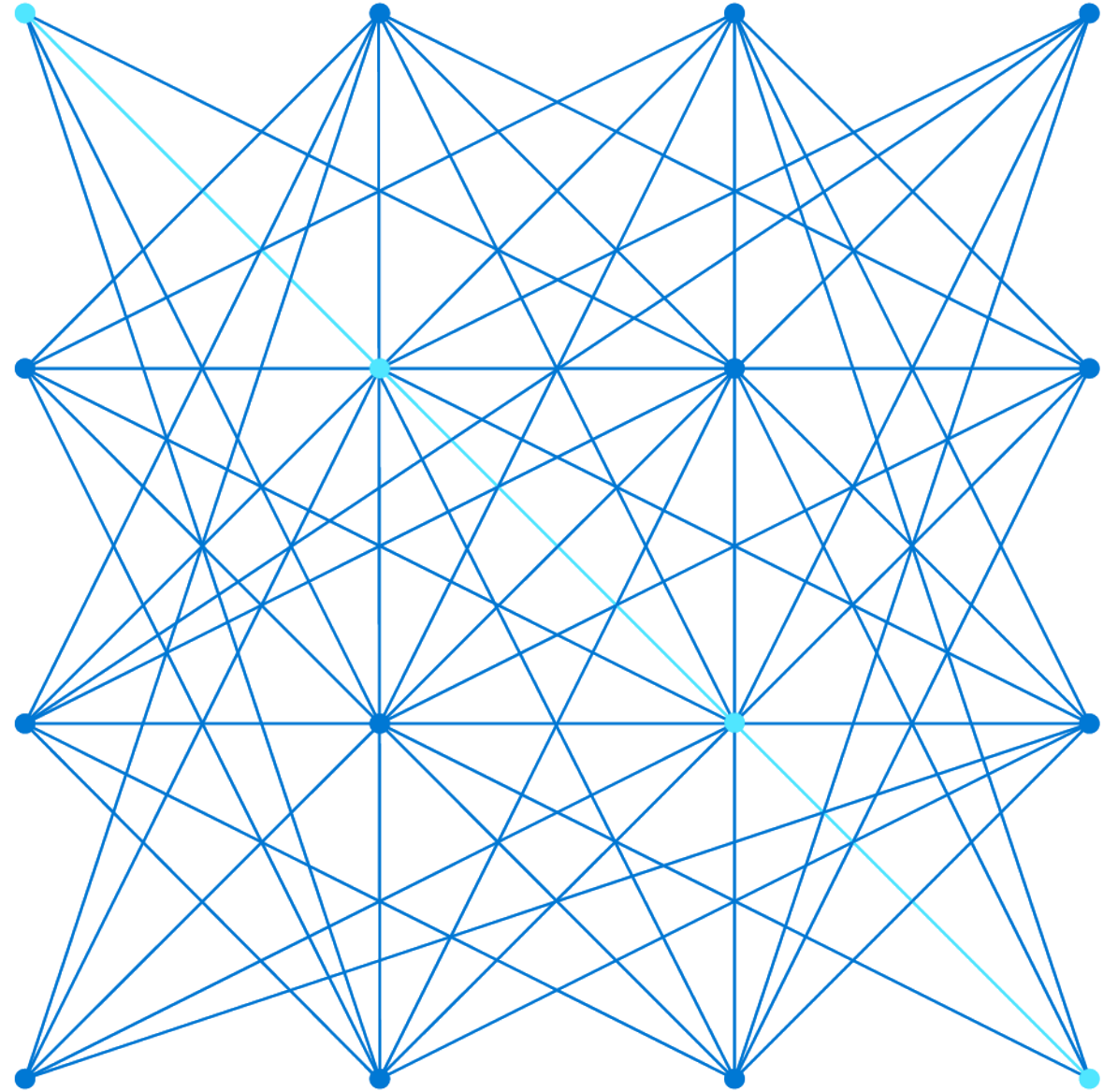


Online Role-based training resources:

**Microsoft Learn**

<https://docs.microsoft.com/en-us/learn/>

# PL-300 Analyzing Data with Power BI



# Module 10: Perform Advanced Analytics

# Learning Objectives

You will learn the following concepts:

- Advanced Analytics
- Data Insights through AI Visuals

# Lesson 1: Advanced Analytics

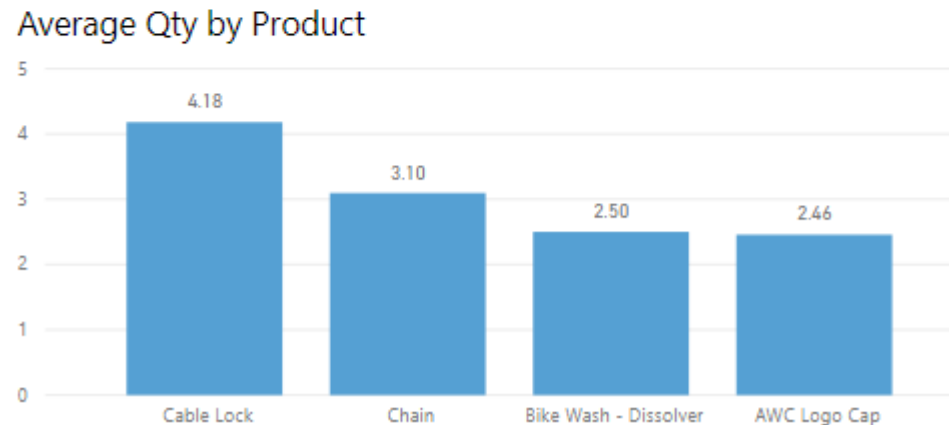


# Introduction to Advanced Analytics

- Advanced analytics enables organizations to make better business decisions and create actionable and meaningful insights.
- The emerging power of advanced analytics.
- Bring value to an organization through Power BI's advanced analytics capabilities.

# Explore Statistical Summary

- Information that provides quick and simple description of your data.
- See clusters, patterns, and behavioral data.



Visualizations

Filters

Axis

Product Name

Legend

Add data fields here

Values

Average Qty

Tooltips

Remove field

Rename

Move to

Sum

✓ Average

Minimum

Maximum

Count (Distinct)

