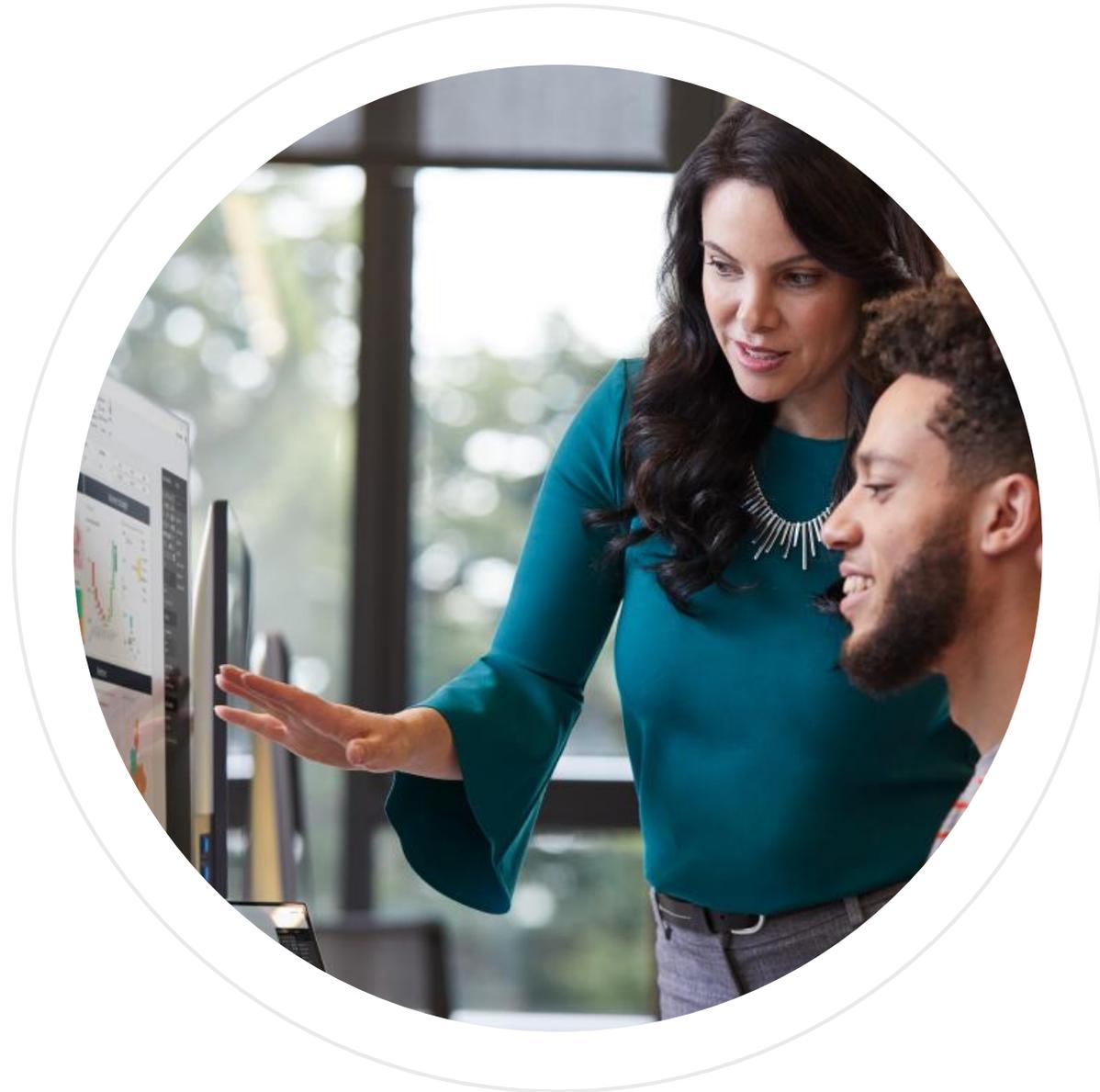


Module 7: Create Reports

Mohammed Arif



Learning Objectives

You will learn the following concepts:

- Design a Report
- Enhance a Report

Module Agenda



Design a Report



Enhance the Report

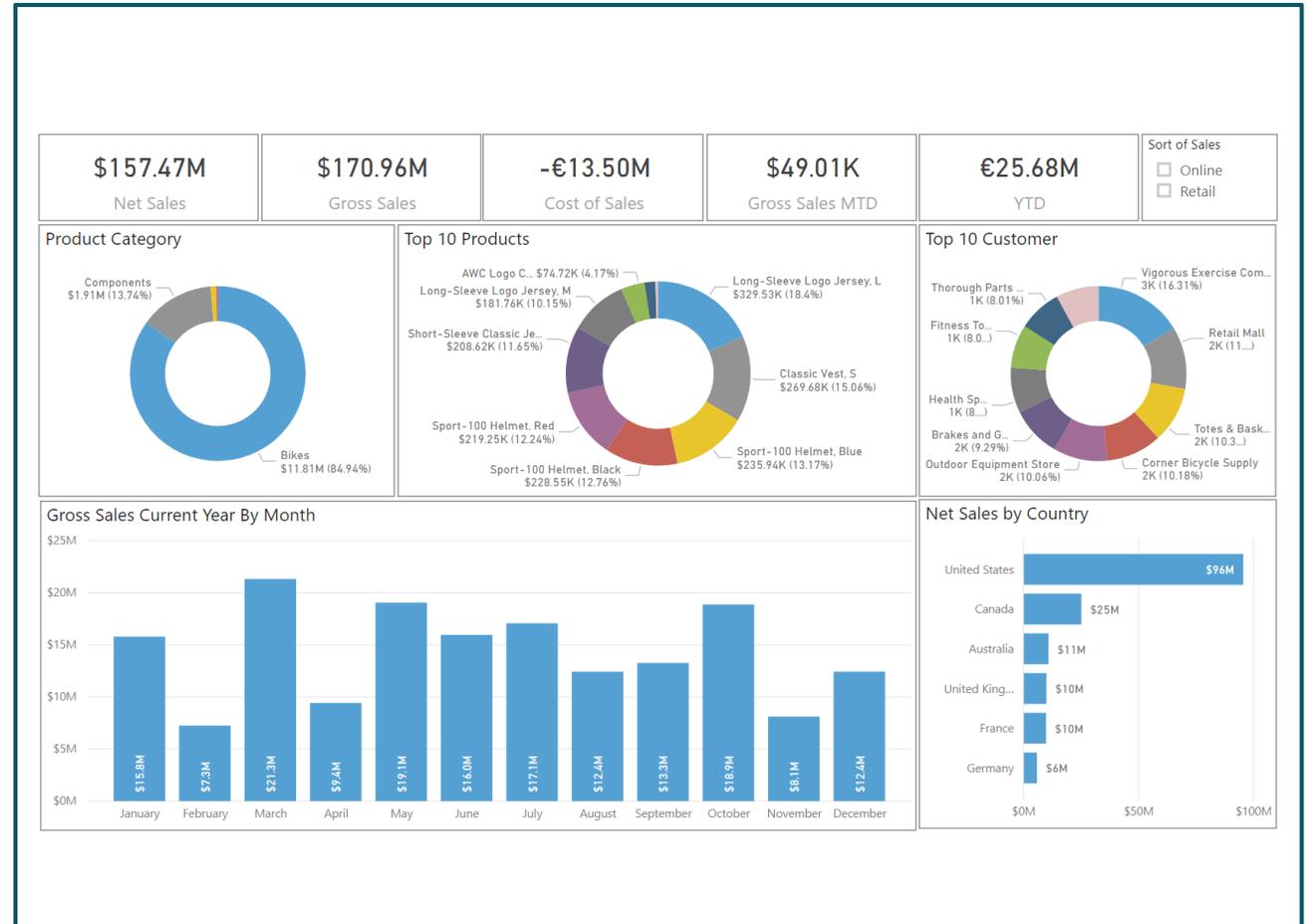
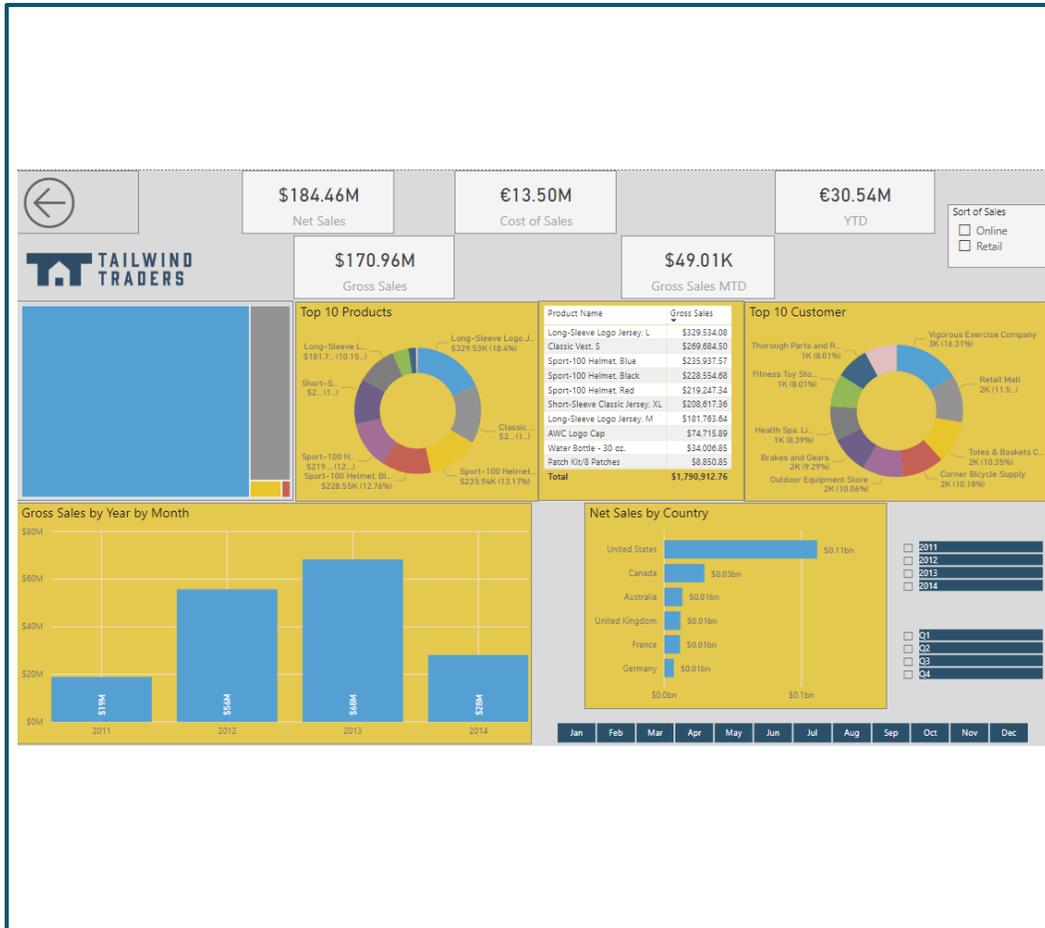
Lesson 1: Design a Report



