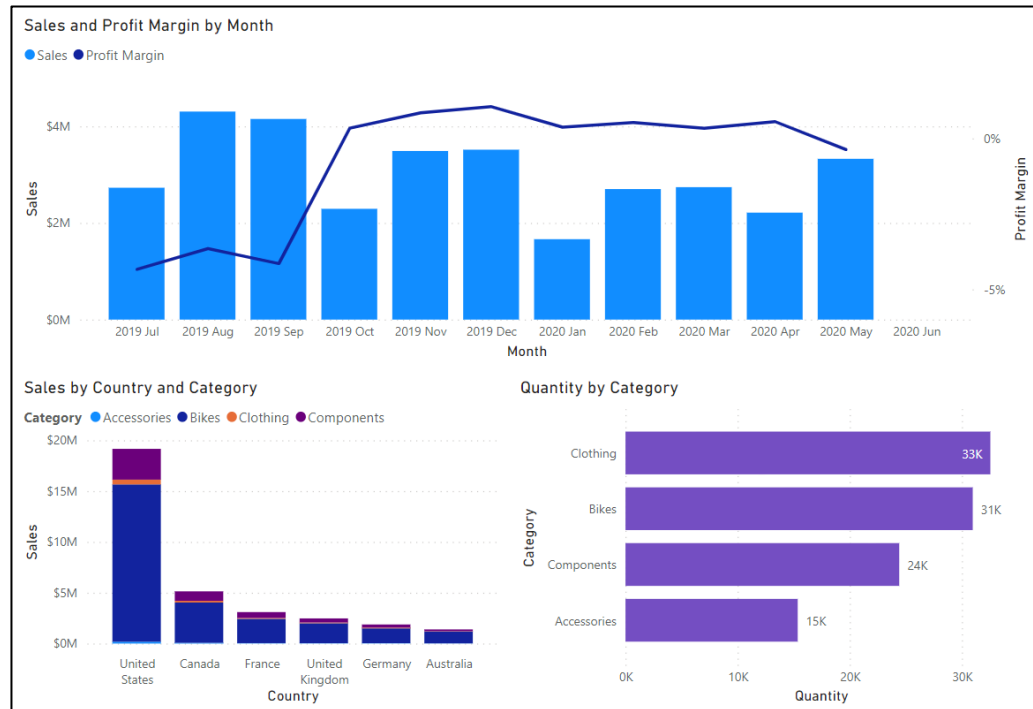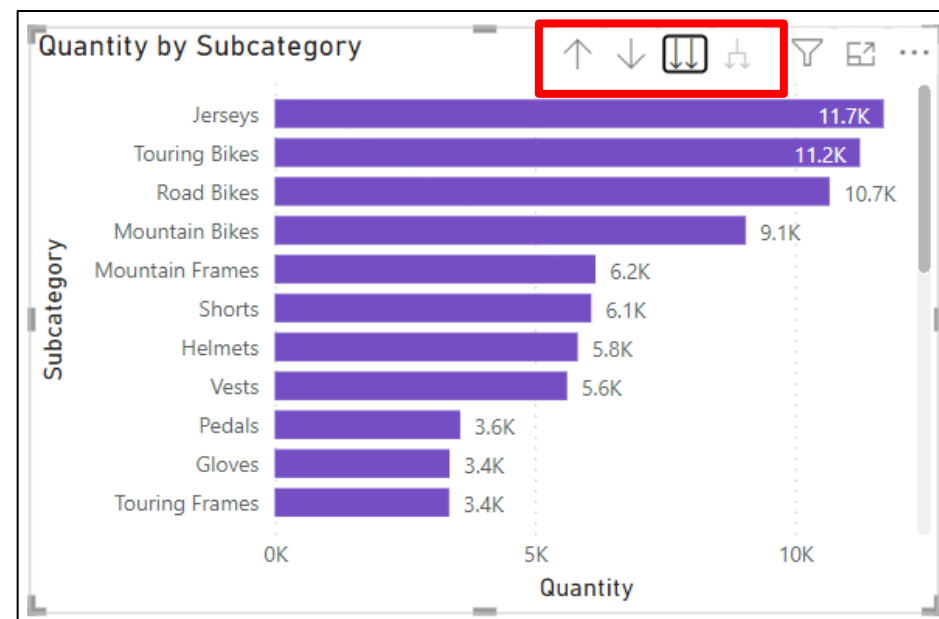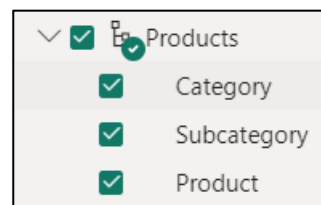# Cross-highlight between visuals

Drill down through a hierarchy in a visual

Lab: Design a report in Power BI Desktop (45 minutes)

Design a Report | GitHub Exercise

In this lab, you'll create a three-page report. You'll then publish it to Power BI, whereupon you'll open and interact with the report.

- Design a report

- Configure visual fields and format properties

Knowledge check: create reports

Is conditional formatting available for all visuals?

☐ Yes, all default included visuals in Power BI Desktop.

☐ No, only custom visuals imported from AppSource.

☑ No, only table and matrix visuals in Power BI Desktop.

What is the default interaction between visuals?

☐ There's no interaction between visuals by default.

☑ All visuals will cross-highlight and slicers filter other visuals.

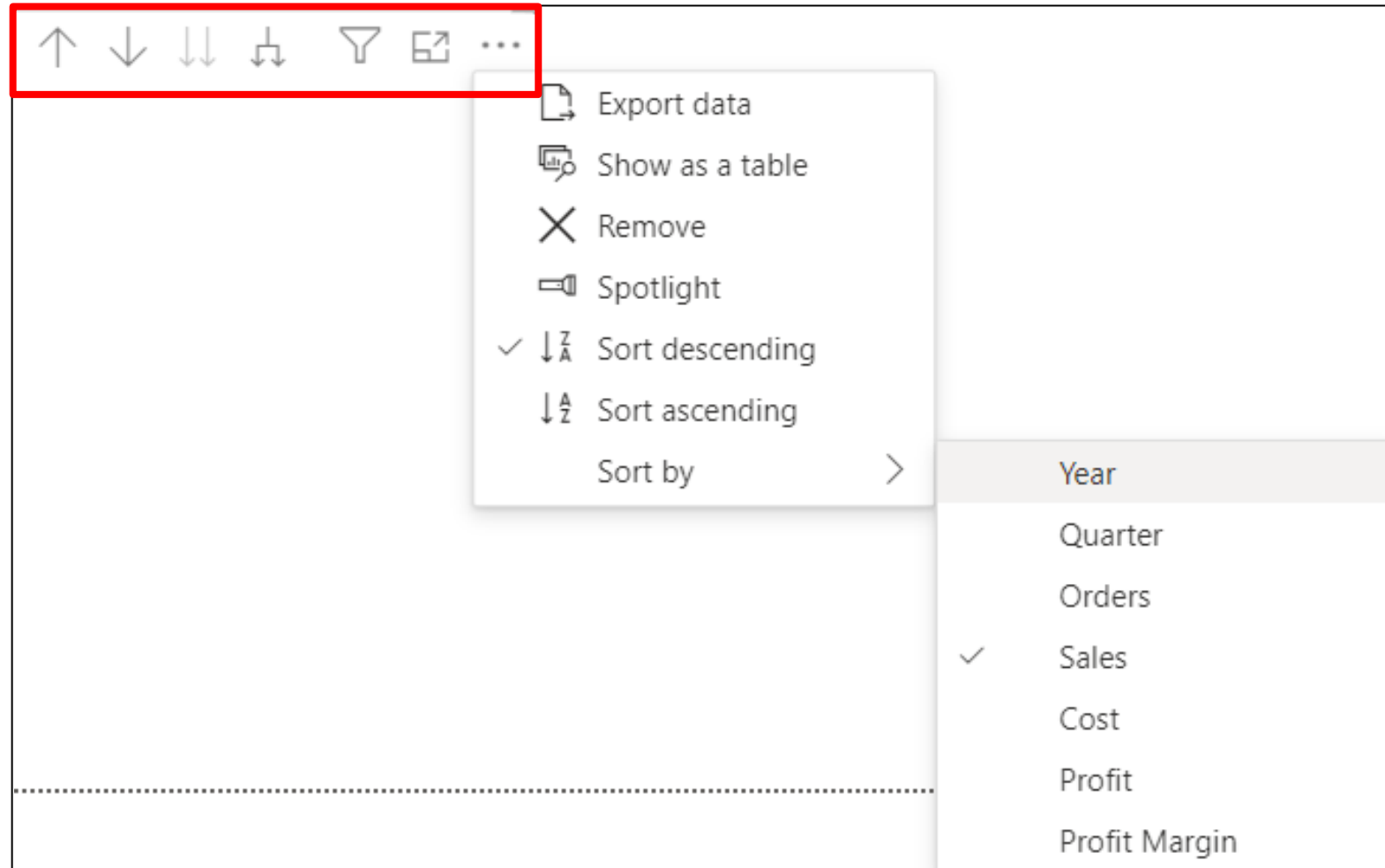☐ Slicers will filter other visuals, but visuals don't cross-highlight.