Count

Standard deviation

Variance

Median

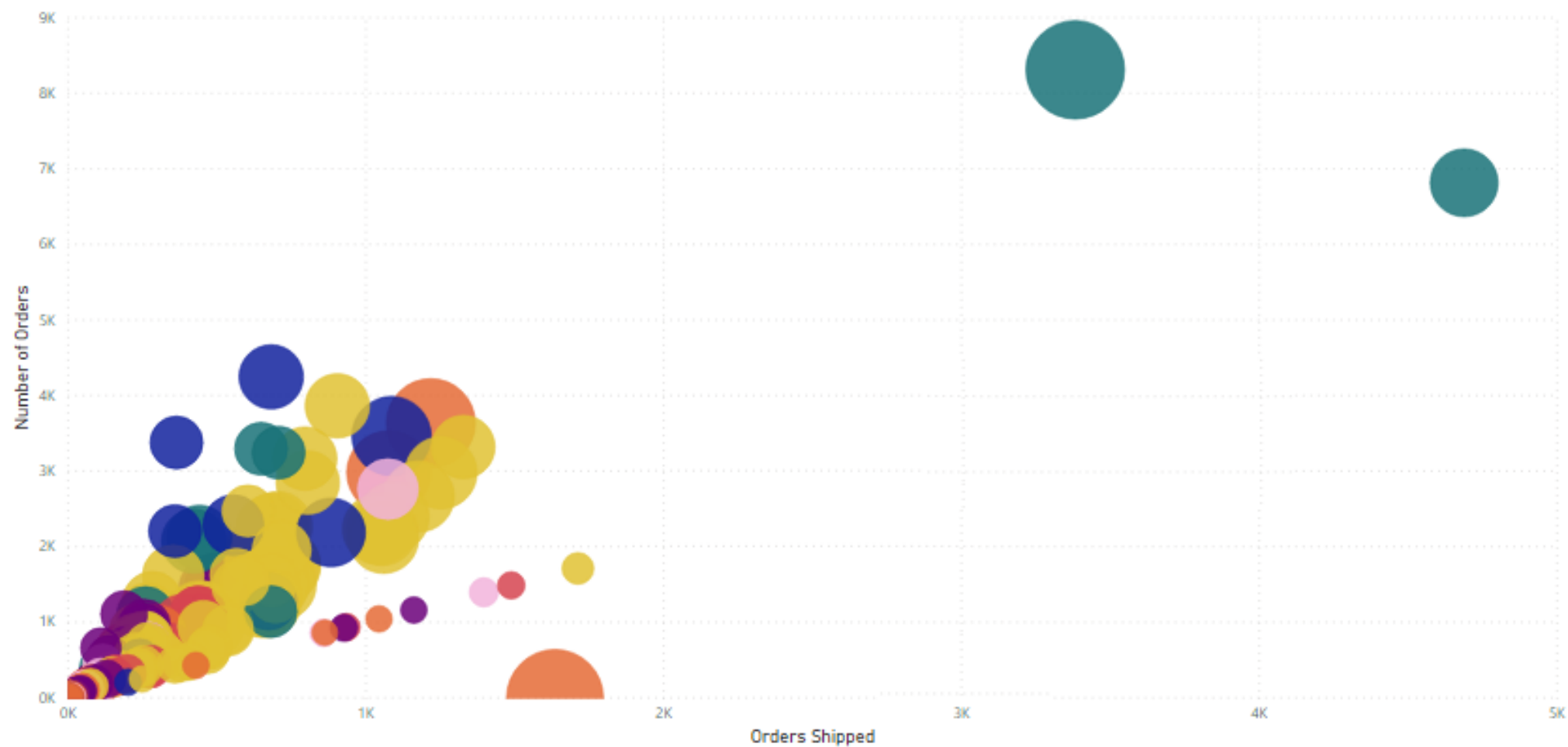
Show value as

New quick measure

# Identify Outliers

Number of Orders by Orders Shipped by Product Category

Product Category ● Clothing ● HL Mountain Bikes ● LL Bikes ● ML Mountain ● Mountain ● Road ● Ski Gear ● Touring

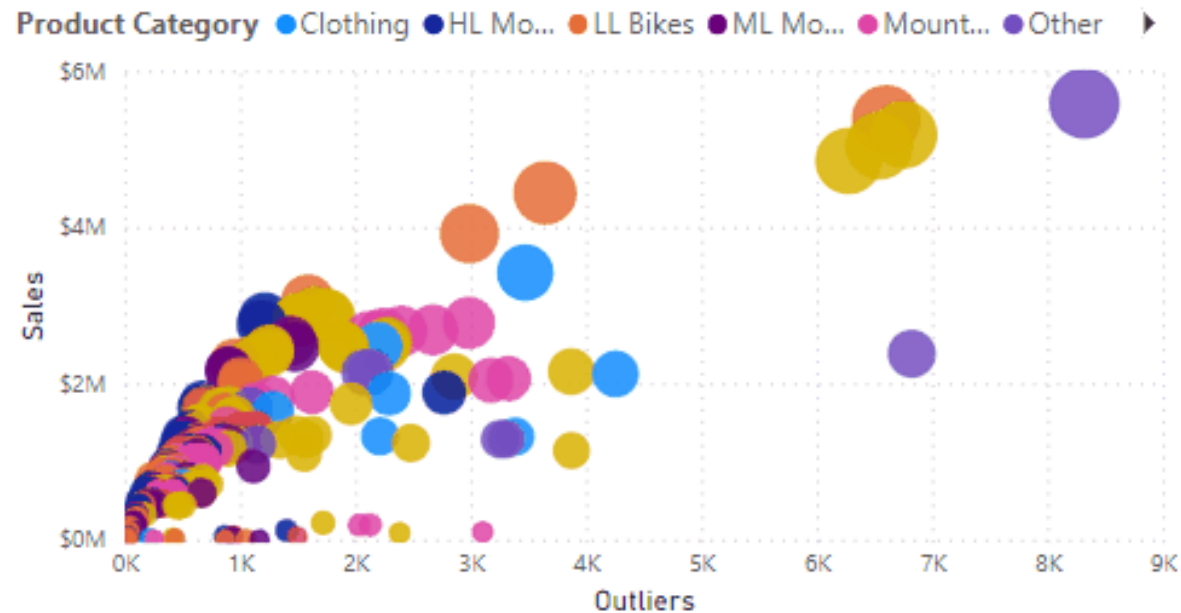




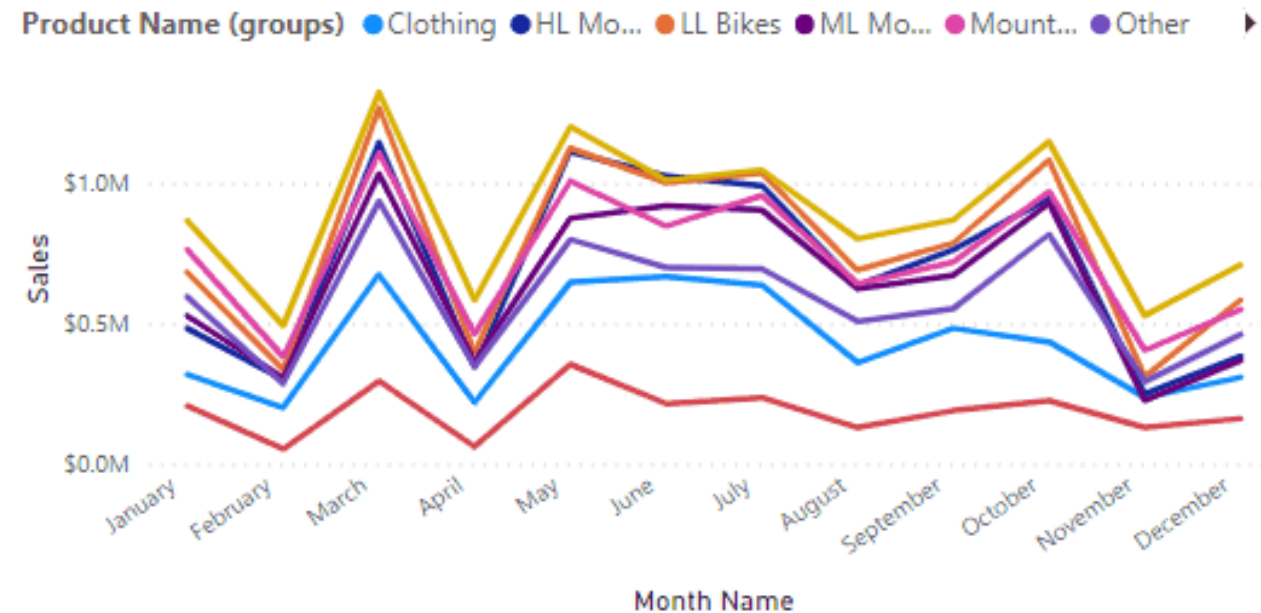
# Conduct Time-series Analysis

- Analyze a series of data over time.
- Identify meaningful trends and make predictions.