Introduction

- Visuals allow you to share data insights more effectively.
- Effective visualizations help your users connect and interact with the information.

Design a Report Layout

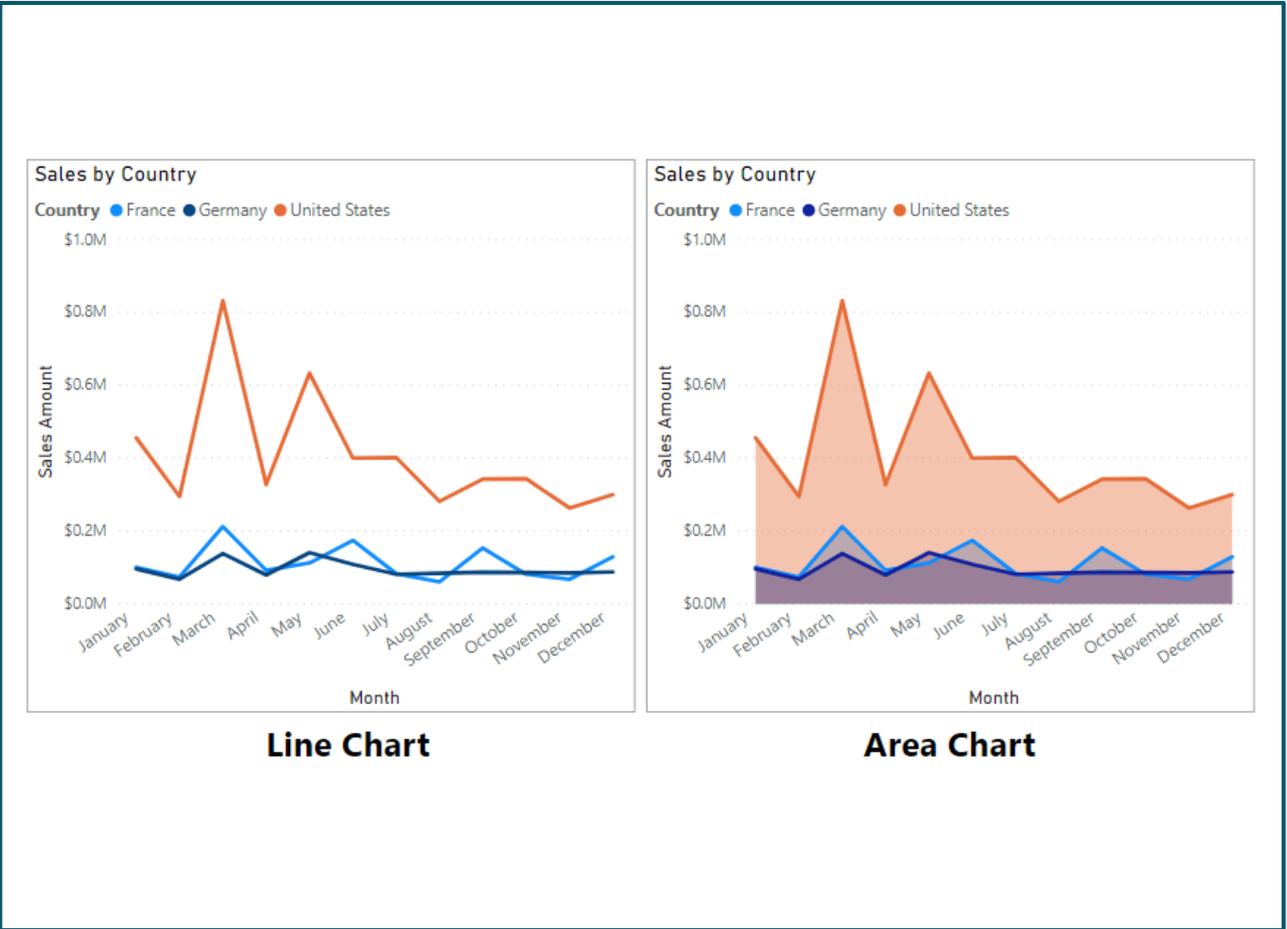


Choosing Effective Visualizations

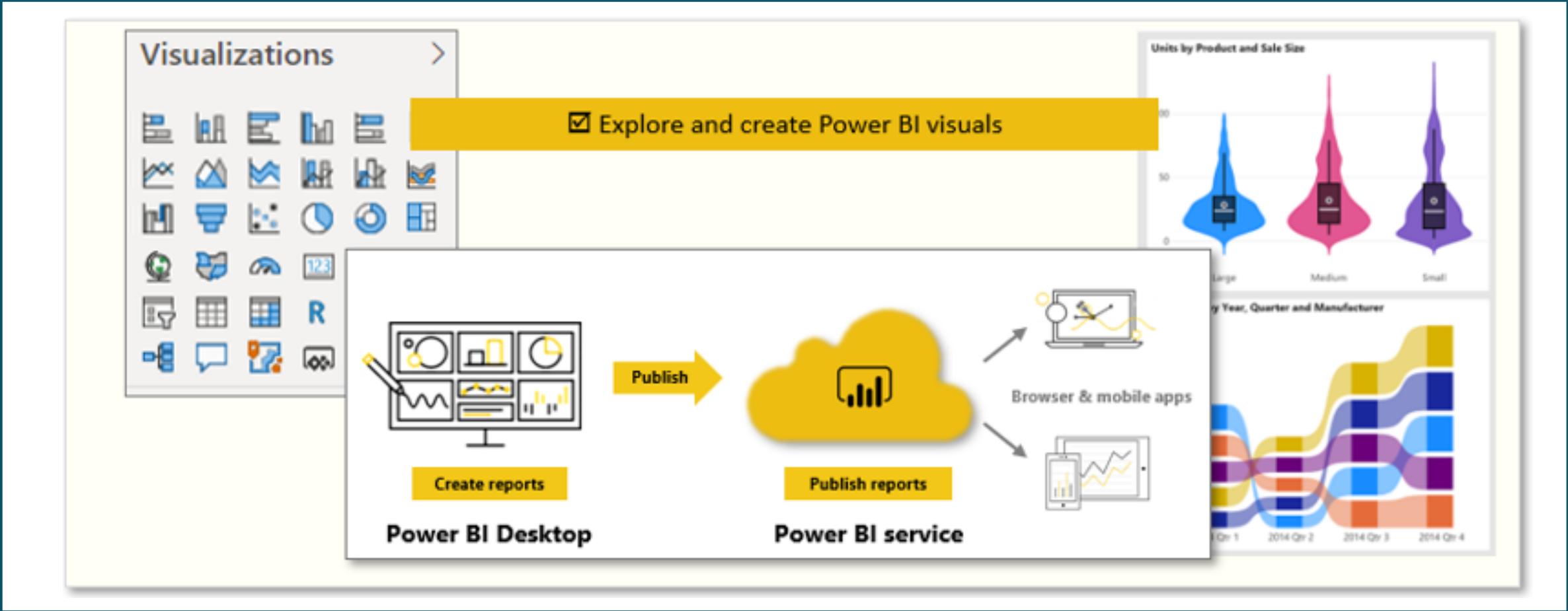
The screenshot shows a data tool interface. On the left is a table with columns 'Country' and 'Sales Amount'. The table lists sales for the United States, France, and Germany, with a total of \$8,550,077. On the right is a 'Visualizations' pane with a 'Fields' list. The 'Fields' list includes 'Territory' (City, City (groups), Country, Europe, Group, Norte America, Other) and 'Sales Amount'. The 'Country' field and 'Sales Amount' field are highlighted with red boxes. The 'Visualizations' pane also shows various chart icons, with a line chart icon highlighted.