Navigation and filtering

Design functional report navigation

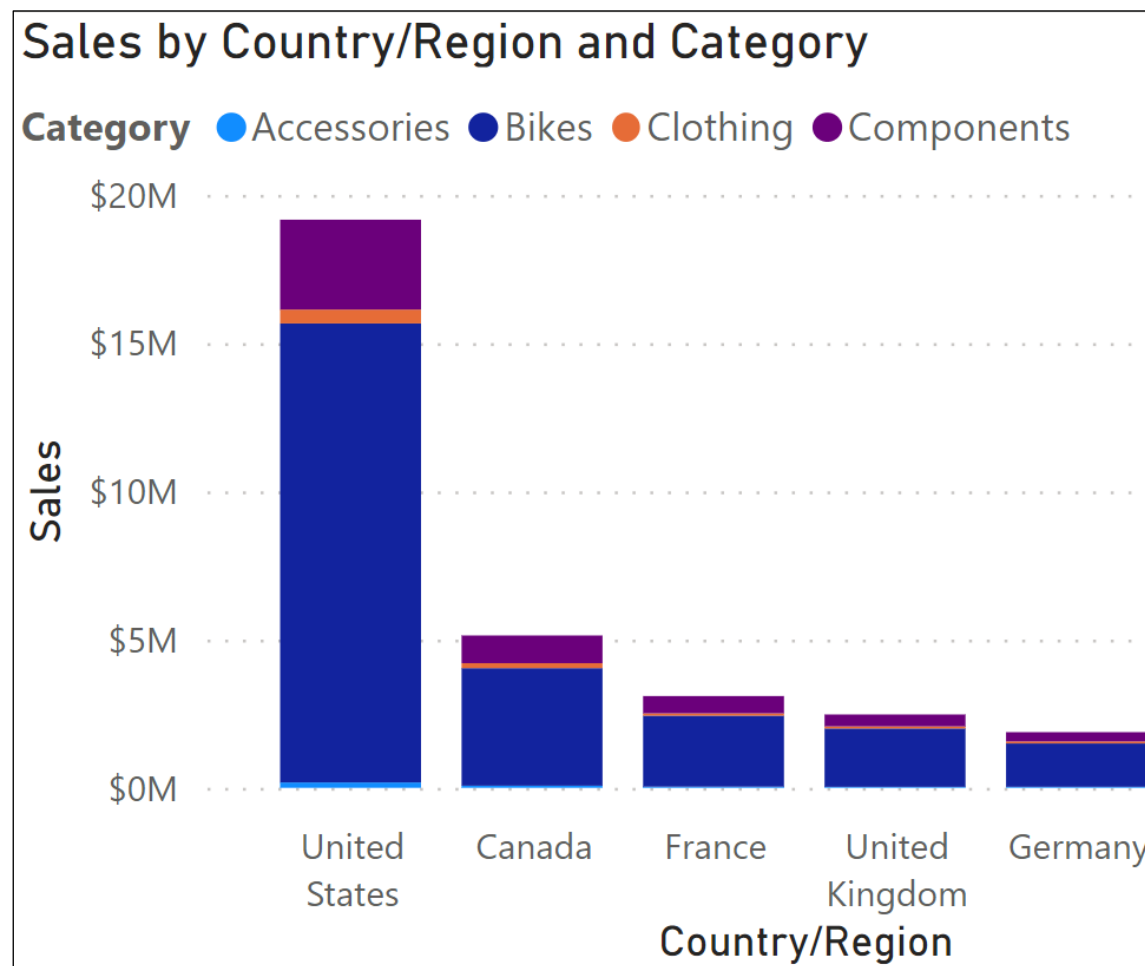# Sort visuals in the most effective order

Use the Slicer visual to provide on-report filtering

Create complex filter conditions with the Filter pane
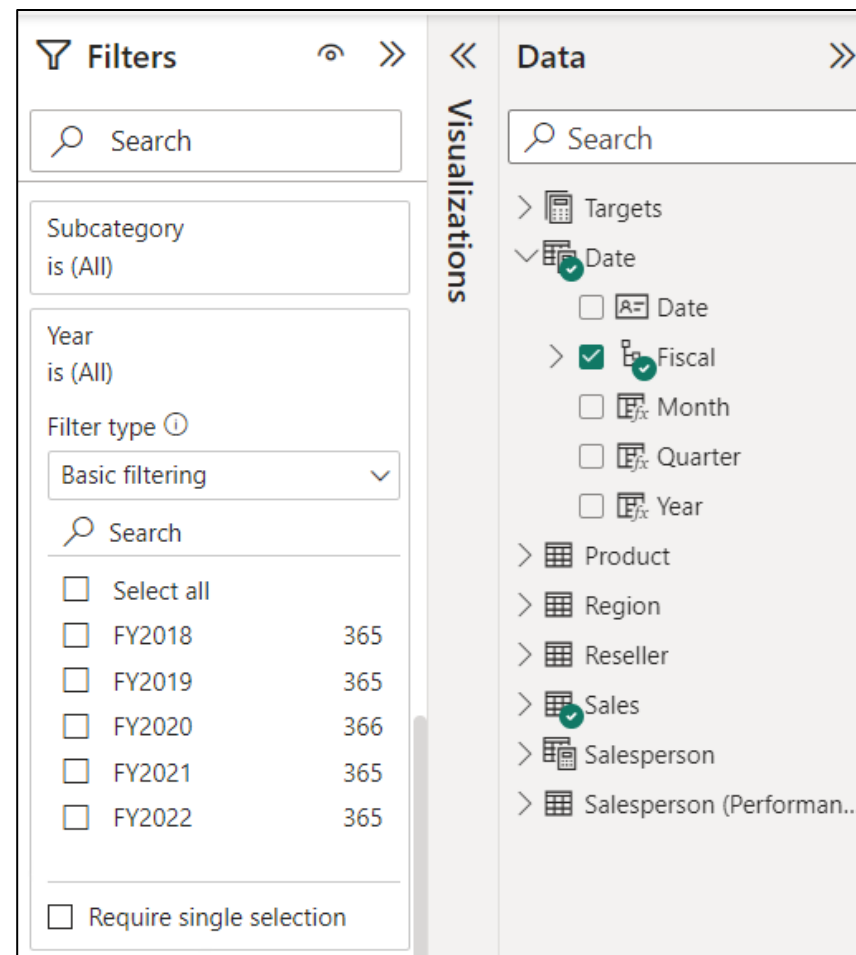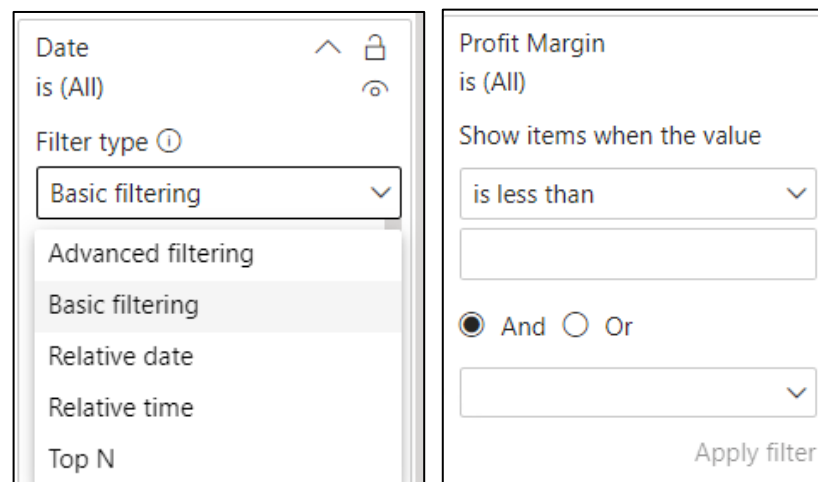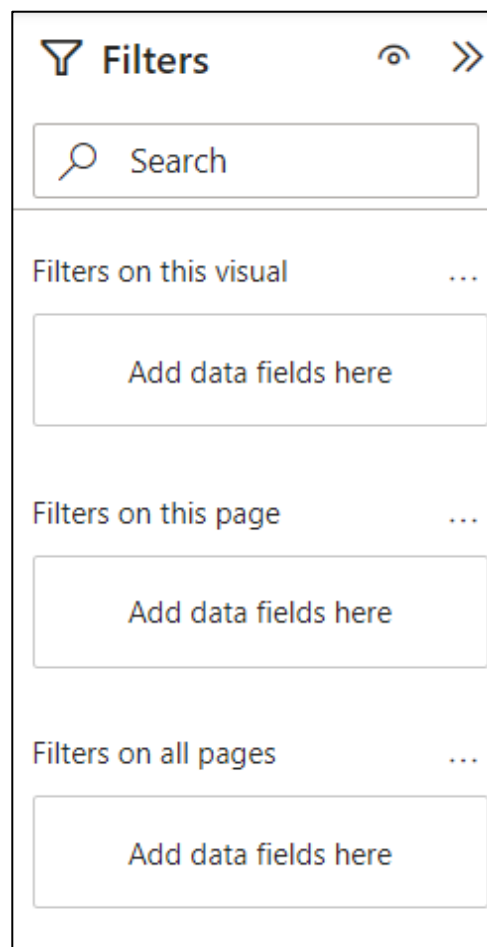
Enhance design with report elements

Add shapes and buttons

Enhance reports with:

- Text boxes

- Images

- Shapes

Improve navigation with Buttons.