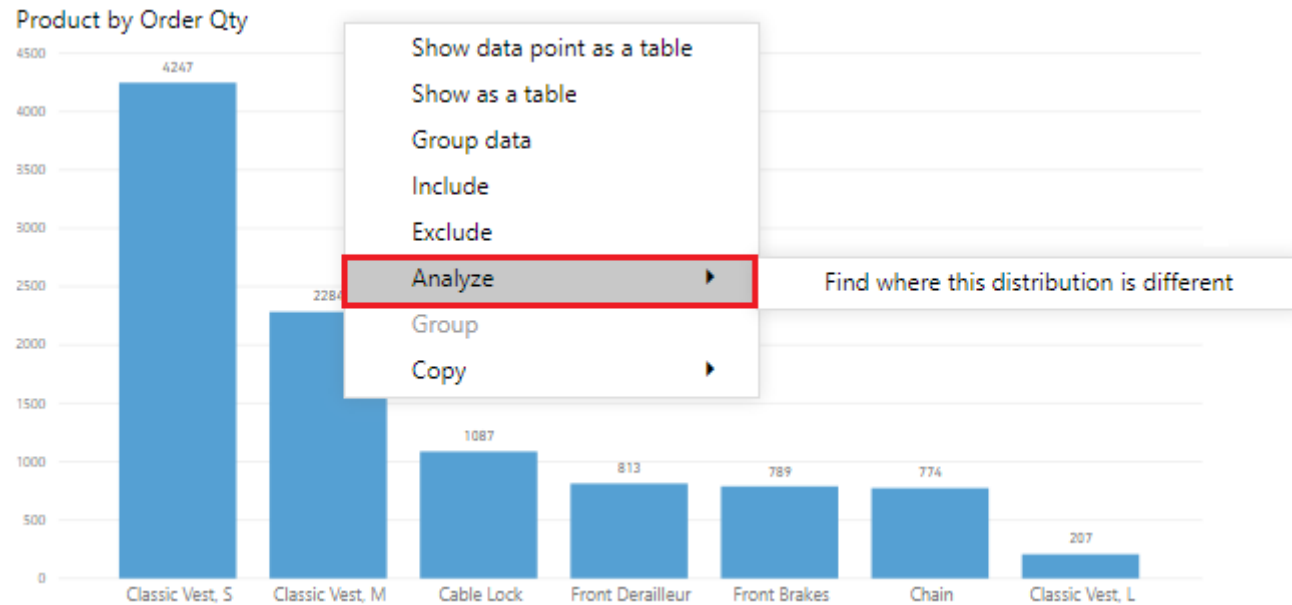
Sales by Product Category



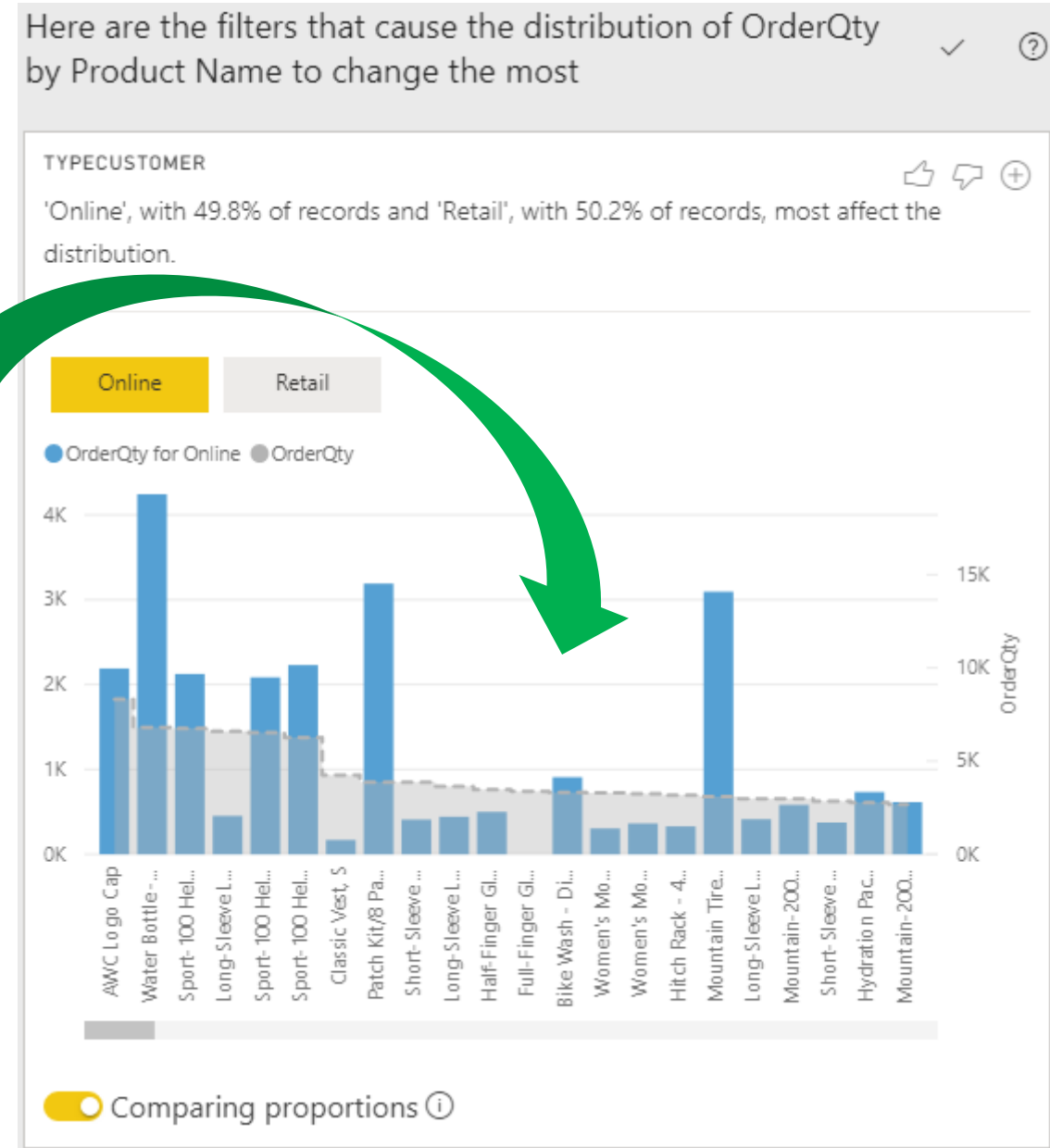
Sales by Month



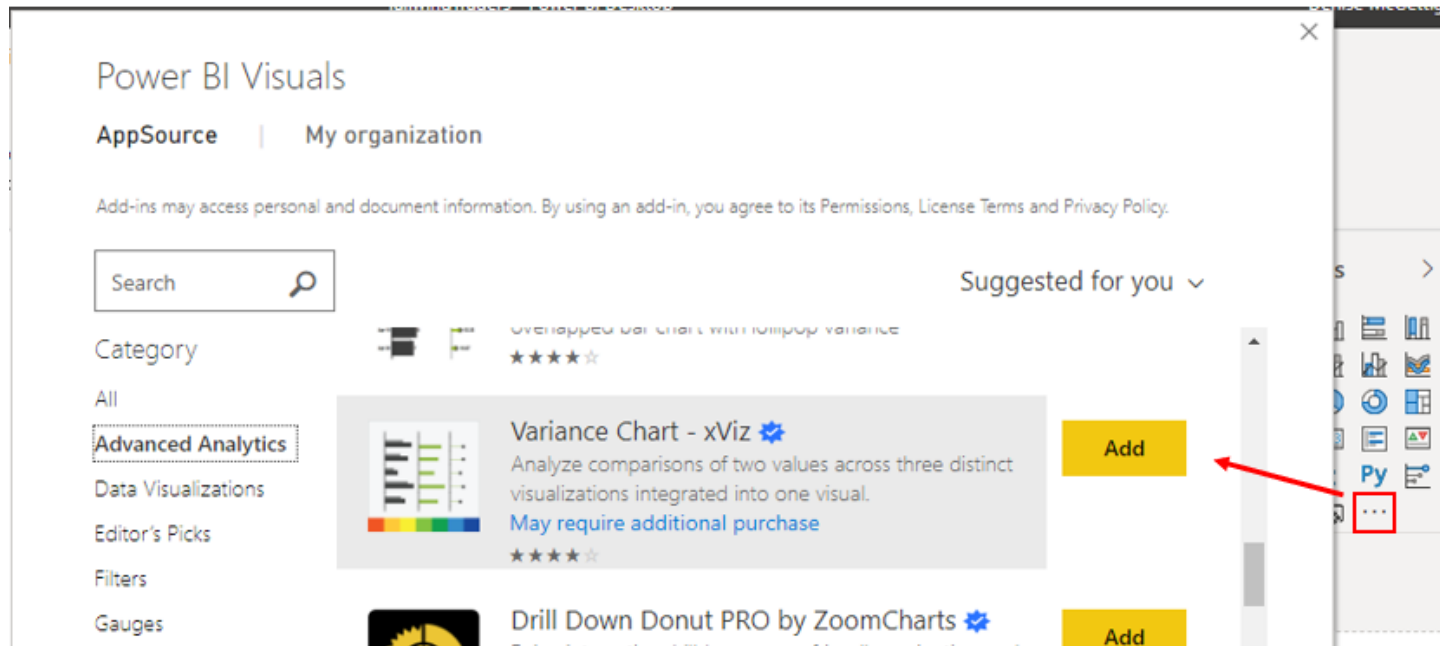
# Using the Analyze Feature