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

The right visual makes all the difference.

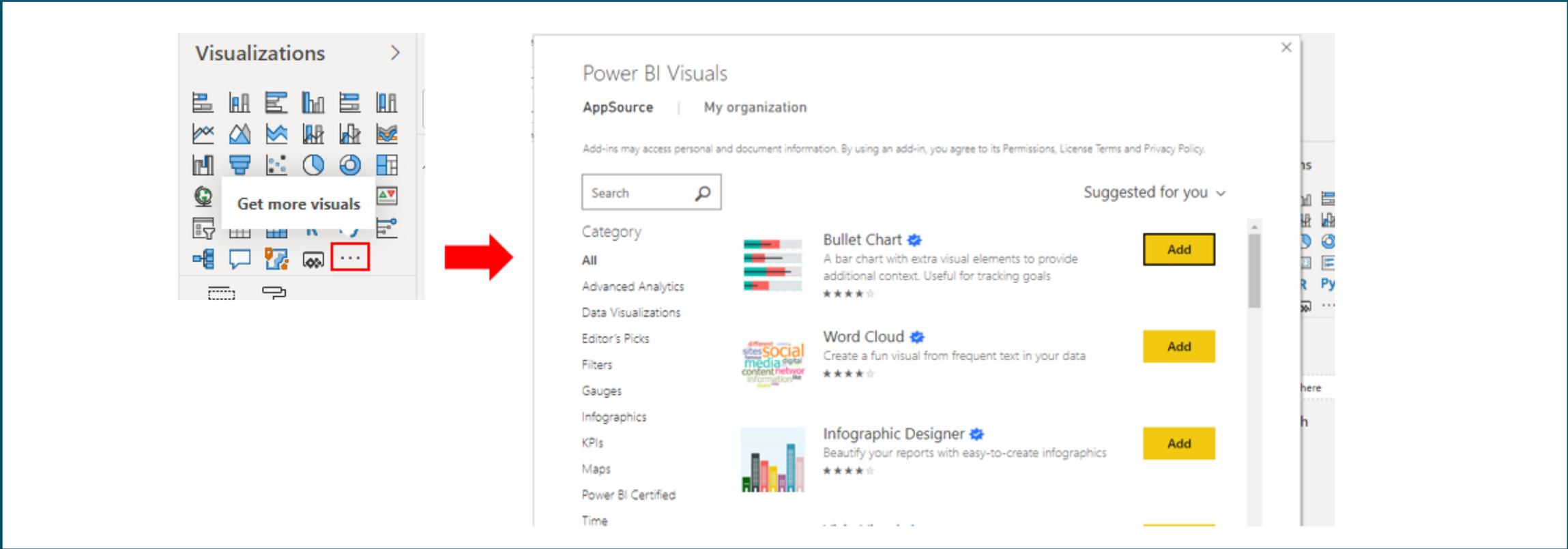


Adding Visualizations to Reports

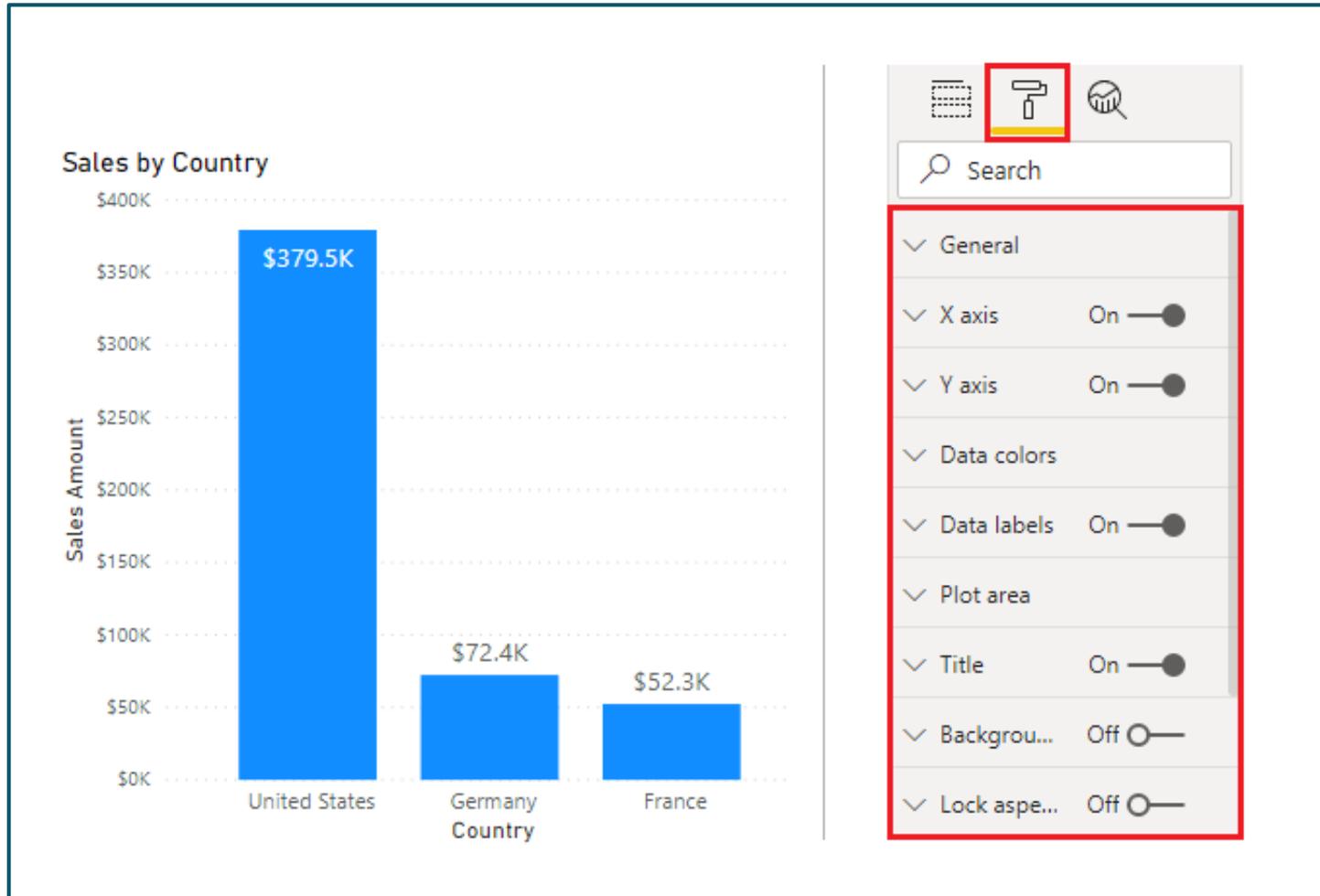


Import a Custom Visual

Use visuals tailored for your needs.