Elements: Text box, Buttons, Shapes, Image

- Left arrow
- Right arrow
- Reset
- Back
- Information
- Help
- Q&A
- Bookmark
- Blank
- Apply all slicers
- Clear all slicers
- Navigator >
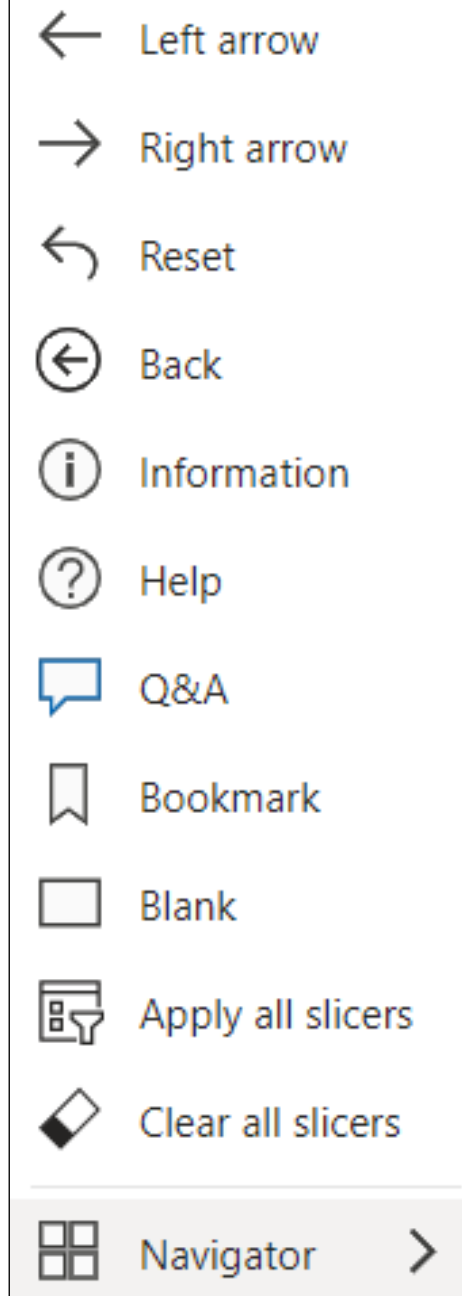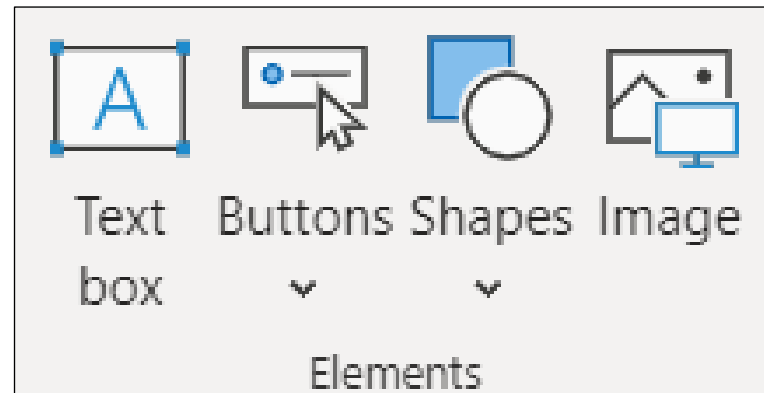
Preserve report state with bookmarks

Bookmarks capture:

- Current page

- Filters

- Slicers

- Sort order

- Drill location

Bookmarks » ✕

☐₊ Add   ☐₀ View

Bar Chart ON

Column Chart ON
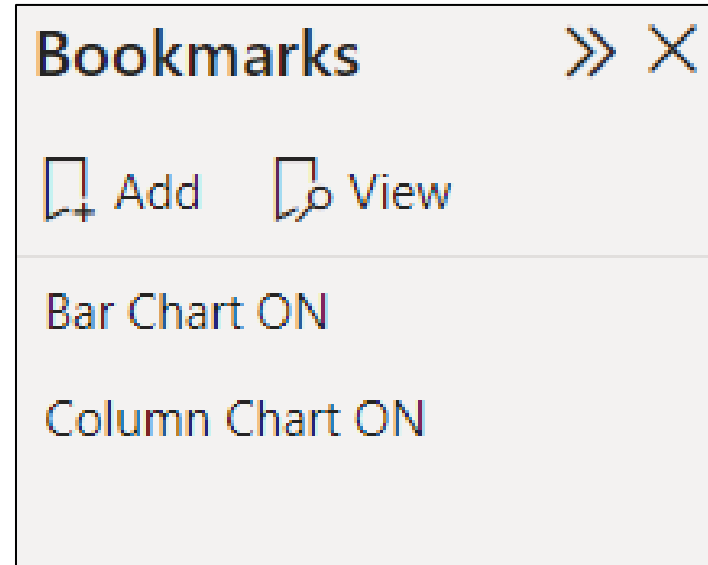
Use selection order for accessibility

Layer order:

Defines the order of visuals.
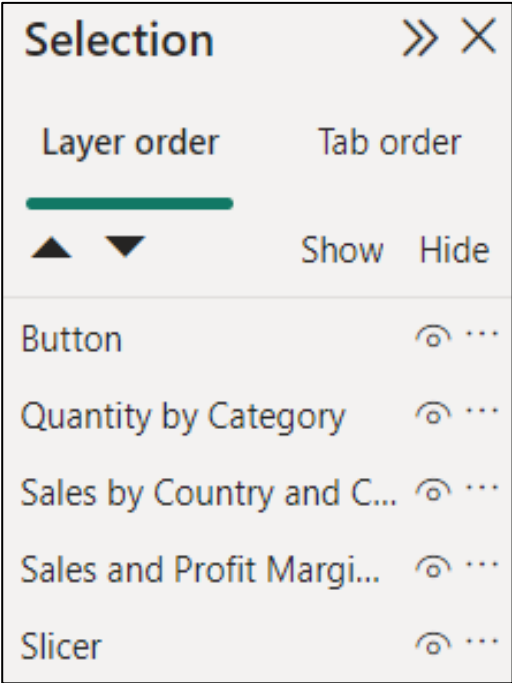
Tab order:

Controls keyboard user navigation.
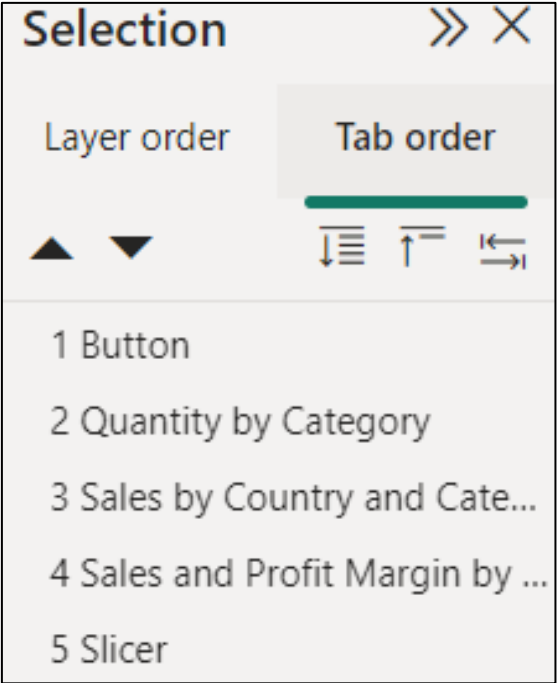
Drill through from one visual to another

Choose when to use paginated reports

Lab: Enhance a report in Power BI Desktop (45 minutes)

[Enhance a Report | GitHub Exercise](#)

In this lab, you'll enhance the Sales Analysis with advanced design features.

In this lab you learn how to:

- Sync slicers

- Create a drill through page

- Apply conditional formatting

- Create and use bookmarks

Knowledge check: enhance reports

What type of report visual can effectively show the stock levels at a company?