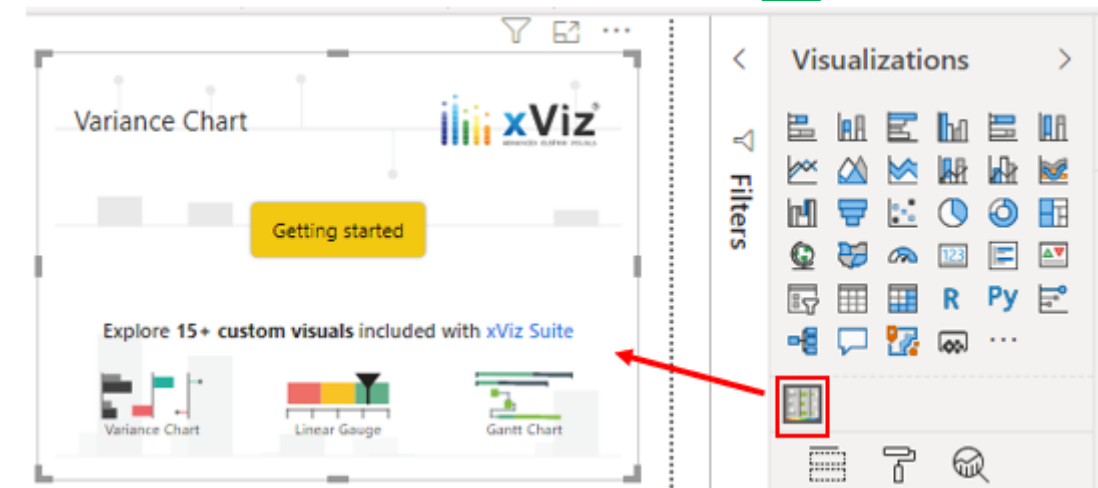
Get fast, automated, and insightful analysis on your data.



# Advanced Analytics Custom Visuals



Add a layer of data insights to your reports for further analysis.