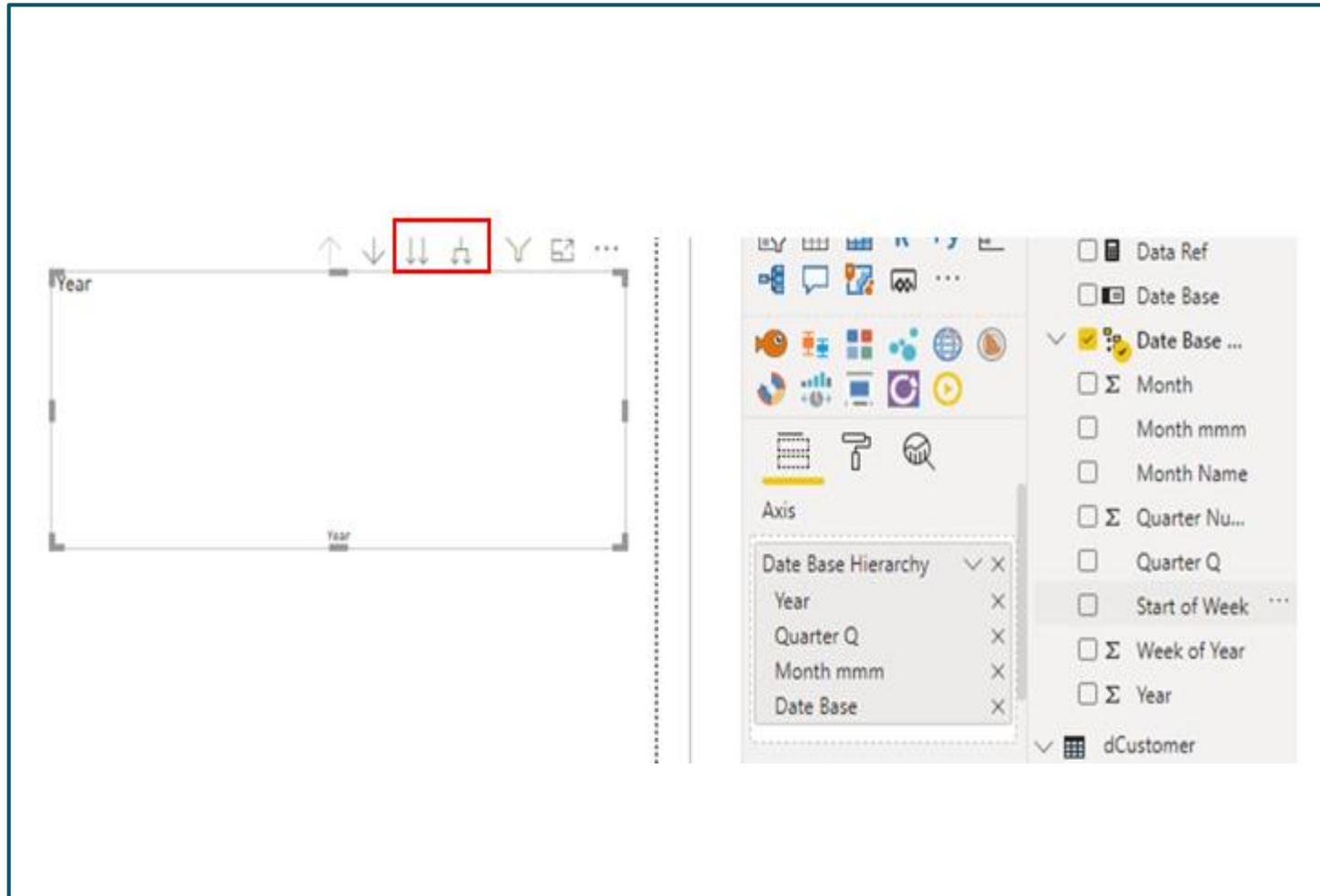


Format and Configure Visualizations



- Control the look and feel of each visual.
- Format options differ depending on the type of visual selected.

Basic Interactions



Use interactions to change how visuals impact each other.

Use hierarchies to drill down for additional relevant content.

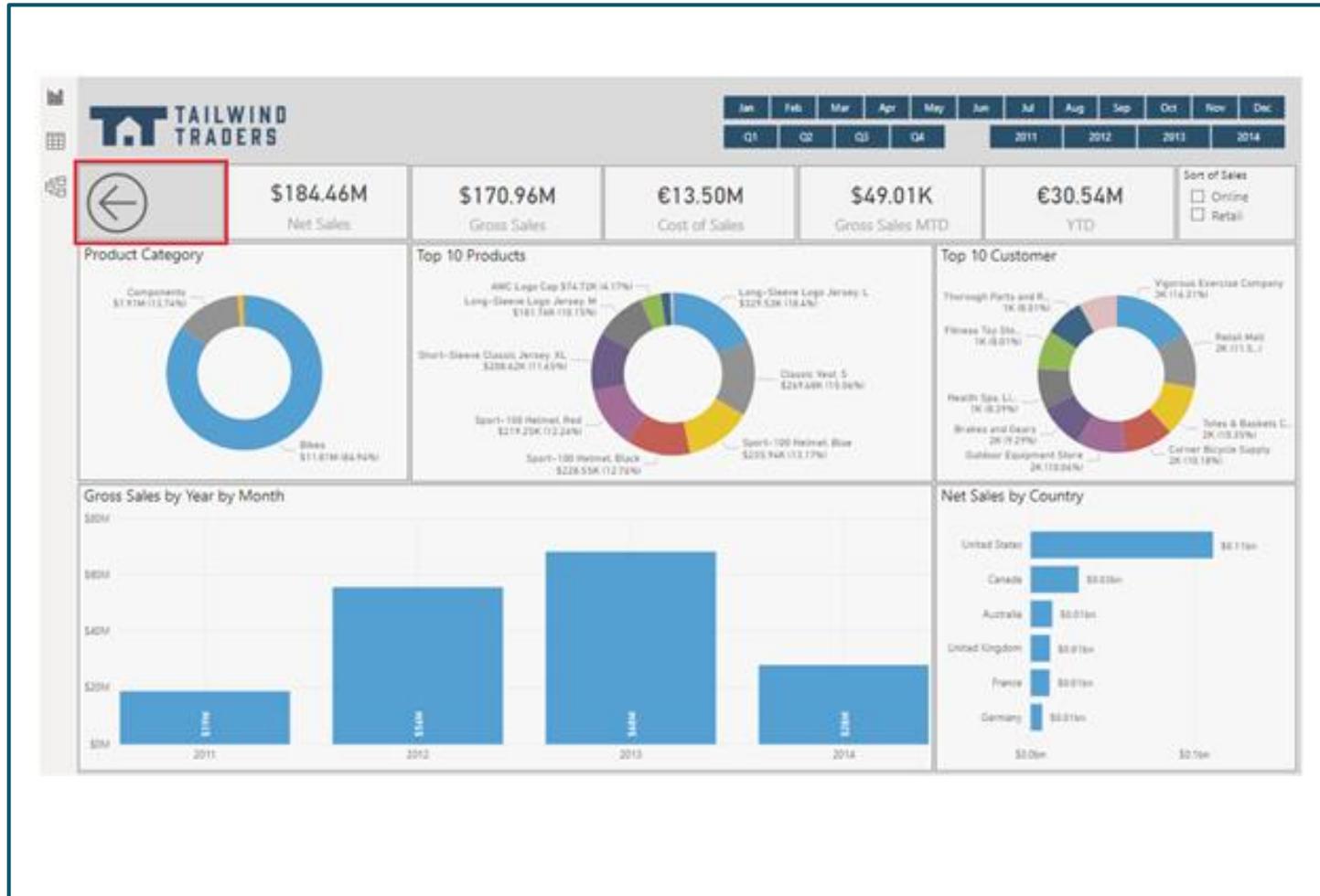
Configure Conditional Formatting

The screenshot displays a Power BI report with a table of regional sales data. The 'Sales' column is highlighted with a blue-to-white color scale. The 'Visualizations' pane on the right shows the 'Background color' option selected for the 'Sales' field. The 'Background color - Sales' configuration dialog is open, showing the following settings:

- Format by: Color scale
- Apply to: Values only
- Based on field: Sum of Sales
- Summarization: Sum
- Default formatting: As zero
- Minimum: Lowest value
- Center: Middle value
- Maximum: Highest value
- Diverging

Region	Sales
Southwest	\$18,001,116
Canada	\$13,875,633
Northwest	\$12,004,822
Southeast	\$7,638,607
Central	\$7,633,387
Northeast	\$6,715,354
France	\$4,527,840
United Kingdom	\$3,883,043
Germany	\$1,877,743
Australia	\$1,391,025
Total	\$77,548,570

Design Report Navigation



Move users between pages.
Use buttons, bookmarks, or
conditional formatting.