☐ Bar chart

☐ Pie chart

☑ Line chart

What type of report visual can show detailed sales values over time and by type?

☑ Matrix

☐ Table

☐ Treemap

Recap

In this section, we covered:

Choosing effective visuals and add to canvas.

Formatting and configuring visuals.

Designing report layout and interactions.

Configuring navigation and filtering.

Enhancing design with report elements, including bookmarks.

Setting tab and layer order to increase accessibility.

How to use drill down and drill through for additional insights.

When to use paginated reports.

Microsoft

Perform Advanced Analytics with Power BI Desktop

aka.ms/PL300-6

Agenda

Explore insights with Advanced Analytics

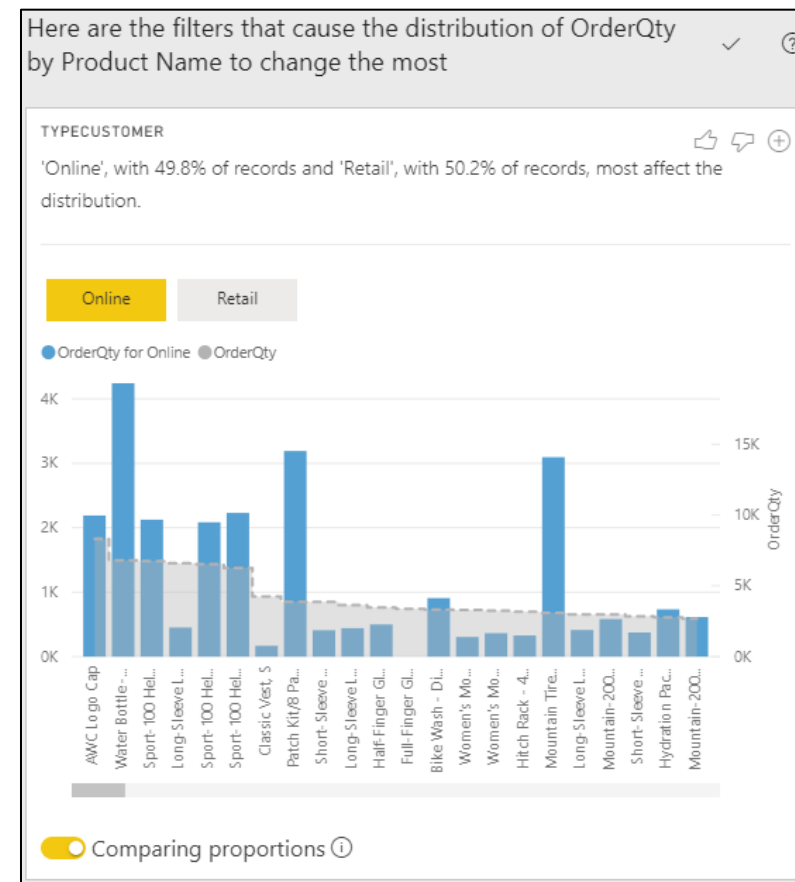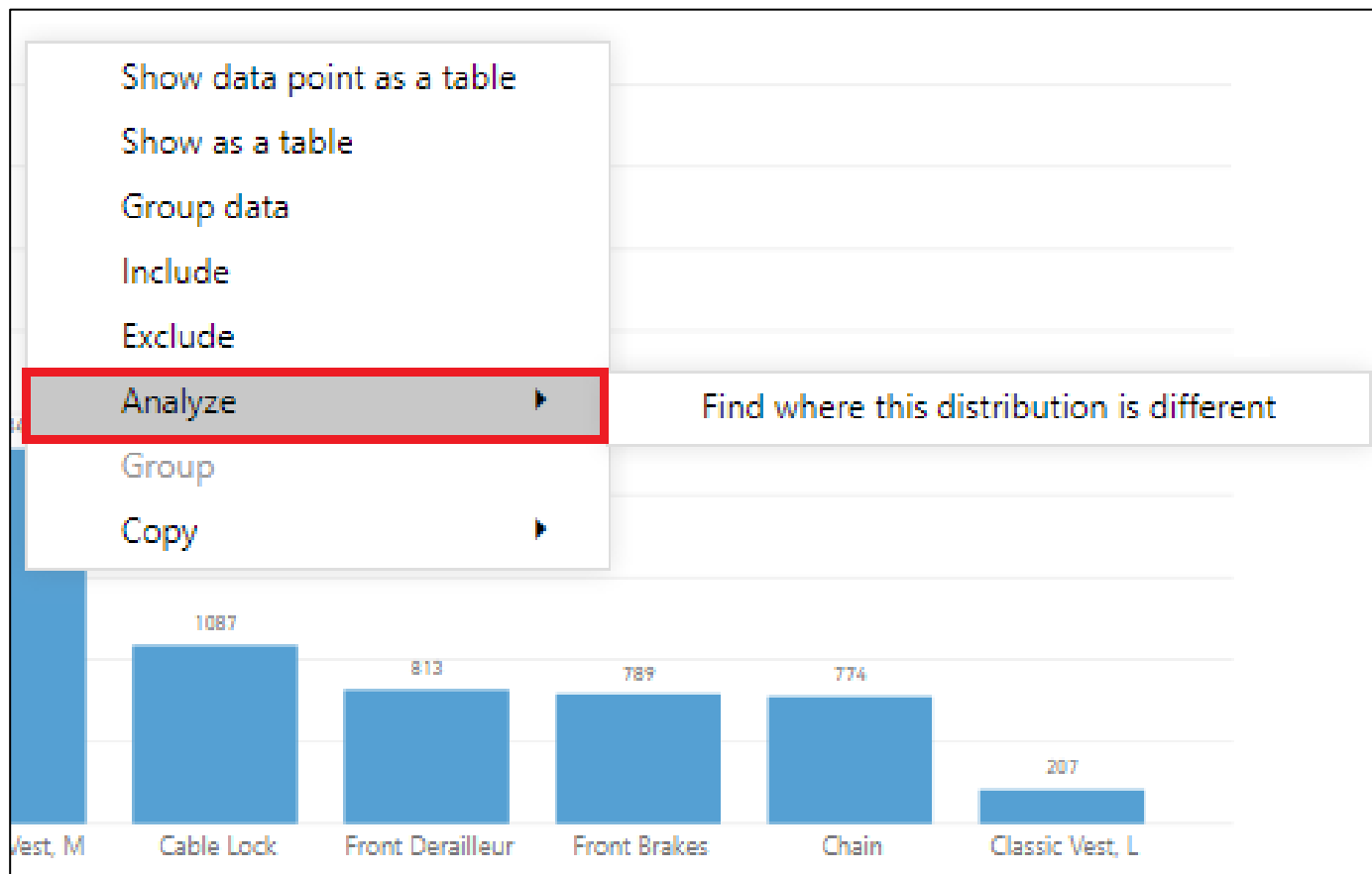- Data comparison with Analyze feature.

- Group and bin data.

- Cluster data and find outliers with Scatter chart visual.

- Key Performance Indicator visual.

- What-if parameters for scenario planning.