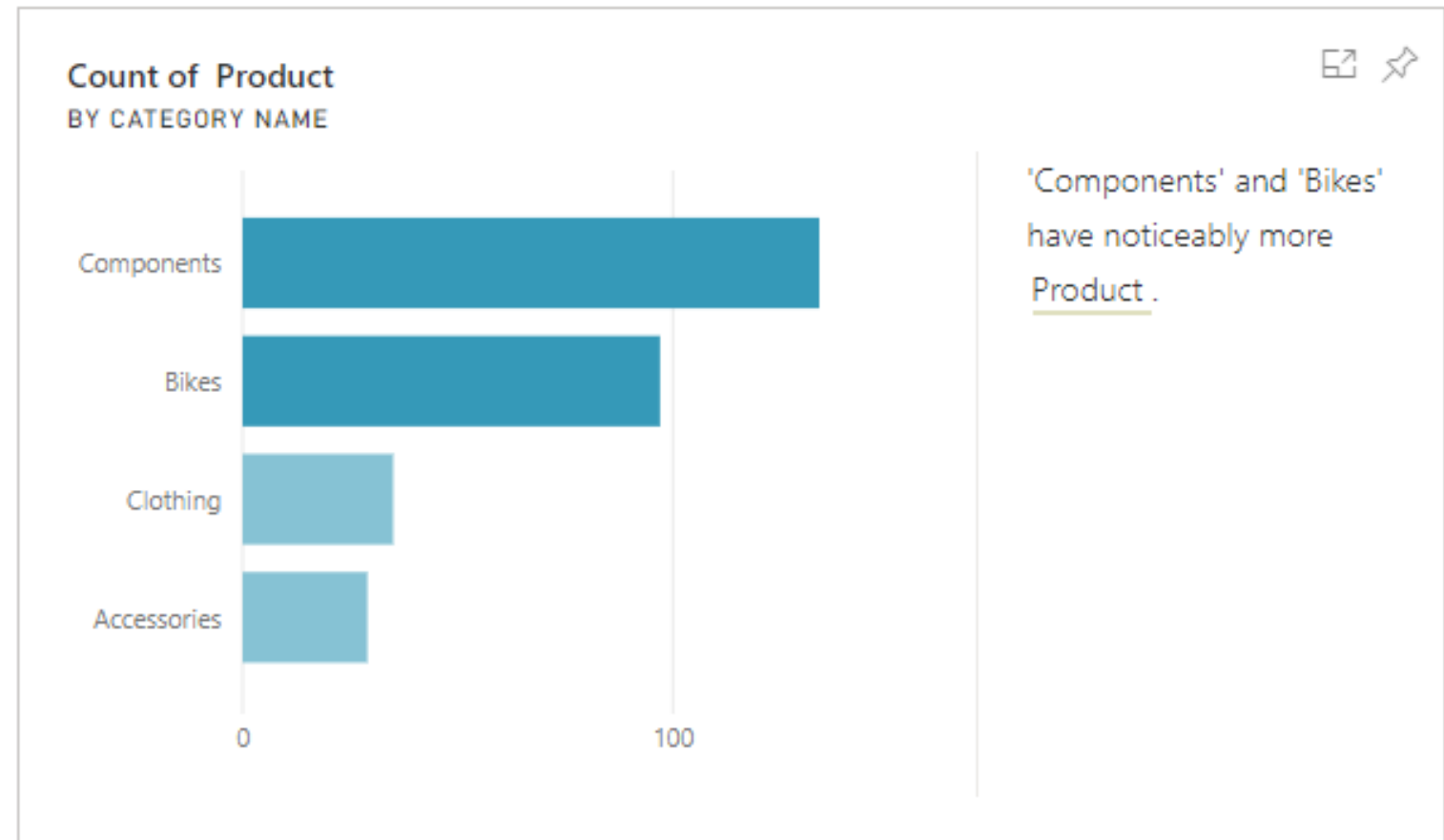


# Quick Insights

- Uses Machine Learning algorithms to produce quick insights.
- Uncover insights missed during report construction.
- Generate stimulating visual interactions.

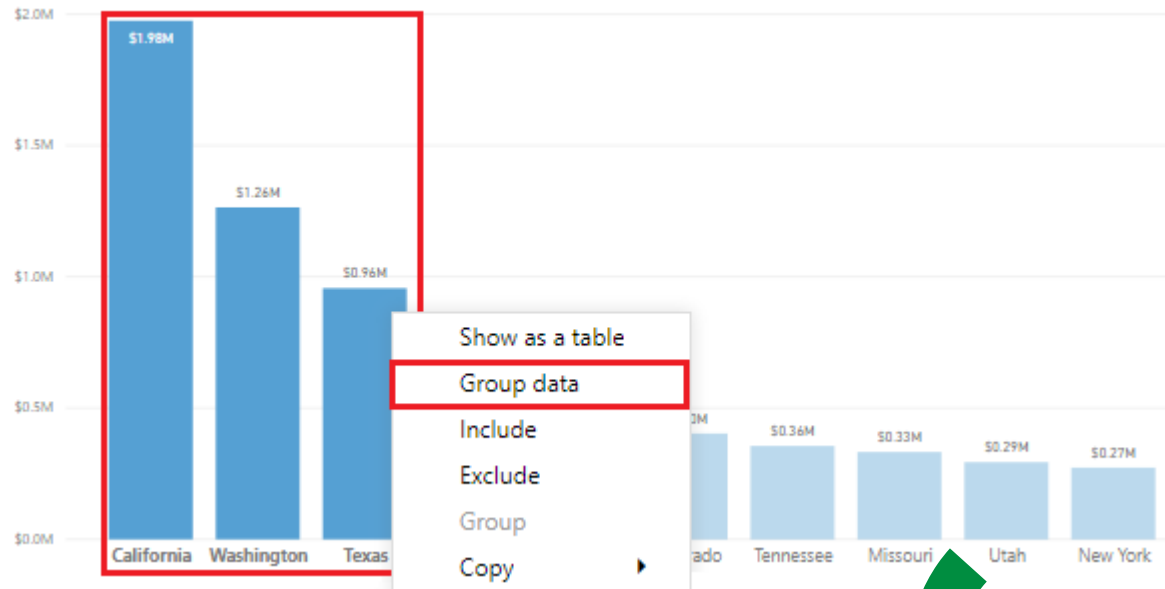
## Quick Insights

A subset of your data was analyzed and the following insights were found. [Learn more](#)