Review Questions

- **Q01 – What is the benefit of using a report tooltip?**
 - A01 – To provide additional detail that is specific to the context of the data that is being hovered over.
- **Q02 – Do you need to import custom visuals each time you want to use them when you are developing a new report?**
 - A02 – Yes, custom visuals need to be imported from AppSource each time you start developing a new report unless you pin the custom visual to the visualizations pane.

Lesson Review

- Visuals allow you to share data insights more effectively.
- Using effective visualizations help users connect and interact with the information.

Lab: Design a Report in Power BI Desktop, Part 1

Lab: Design a Report in Power BI Desktop, Part 1



Lesson 2: Enhance the Report



Introduction to Report Enhancement

- Organizations rely on report information when making decisions.
- Reports drive organizational behavior and action.

Apply Slicing, Filtering, and Sorting

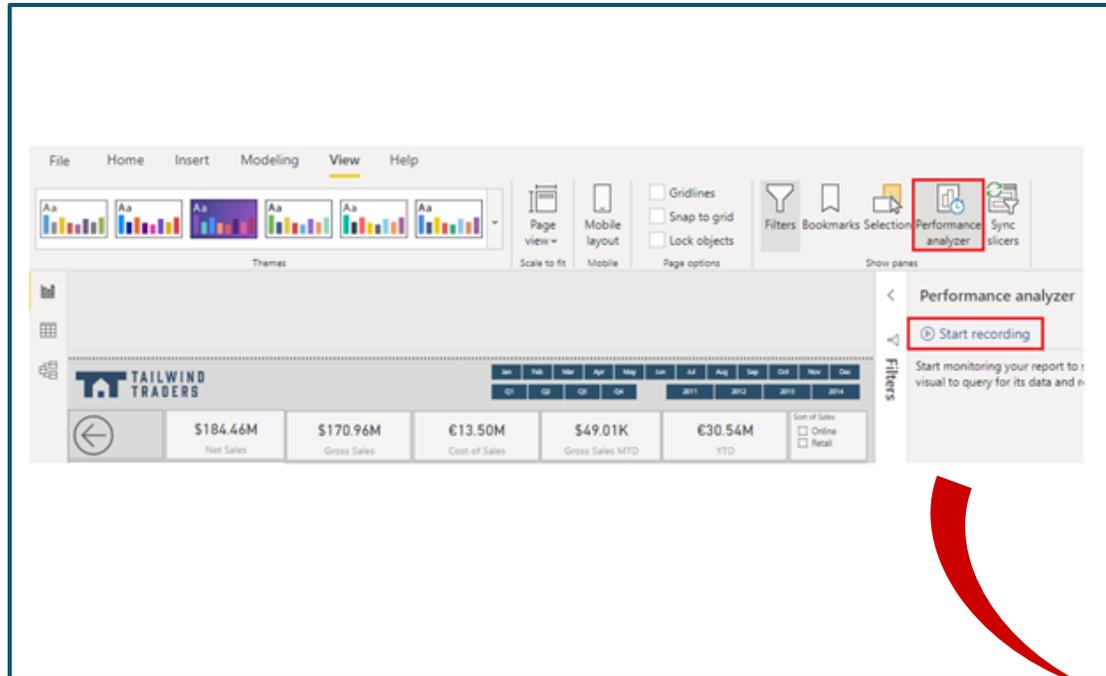
Specifies

Country	Category Name	Product Name	Gross Sales	Net Sales
United States	Components	ML Road Frame - Yellow, 44	\$86,250.35	\$448,007.20
Canada	Components	ML Road Frame - Yellow, 44	\$71,974.43	\$295,107.66
United States	Components	LL Road Frame - Black, 52	\$57,664.62	\$482,362.68
Canada	Components	ML Road Frame - Yellow, 38	\$54,129.53	\$357,545.73
United States	Components	ML Road Frame - Yellow, 48	\$52,345.04	\$348,680.80
Canada	Components	ML Road Frame - Yellow, 48	\$44,017.42	\$256,278.10
Canada	Components	ML Road Frame - Yellow, 38	\$43,422.59	\$255,683.27
Canada	Components	LL Road Frame - Black, 52	\$37,431.42	\$308,463.17
United States	Components	LL Road Frame - Red, 60	\$37,094.20	\$278,484.66
United States	Components	LL Road Frame - Red, 44	\$36,082.54	\$278,662.07
United States	Components	LL Road Frame - Black, 58	\$32,710.34	\$328,946.58
Canada	Components	LL Road Frame - Black, 58	\$32,035.90	\$267,869.53
Canada	Components	LL Road Frame - Red, 44	\$28,326.48	\$200,708.54
Total			\$729,936.88	\$1,489,832.44

Country	Category Name	Product Name	Gross Sales	Net Sales
United States	Components	HL Road Frame - Red, 62	\$88,753.00	\$304,153.46
United States	Components	ML Road Frame - Yellow, 44	\$86,250.35	\$448,007.20
United States	Components	HL Road Frame - Red, 44	\$85,890.00	\$301,290.46
Canada	Components	ML Road Frame - Yellow, 44	\$71,974.43	\$295,107.66
United States	Components	HL Road Frame - Black, 44	\$70,143.50	\$244,562.32
Canada	Components	HL Road Frame - Red, 44	\$64,417.50	\$237,697.95
Canada	Components	HL Road Frame - Red, 62	\$62,986.00	\$206,670.38
United States	Components	LL Road Frame - Black, 52	\$57,664.62	\$482,362.68
Canada	Components	HL Mountain Frame - Silver, 38	\$57,309.00	\$170,169.35
United States	Components	ML Road Frame - Yellow, 38	\$54,129.53	\$357,545.73
United States	Components	ML Road Frame - Yellow, 48	\$52,345.04	\$348,680.80
Canada	Components	HL Mountain Frame - Silver, 46	\$51,851.00	\$157,214.50
Canada	Components	HL Mountain Frame - Black, 42	\$51,284.80	\$164,136.99
Total			\$1,910,621.88	\$2,910,341.02

The screenshot shows the Power BI ribbon with three main panes: Filters, Visualizations, and Fields. In the Fields pane, the 'Year' field is highlighted with a red box. A red arrow points from this field to the 'DueDate - Year' filter in the Filters pane. The Visualizations pane shows various chart and table icons, and the Filters pane shows a search bar and a list of filters on the visual and on the page.

Performance Tuning Reports



The performance of a report depends on how quickly data can load into the report page.

The screenshot shows the Performance analyzer tool with a list of report elements and their durations. The 'Start recording' button is highlighted with a red box. The list includes:

Name	Duration (ms)
Recording started (16/06/2020 00:13:52)	-
Changed page	-
Net Sales	1435
MTD card	1491
DAX query	46
Visual display	31
Other	1414
YTD card	1983
Cost of Sales	1550
Cross Sales	1655
Gross Sales by Year by Month	1312
Net Sales by Country	1831
Top 10 Products	1355
Top 10 Customer	1587
Product Category	2023
Sort of Sales	1034
Slicer	1726
Slicer	1190
Slicer	1896
Image	305
Button	115

Commenting on Reports

The screenshot shows a Power BI report interface. On the left, there is a navigation pane with a search bar, 'Reset to default', 'Bookmarks', and 'View' options. Below this is a monthly navigation bar (Jul, Aug, Sep, Oct, Nov, Dec) and a year selection bar (2011, 2012, 2013, 2014). The main report area displays a total sales figure of €30.54M YTD, a 'Sort of Sales' filter for Online and Retail, a donut chart for 'Customer' segments, and a bar chart for 'Sales by Country'. A 'Filters' pane is visible on the right side of the report area.