Leverage AI visuals

Explore insights with Advanced Analytics

Compare data with the Analyze feature

Group and bin data

Organize data into categories or intervals to better analyze and visual data.
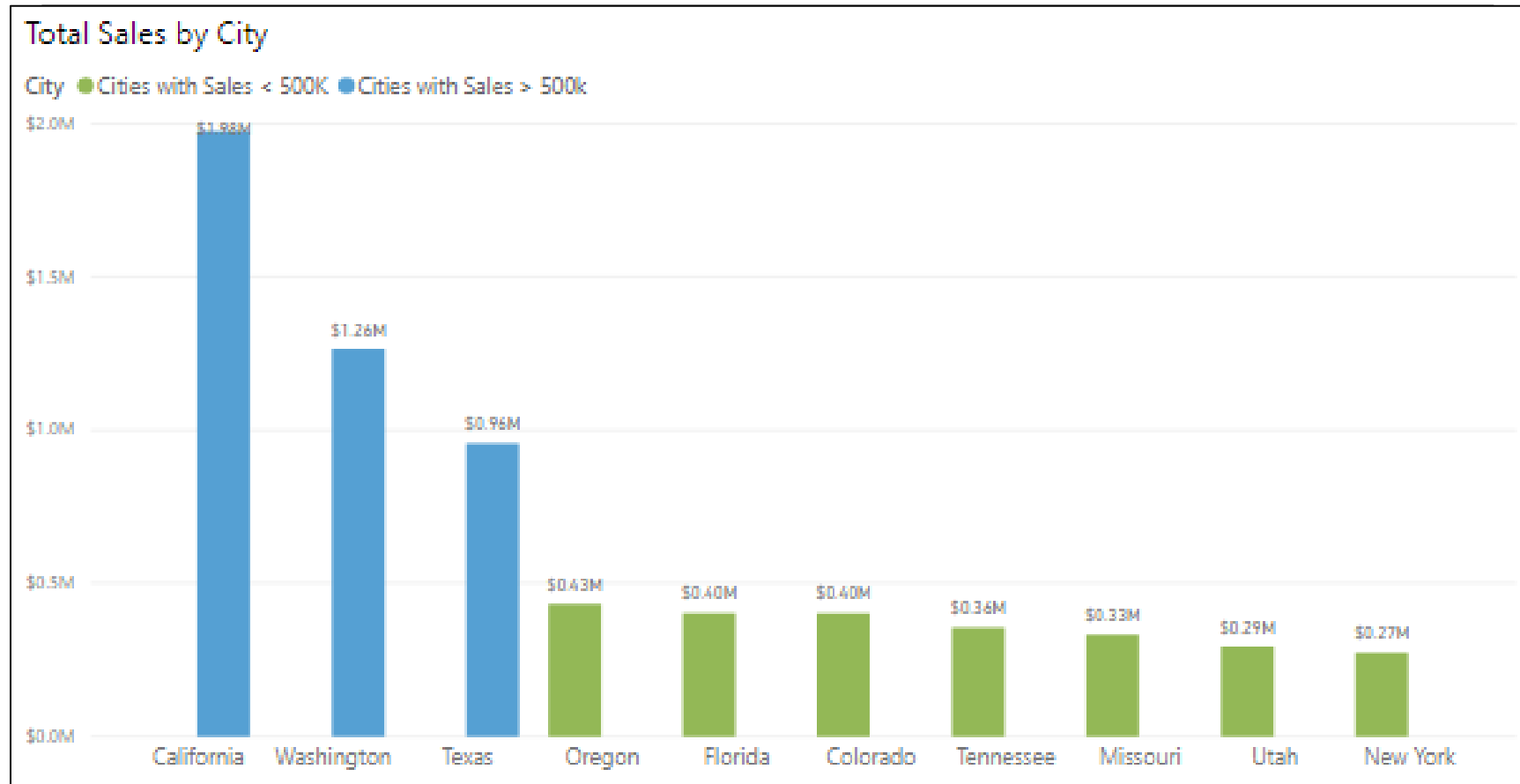
Identify outliers in data

- Unexpected deviations in data.

- Scatter charts can detect outliers.

- Use DAX to define and analyze outliers dynamically.

Number of Orders by Orders Shipped by Product Category

Product Category ●Clothing ●HL Mountain Bikes ●LL Bikes ●ML Mountain ●Mountain ●Road ●Ski Gear ●Touring
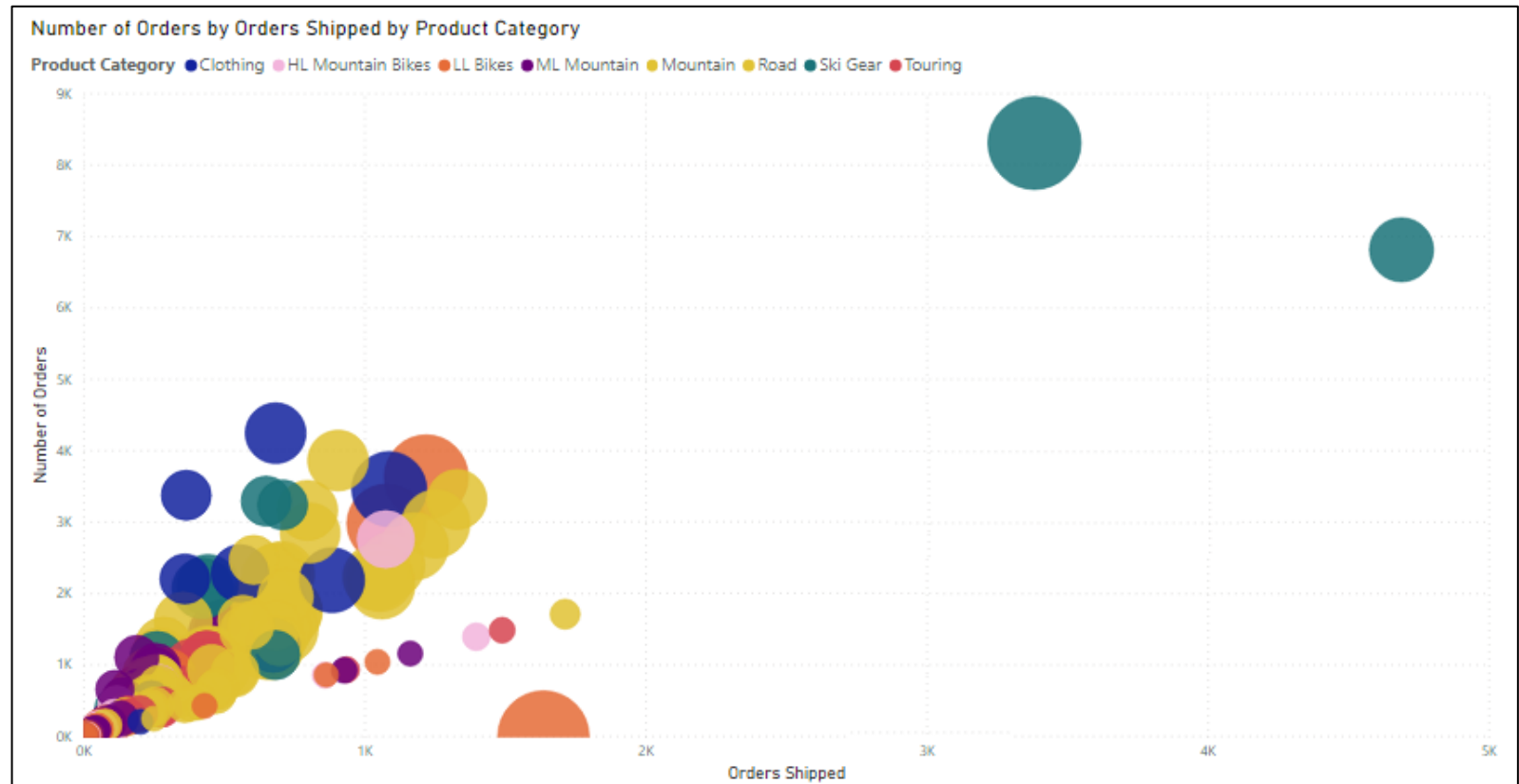
Clustering with Scatter chart visual

- Automatic data grouping.

- Enhance pattern recognition and insights.

- Simplify data understanding and analysis.
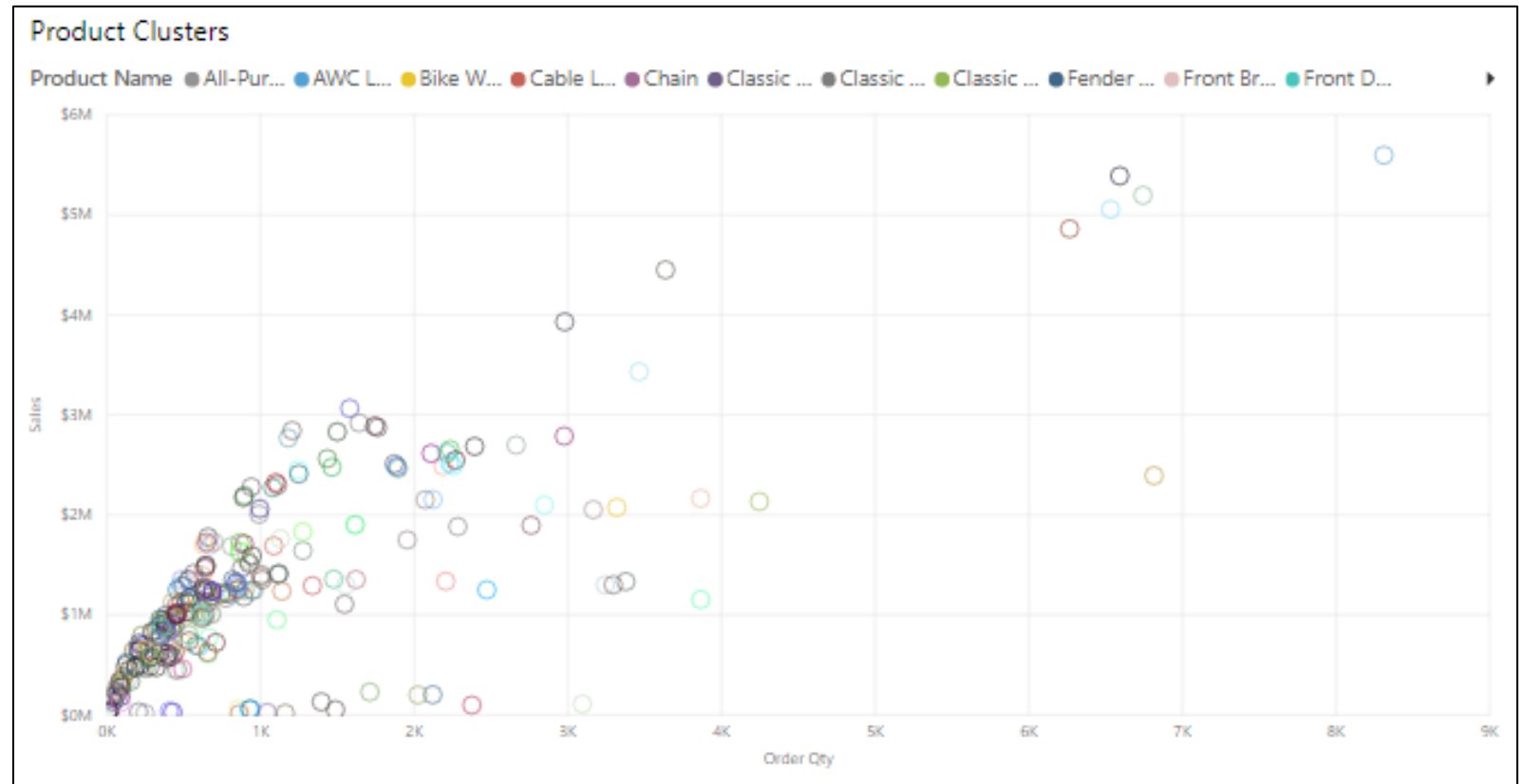
Key Performance Indicator visual