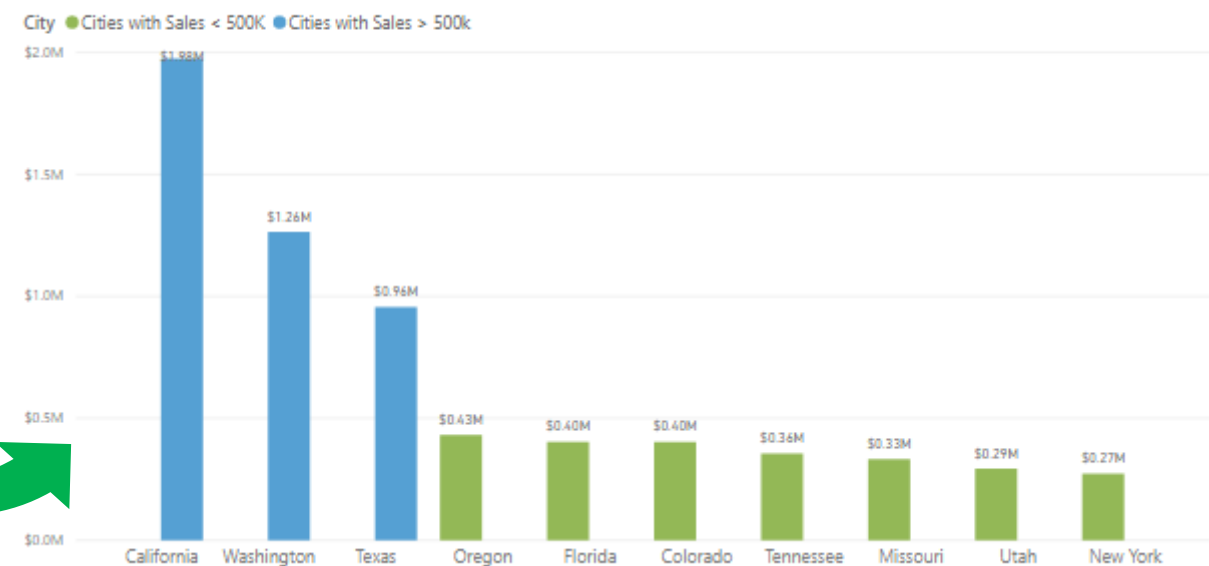
# Grouping and Binning

Total Sales by City



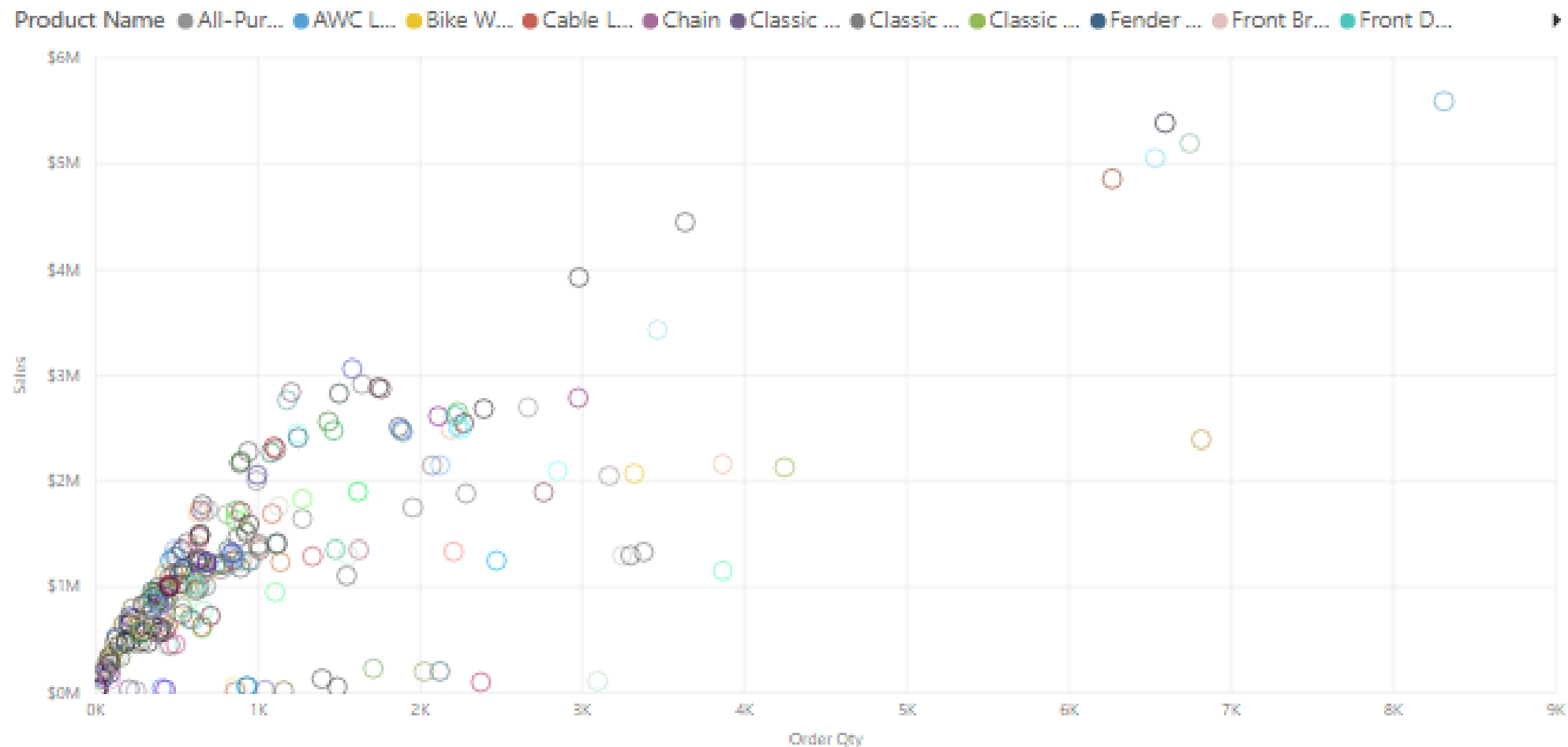
- Grouping: Group categories of data.
- Binning: Group continuous fields.

Total Sales by City



# Clustering Techniques

## Product Clusters



# Lesson Review

- Advanced analytics enables organizations to make better business decisions and create actionable and meaningful insights.
- The emerging power of advanced analytics.
- Bring value to an organization through Power BI's advanced analytics capabilities.