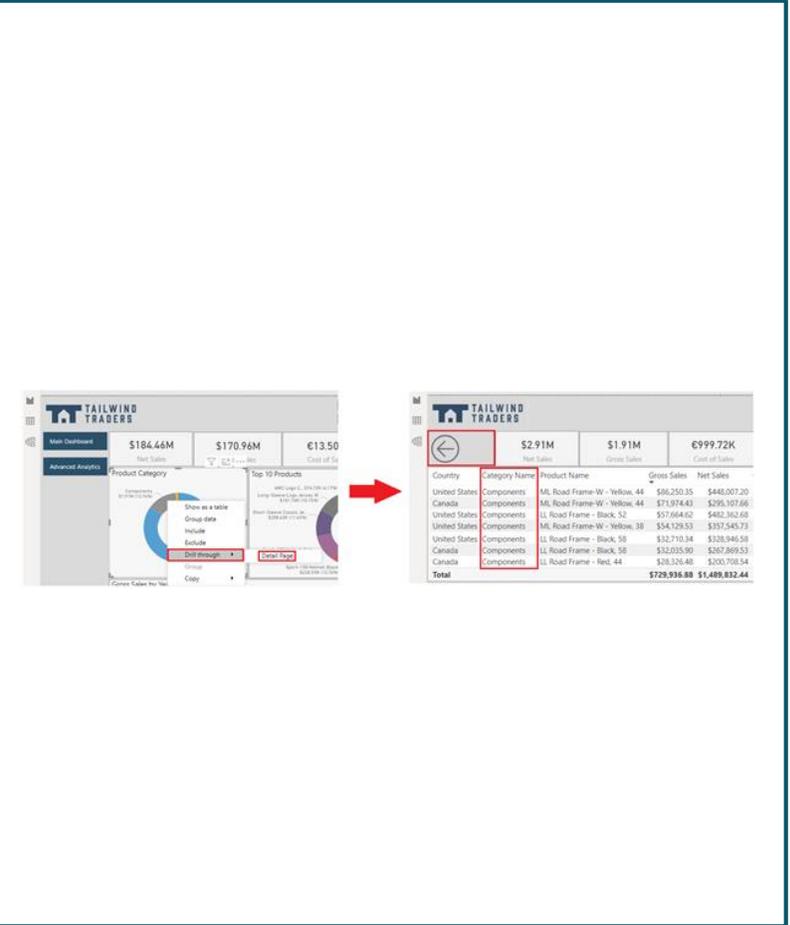
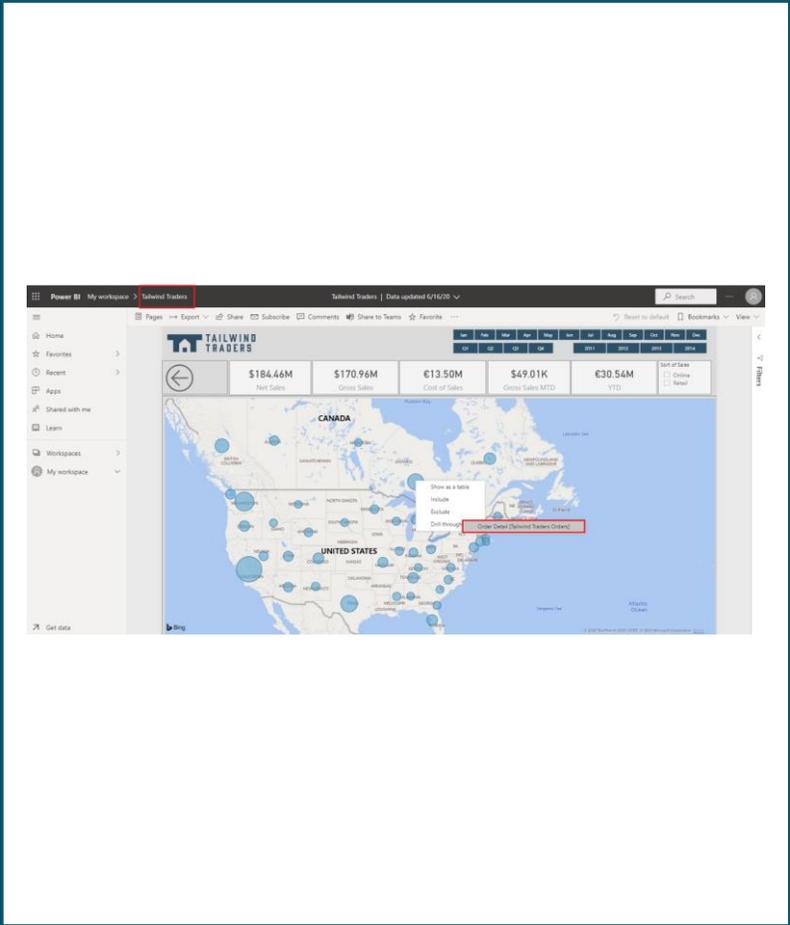
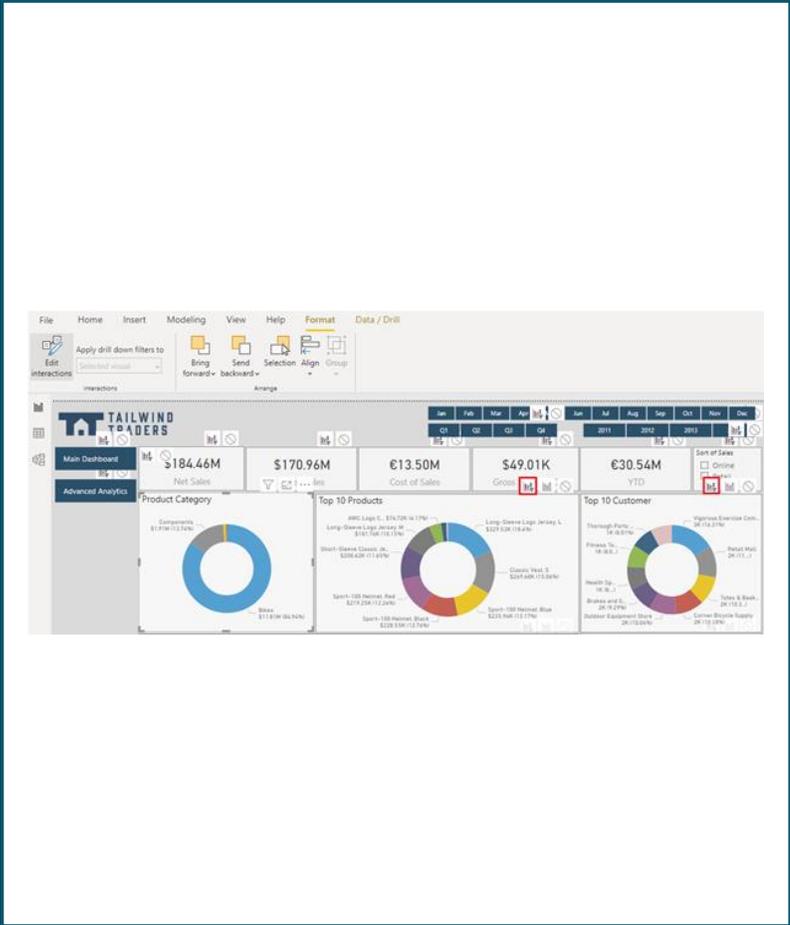
On the right side, a 'Comments' pane is open for the report 'TAILWIND TRADERS'. It features a 'Previous' and 'Next' navigation bar. The main content area contains a text input field with the placeholder text 'Whats next?', a red arrow pointing to a yellow 'Post' button, and a 'Start a conversation' section with the text 'Share your feedback on reports or specific visuals.' Below this is an illustration of a laptop with a chart and comment icons. A 'Close' button is located at the bottom of the comments pane.

Used for personal comments or for collaborating with a colleague.

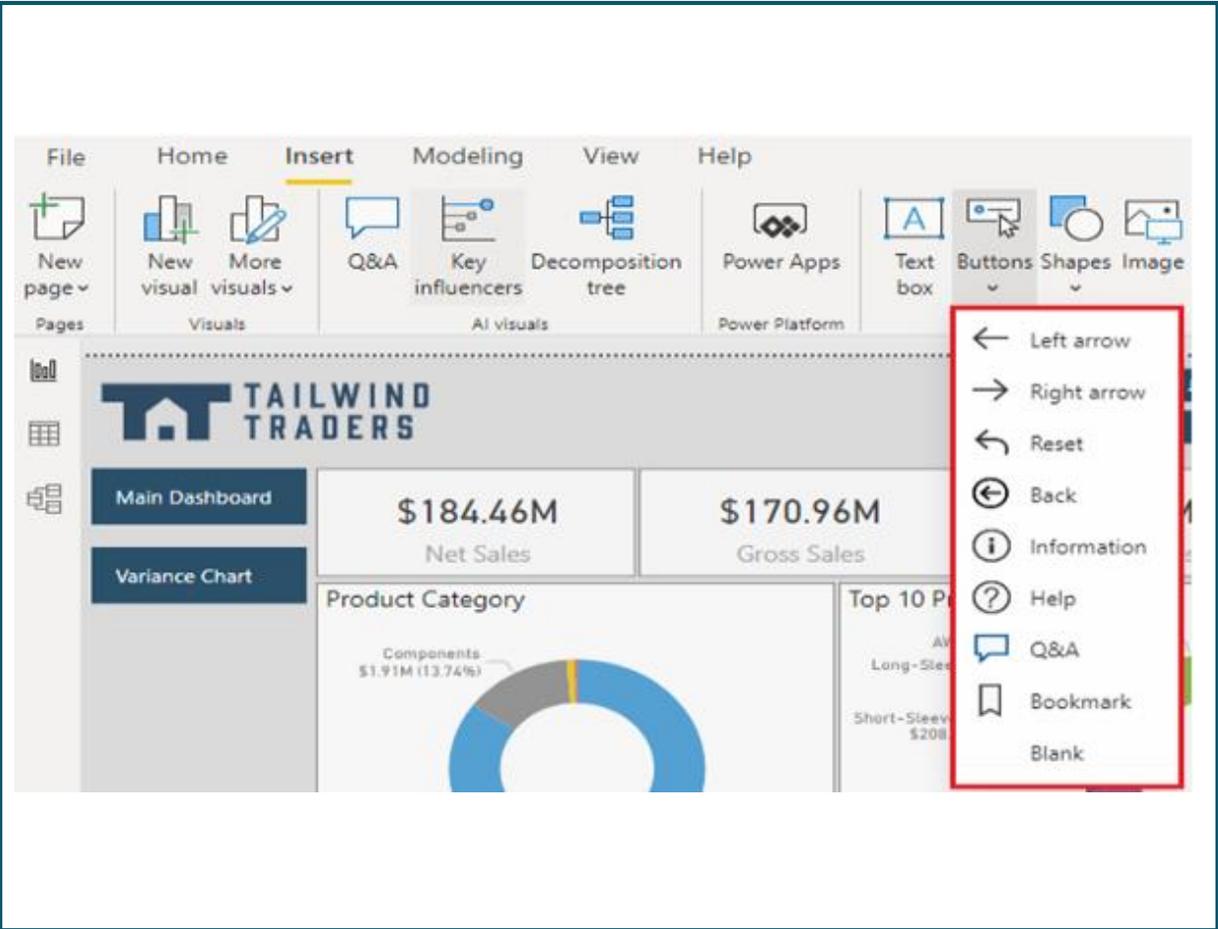
Available for paginated reports, dashboards, and visuals.