At-a-glance insights into performance against predefined targets.
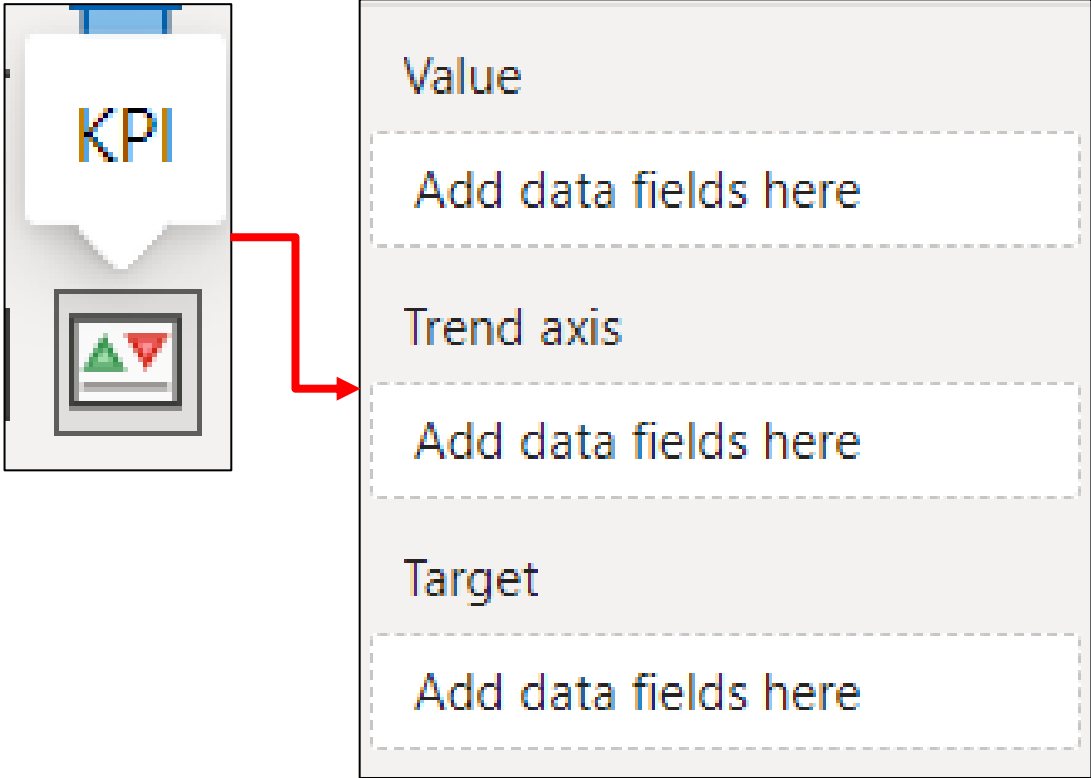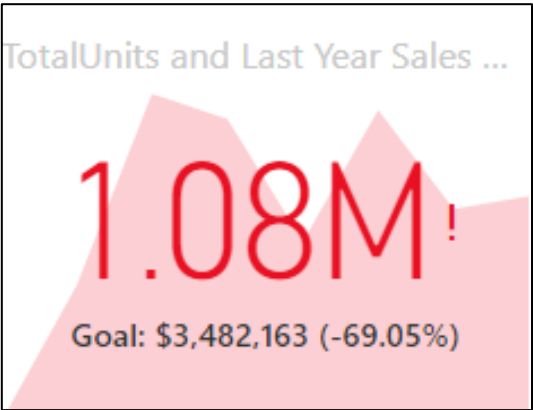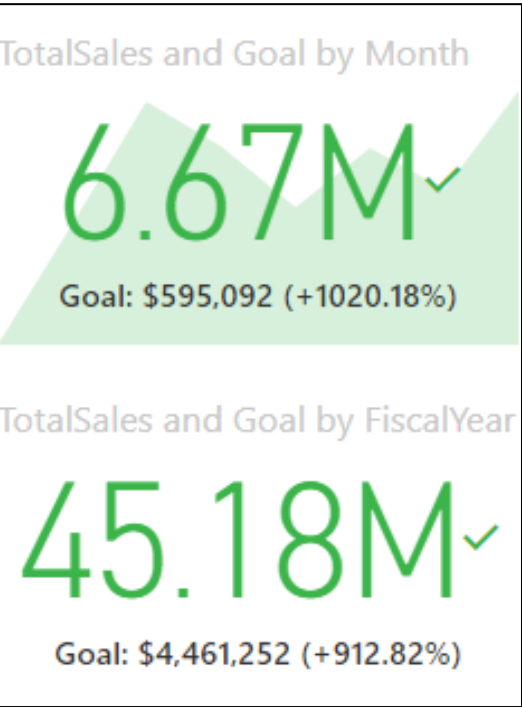
What-if parameters

Enable scenario planning and interactive exploration for better decision-making.
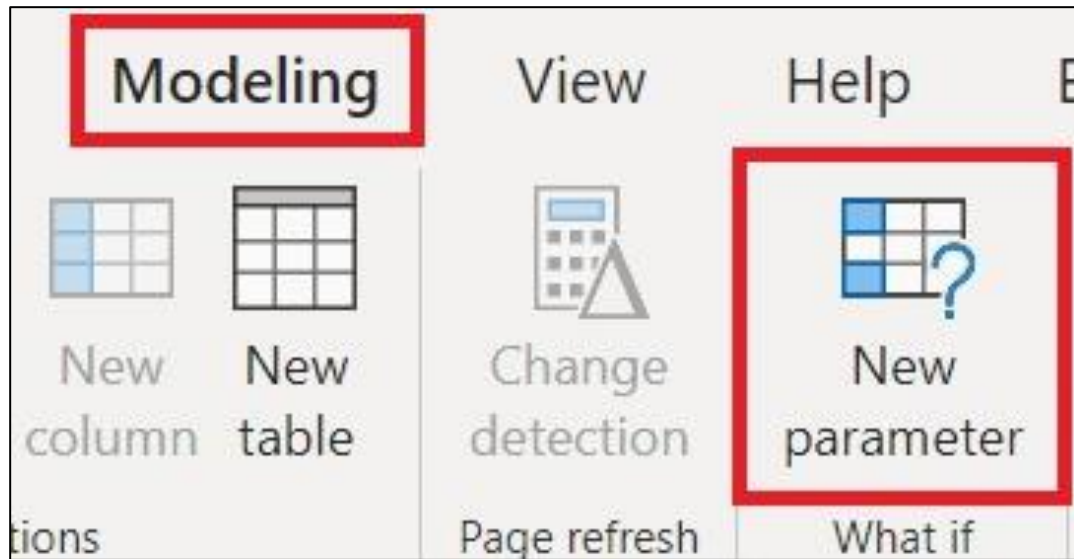
Advanced Analytics custom visuals