# Lesson 2: Data Insights through AI Visuals



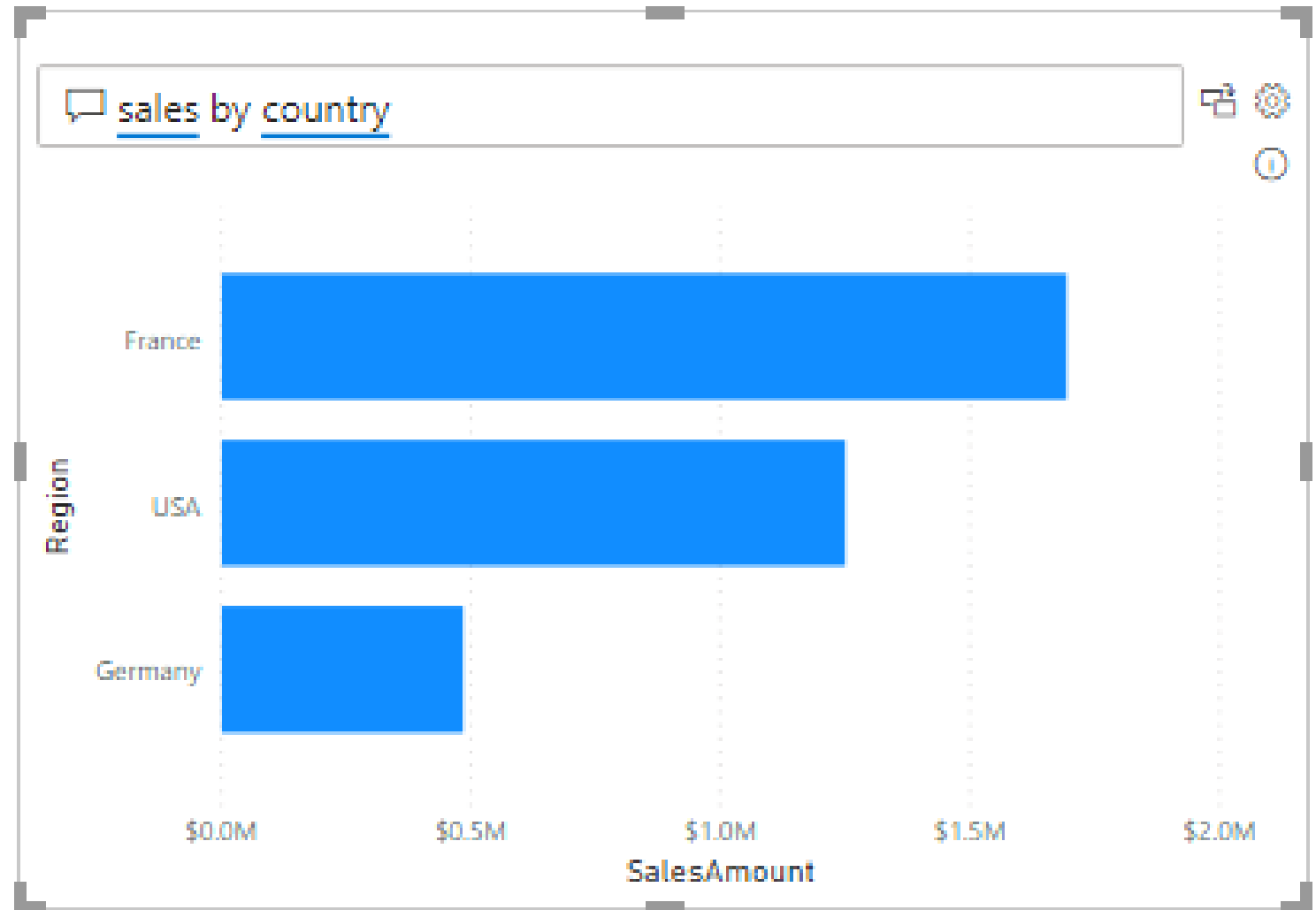


# Introduction to AI Visuals

- Power BI provides a wide range of methods to analyze data.
- Fastest way to get an answer is to ask a question.
- Analyze raw data and transform it into valuable information.

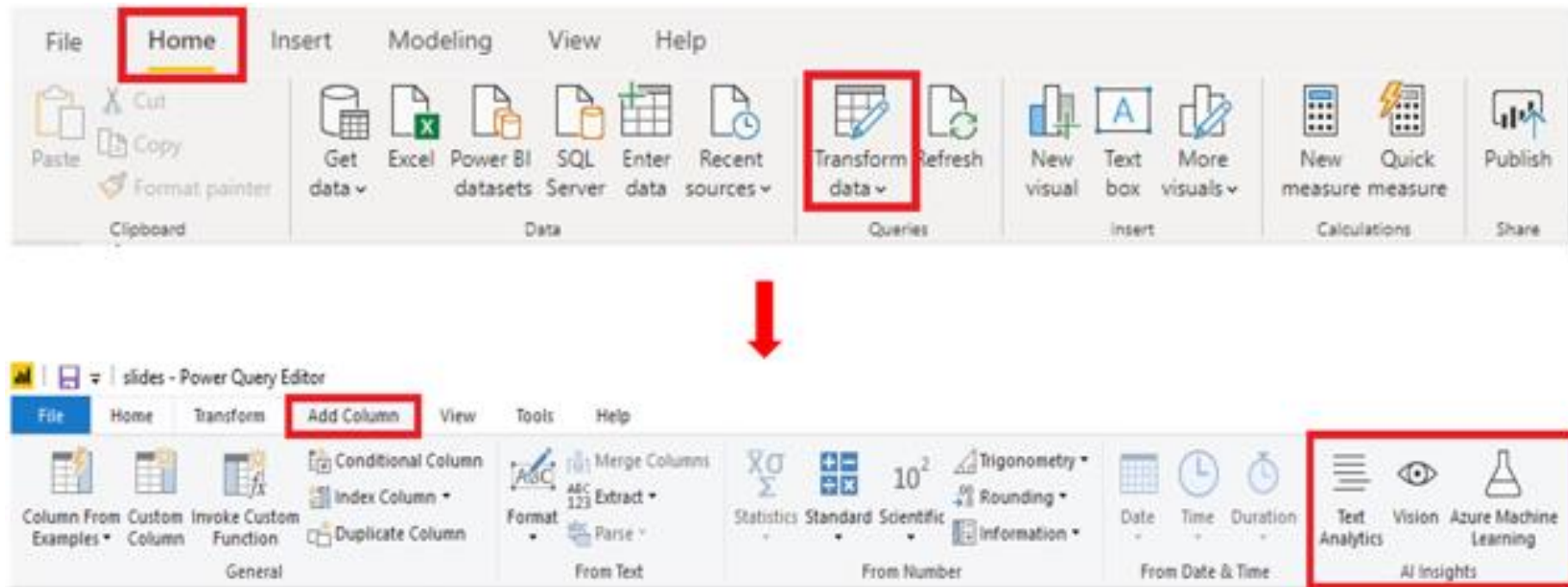
# The Q&A Feature

- Explore data in your own words.
- Ask natural language questions.
- A “self-help” feature for insights the user is interested in.