Anyone with permissions can see comments.

Advanced Interactions and Drill-Throughs



Adding Buttons, Bookmarks, and Selections



Key Performance Indicators

TotalSales and Goal by Month



TotalSales and Goal by FiscalYear



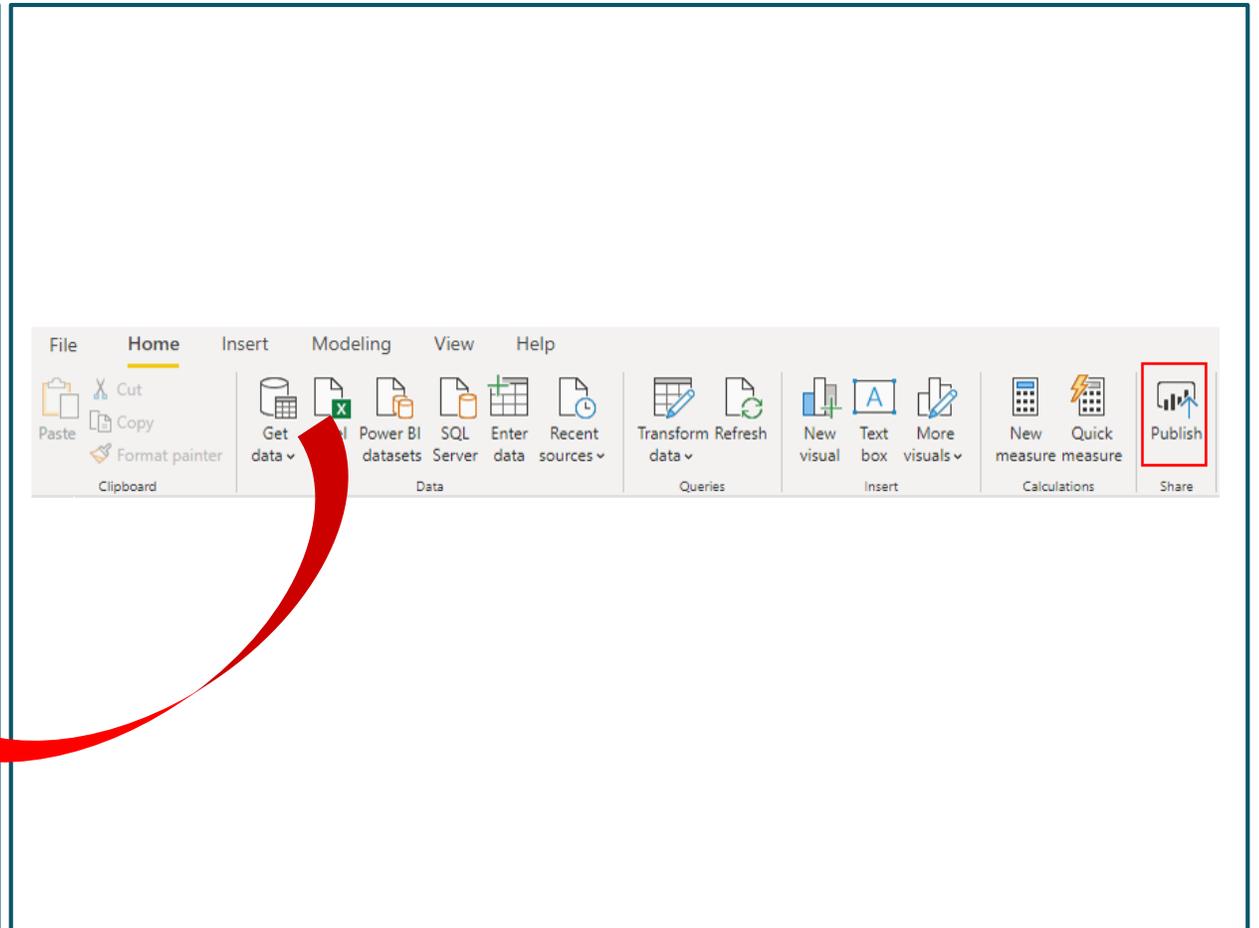
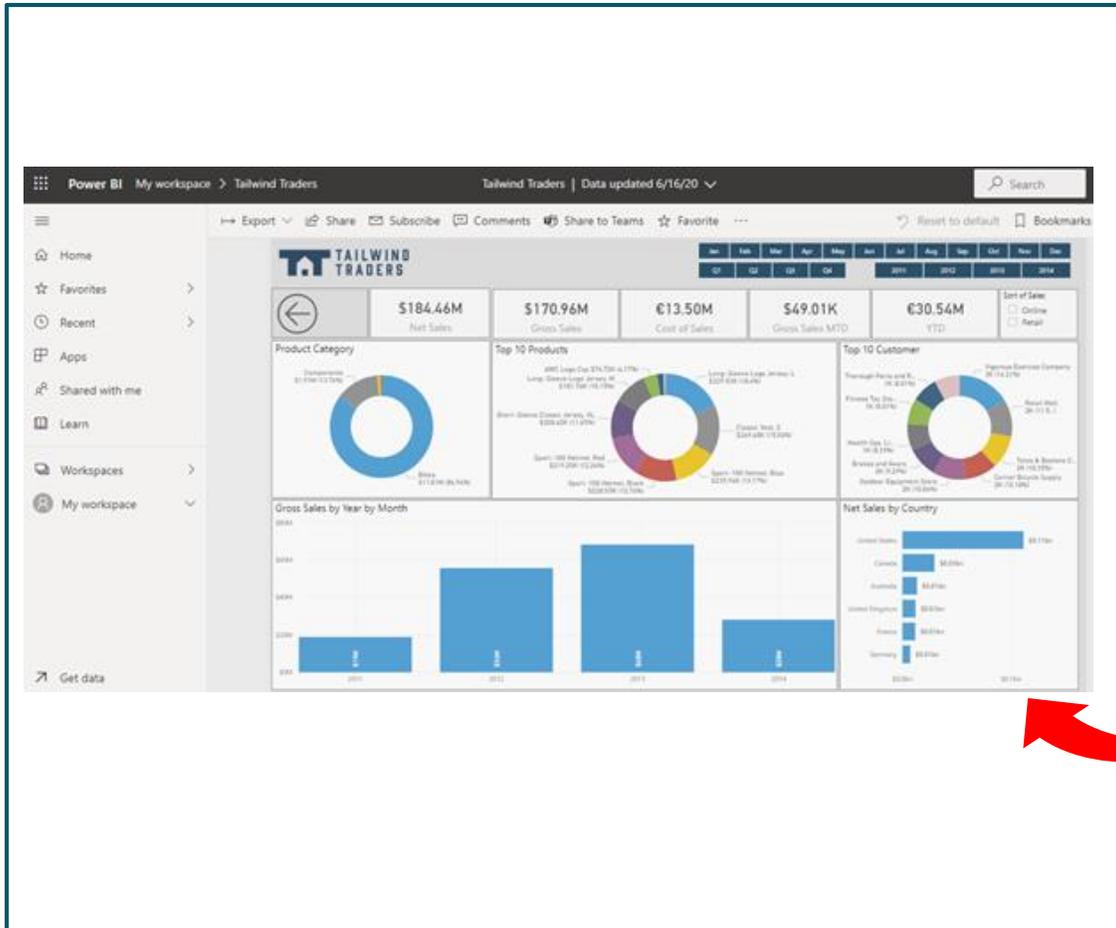
TotalUnits and Last Year Sales ...