Discover additional visuals developed with Advanced Analytics in mind.
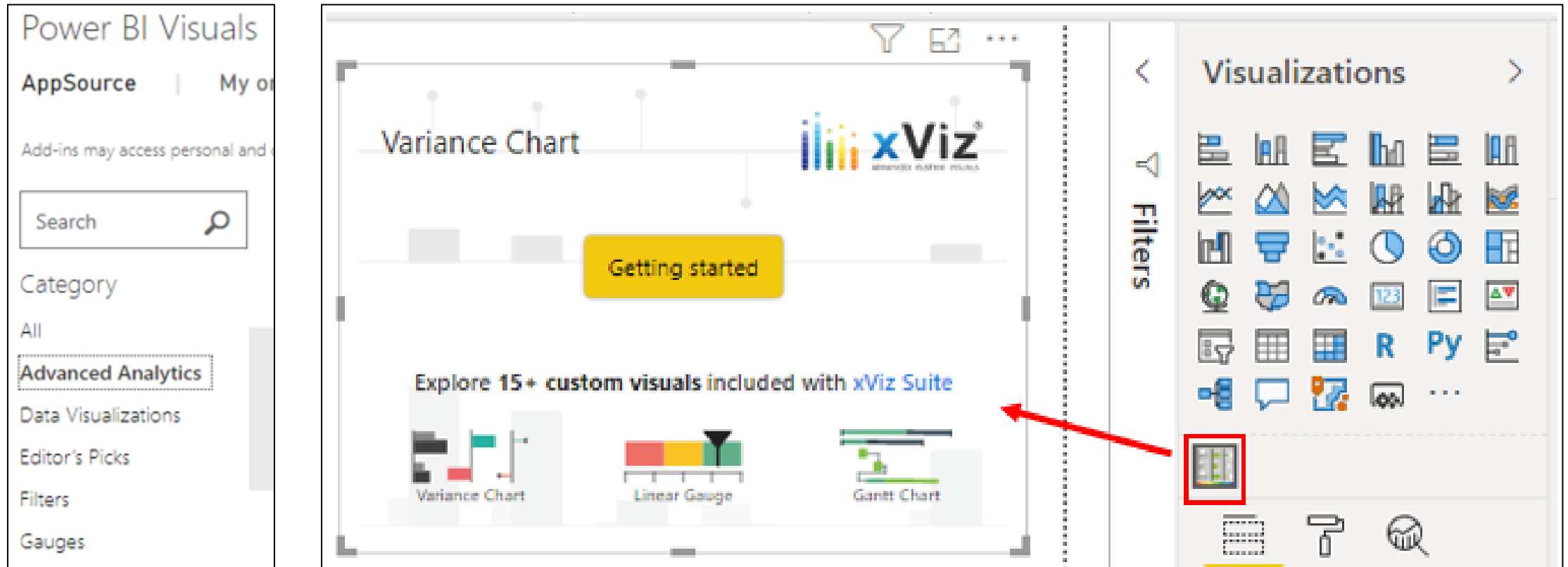
Leverage AI visuals

AI Insights for data preparation in Power Query Editor

Leverage AI analysis of text, images, and use Azure Machine Learning models.

AI in the Q&A feature

Use natural language to ask questions about data and create visuals for insights.
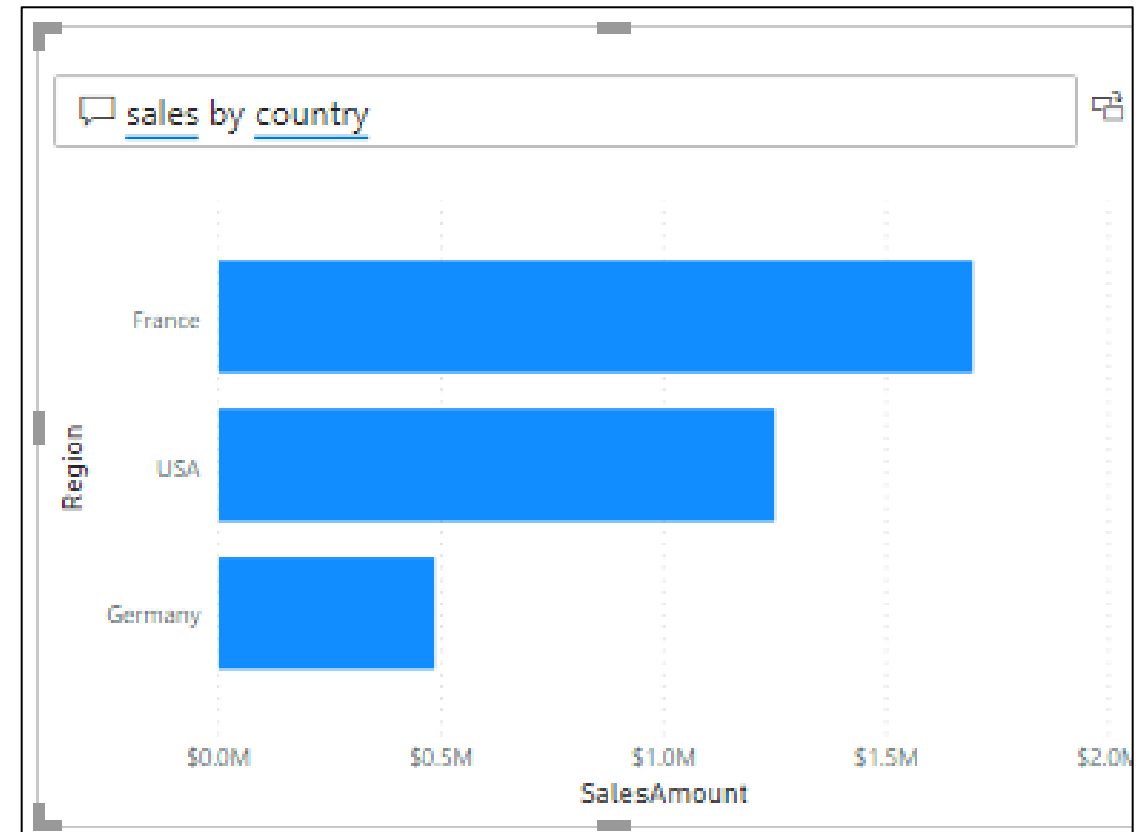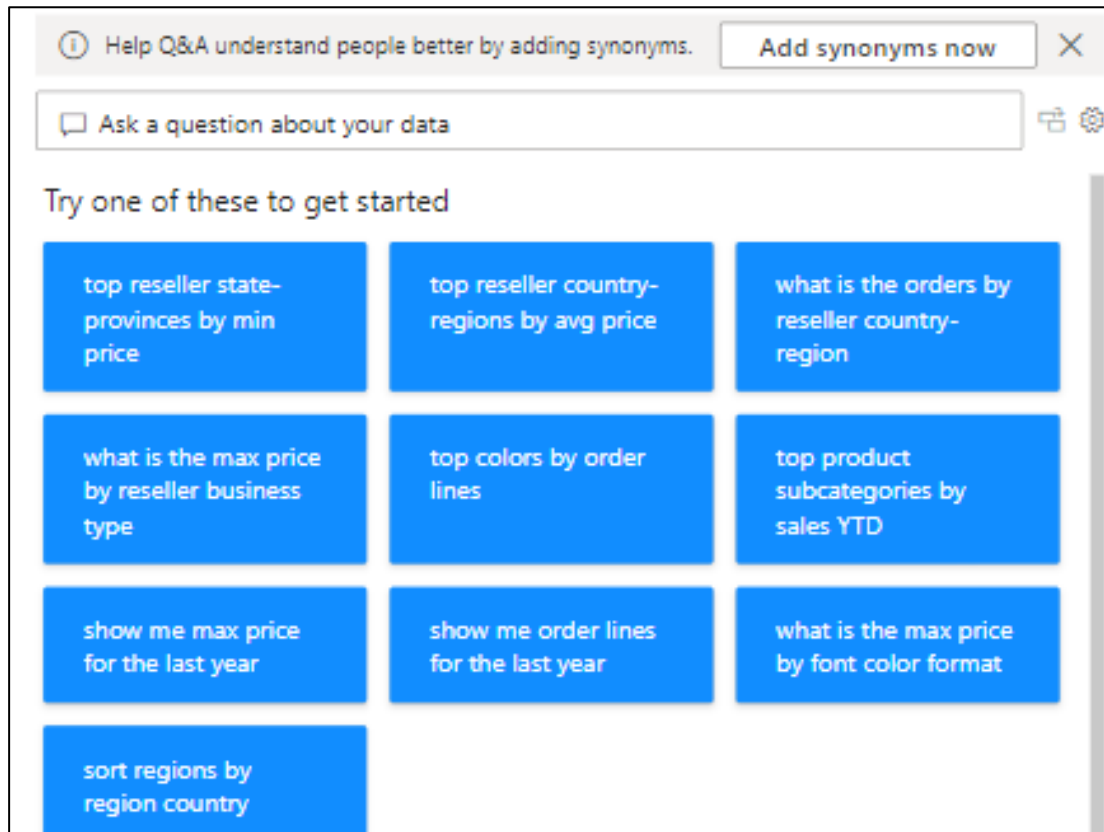
Key influencers visual