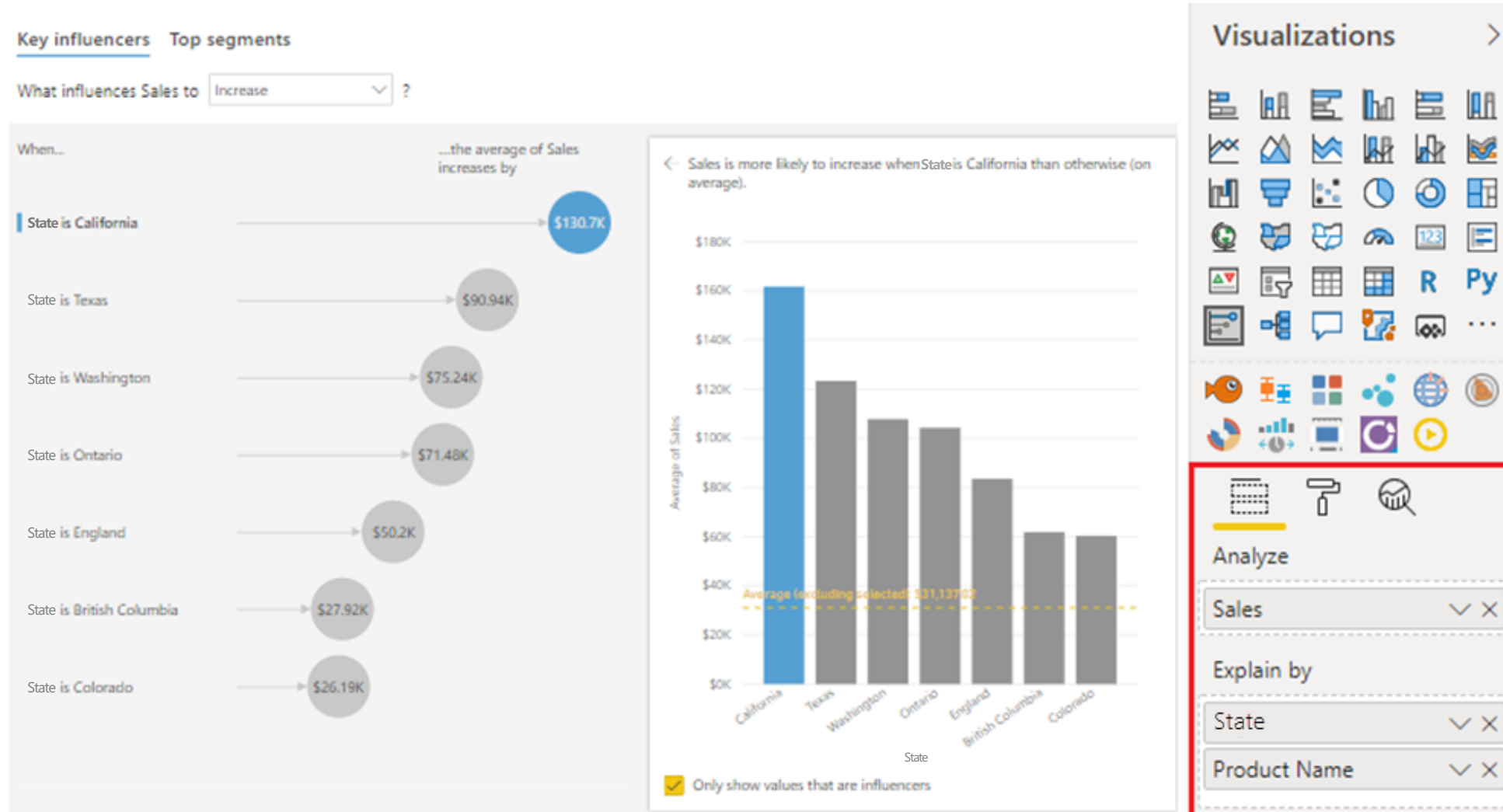


# AI Insights

Connect to a collection of pre-trained Machine Learning models.

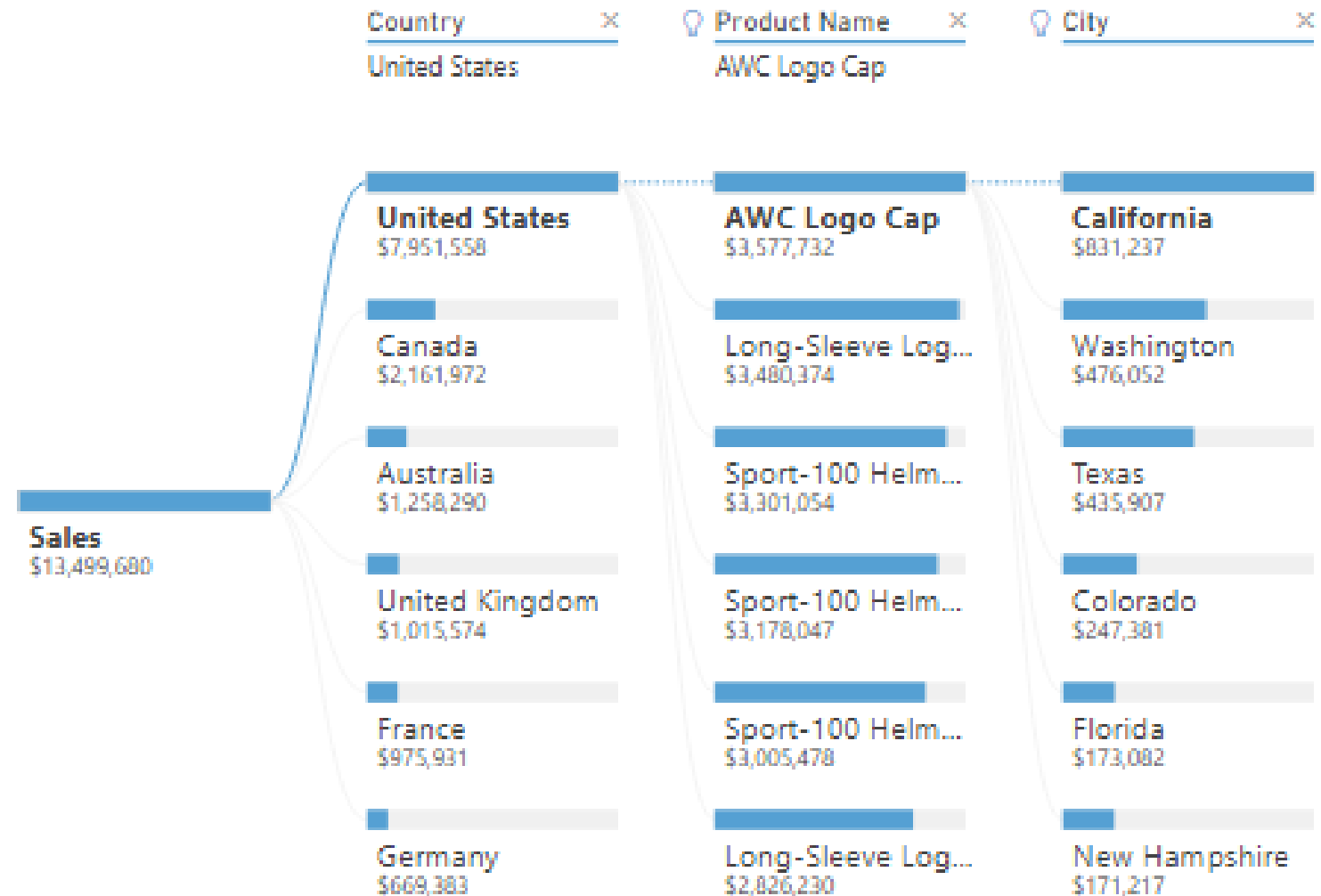


# Key Influencer Visual



# Decomposition Tree Visual

- Aggregate data and drill down into your dimension.
- Improvise exploration and root cause analysis.



# Lesson Review

- Use the AI aspects of advanced analytics in Power BI to dig deeper into data.
- Use AI to answer more business questions.
- Use AI visuals to understand factors affecting a metric or view data across multiple dimensions for root cause analysis.

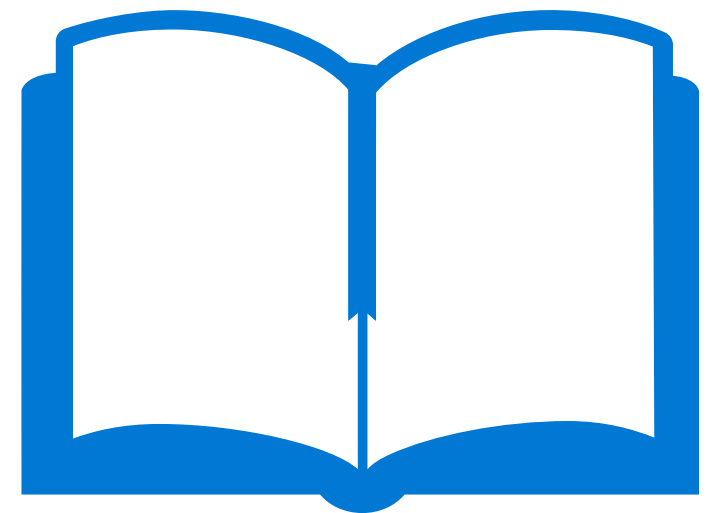
# Module Overview

We covered the following concepts:

- Advanced Analytics
- Data Insights through AI Visuals

# References

- PL-300 Perform analytics in Power BI  
<https://docs.microsoft.com/en-us/learn/paths/perform-analytics-power-bi/>
- Work with AI visuals  
<https://docs.microsoft.com/en-us/learn/modules/ai-visuals-power-bi/>





# Azure Technical Trainer Role Based Training