An excellent source in helping track toward a specific goal over time.

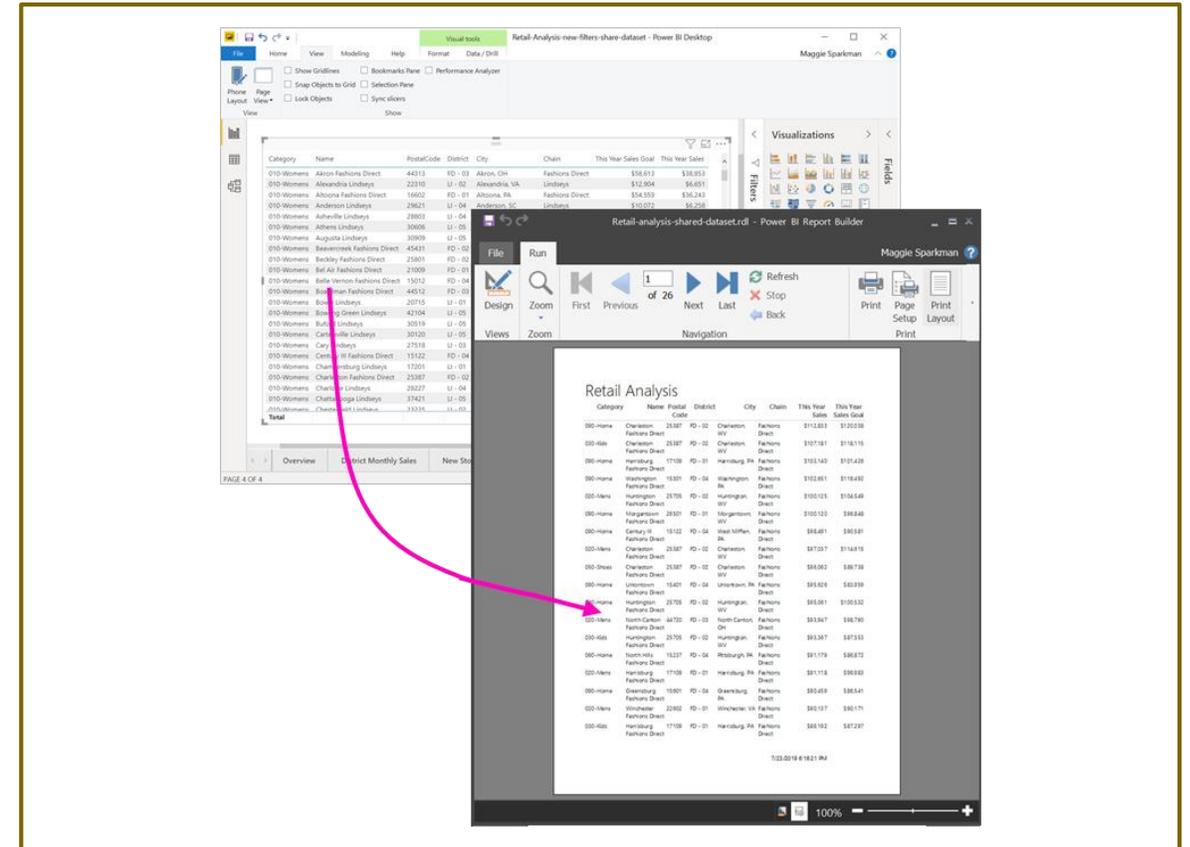
Best when used in a series (e.g., daily, monthly, etc.).

Publish and Export Reports



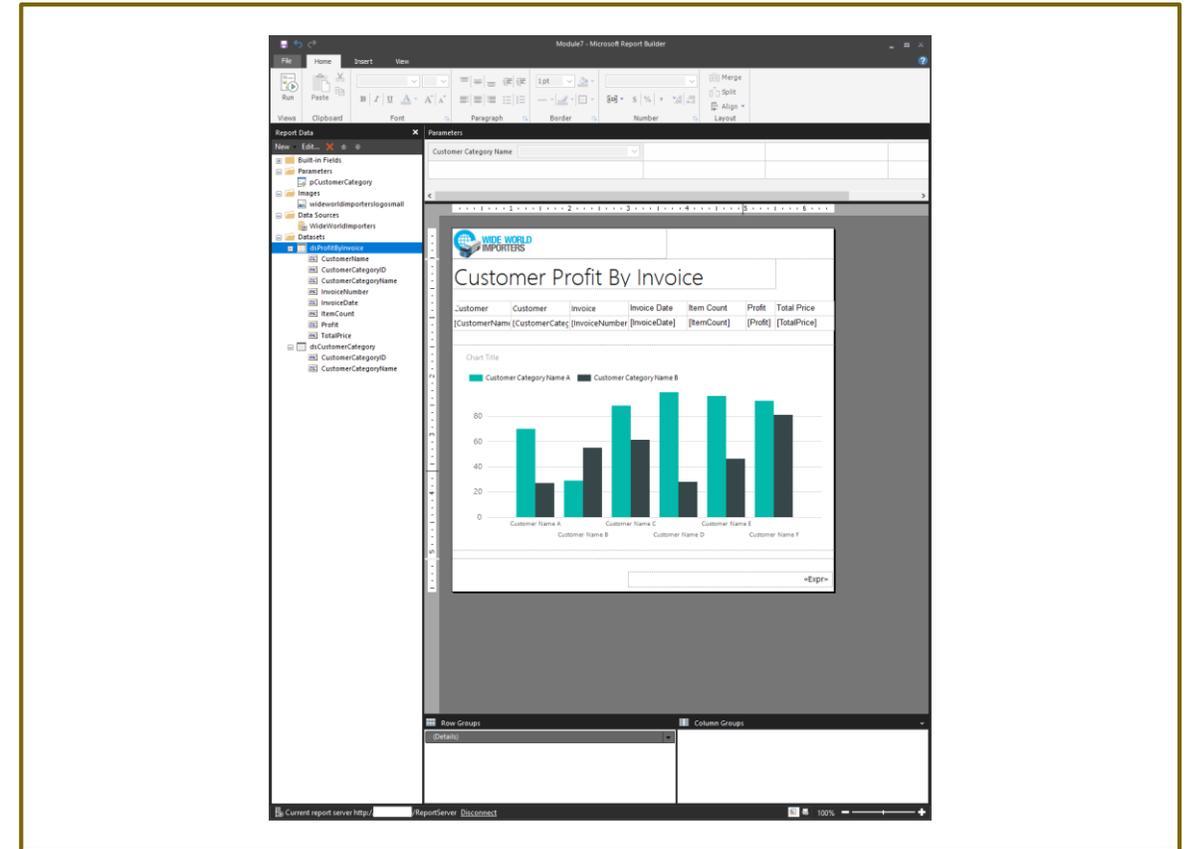
Introduction to Paginated Reports

- Descendant of SQL Server Reporting Services.
- Created in Power BI Report Builder.
- Part of Power BI Premium.



When are they the right fit?

- Operational reports with tables of detail.
- Headers and footers are needed.
- Customized sort orders.
- Clickable headers.
- Rendering tabular data.



Review Questions

- **Q01 – Which filter is not available in Power BI reports?**
 - A01 – Page Type
- **Q02 – How can you analyze performance of each of your report elements?**
 - A02 – By using performance analyzer.
- **Q03 – Can you use bookmarks to create a slide show in Power BI?**
 - A03 – Yes, you can.

Lesson Review

- Organizations rely on report information when making decisions.
- Reports drive organizational behavior and action.

Lab: Design a Report in Power BI Desktop, Part 2

Lab: Design a Report in Power BI Desktop, Part 2



Module Overview

We covered the following concepts:

- Design a Report
- Enhance a Report

References

PL-300 Work with Power BI visuals

<https://docs.microsoft.com/en-us/learn/modules/visuals-power-bi/>

PL-300 Create a data-drive story with Power BI

<https://docs.microsoft.com/en-us/learn/modules/data-driven-story-power-bi/>