Identify factors driving variations in a chosen target metric.
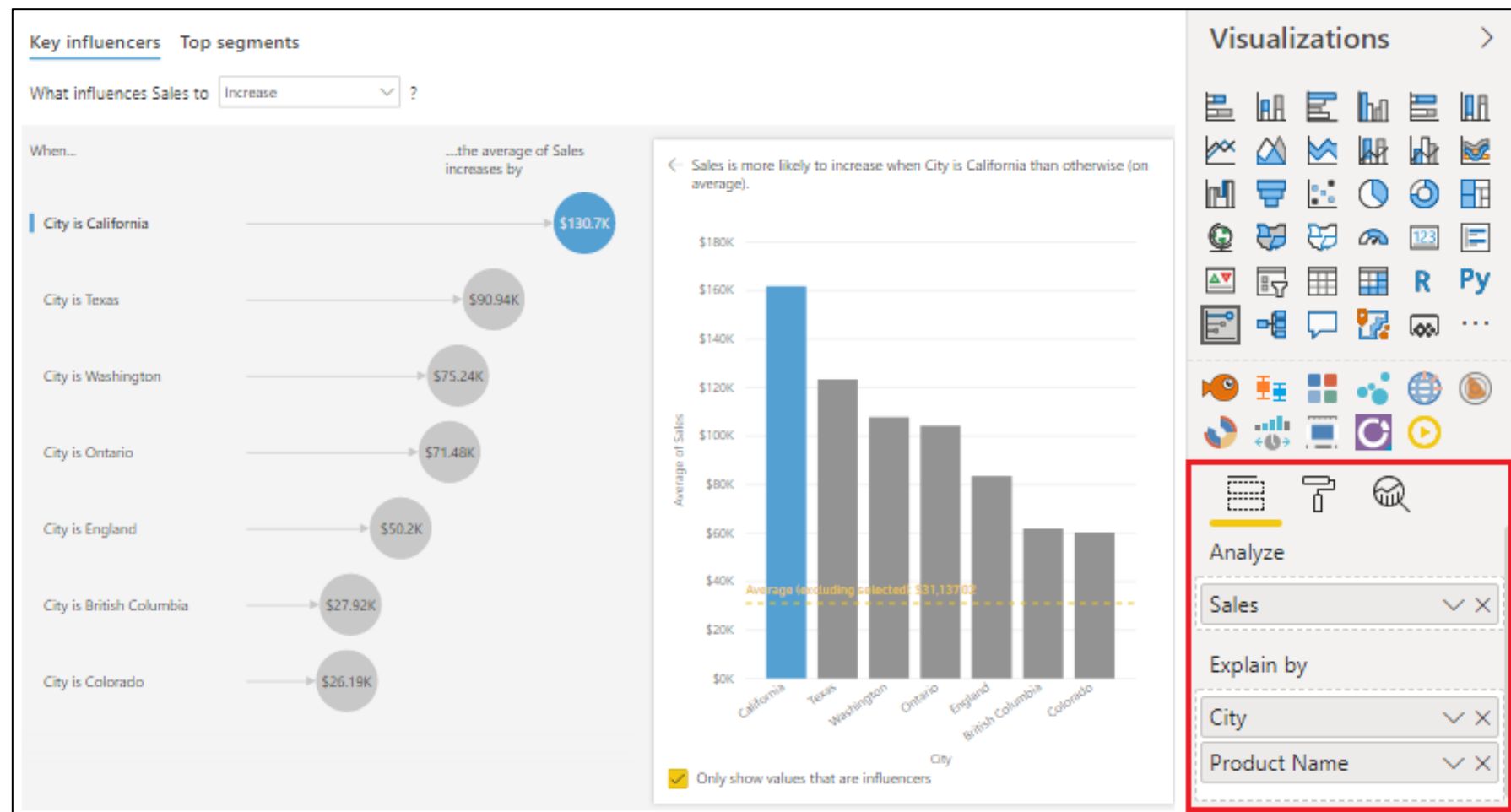
Decomposition tree visual

Visualize data hierarchies for in-depth exploration and pattern discovery.
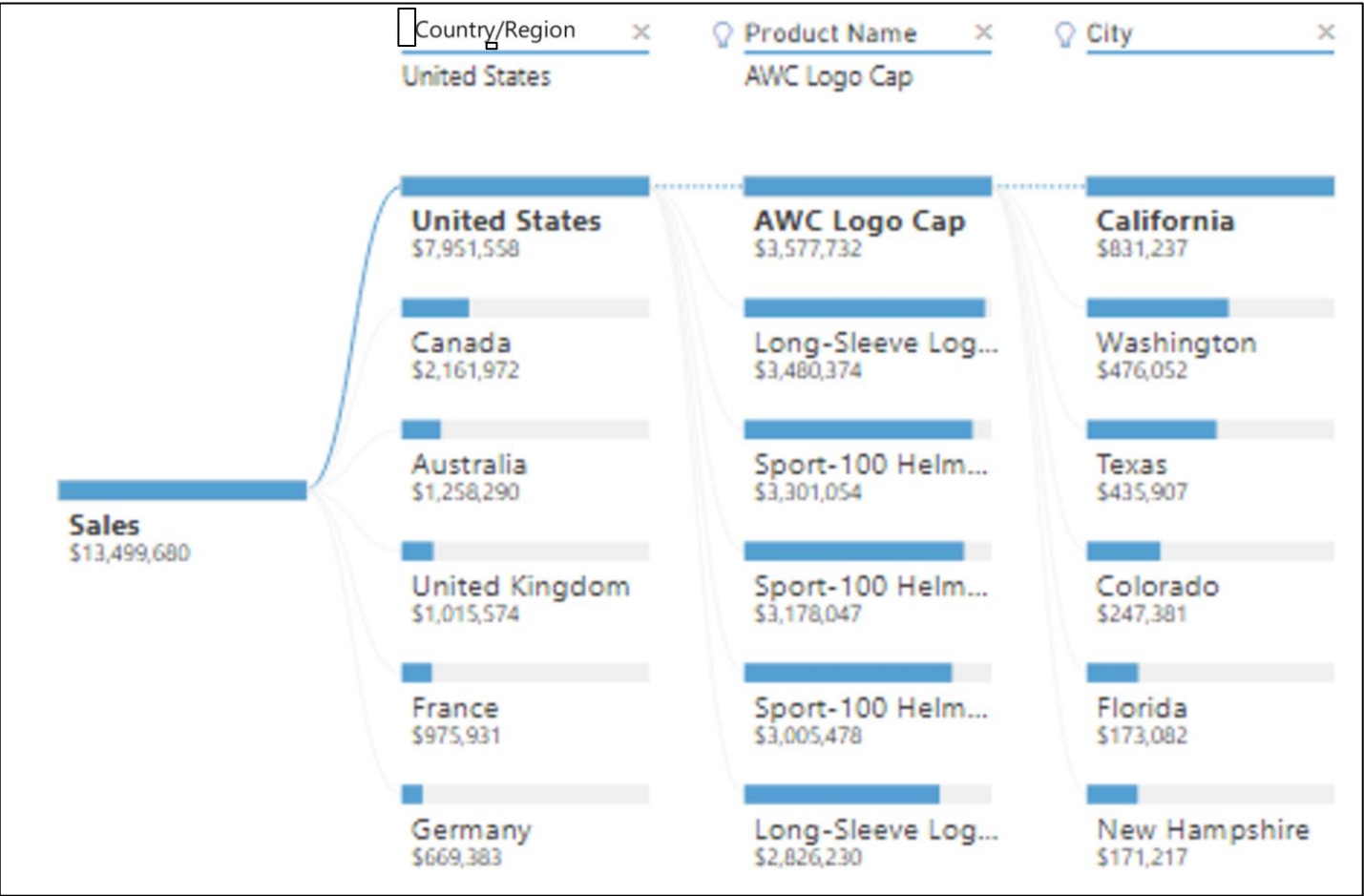
Lab: Perform data analysis in Power BI (30 minutes)

[Perform Data Analysis | GitHub Exercise](#)

In this lab, you'll create the Sales Exploration report.

In this lab you learn how to:

- Create animated scatter charts

- Use a visual to forecast values

Knowledge Check: AI Visuals

Where are time series charts located?

☐ The filter pane is where all filters on visuals and pages are located.

☑ Time series charts can be imported from AppSource.

☐ The fields pane is where all charts are located.

What visual should be used to display outliers?

☐ The line chart is best-suited to display outliers.

☑ The scatter chart is best-suited to display outliers.

☐ The clustered column chart is best-suited to display outliers.

Recap

In this section, we covered:

Grouping and binning and the Analyze feature to compare data.

Clustering data and finding outliers with the Scatter chart visual.

Scenario planning with what-if parameters.

Leveraging AI during data preparation.

Discovering trends and patterns with Key Influencers and Decomposition Tree visuals.

Microsoft

Thanks

Resources

- [Design Power BI reports](#)

- [Configure Power BI report filters](#)

- [Enhance Power BI report designs for the user experience](#)

- [Perform advanced analytics in Power BI](#)