

100 XP

Introduction

1 minute

Continue to use your **MyFirstPowerBIModel** file saved from the previous module. If you're joining the Dashboard in a Day at this point or were unable to complete previous modules, start this module with the provided **Lab 3 solution.pbix** file found in the Reports folder of the class files.

In this Module, you still are the Chief Marketing Officer of VanArsdel, Ltd., and you need to create a full report that you publish to the Power BI Service in a later module. You learn how to do conditional formatting, add a logo to the manufacturer filter, and apply a custom theme to the report.

The flow of this Module includes screenshots to provide a visual aid for the users and a text description of the steps the user needs to follow. In the screenshots, sections are highlighted with red boxes to indicate the action or area on which you need to focus.

Next unit: Apply conditional formatting

[Continue >](#)

Apply conditional formatting

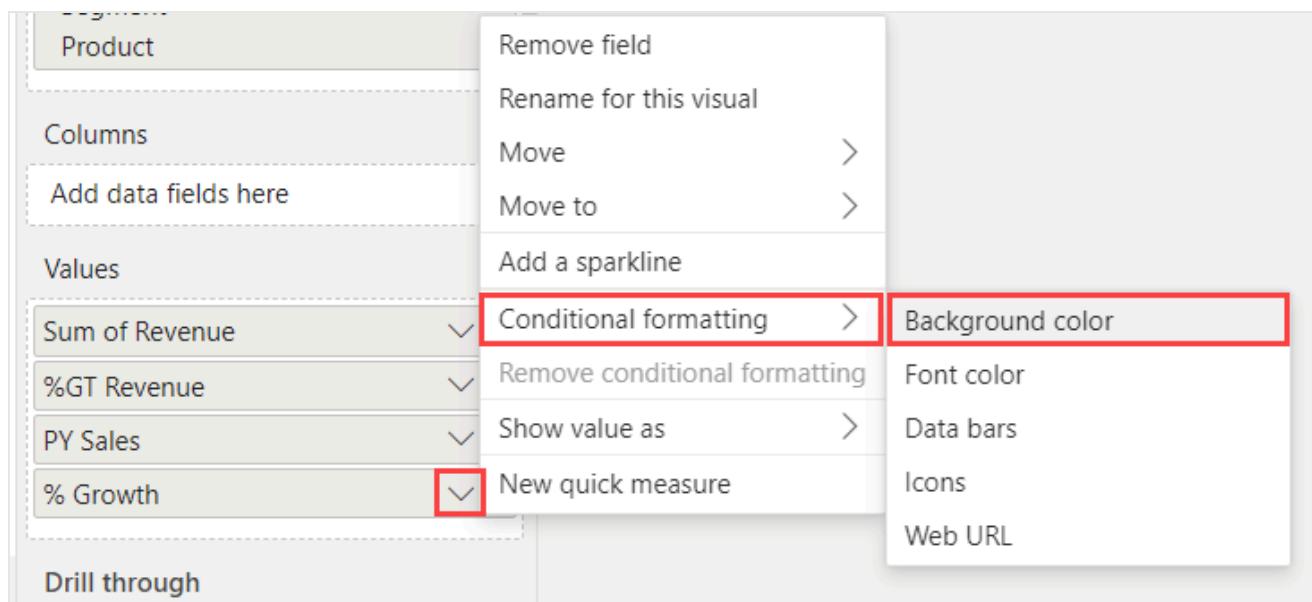
4 minutes

Conditional formatting

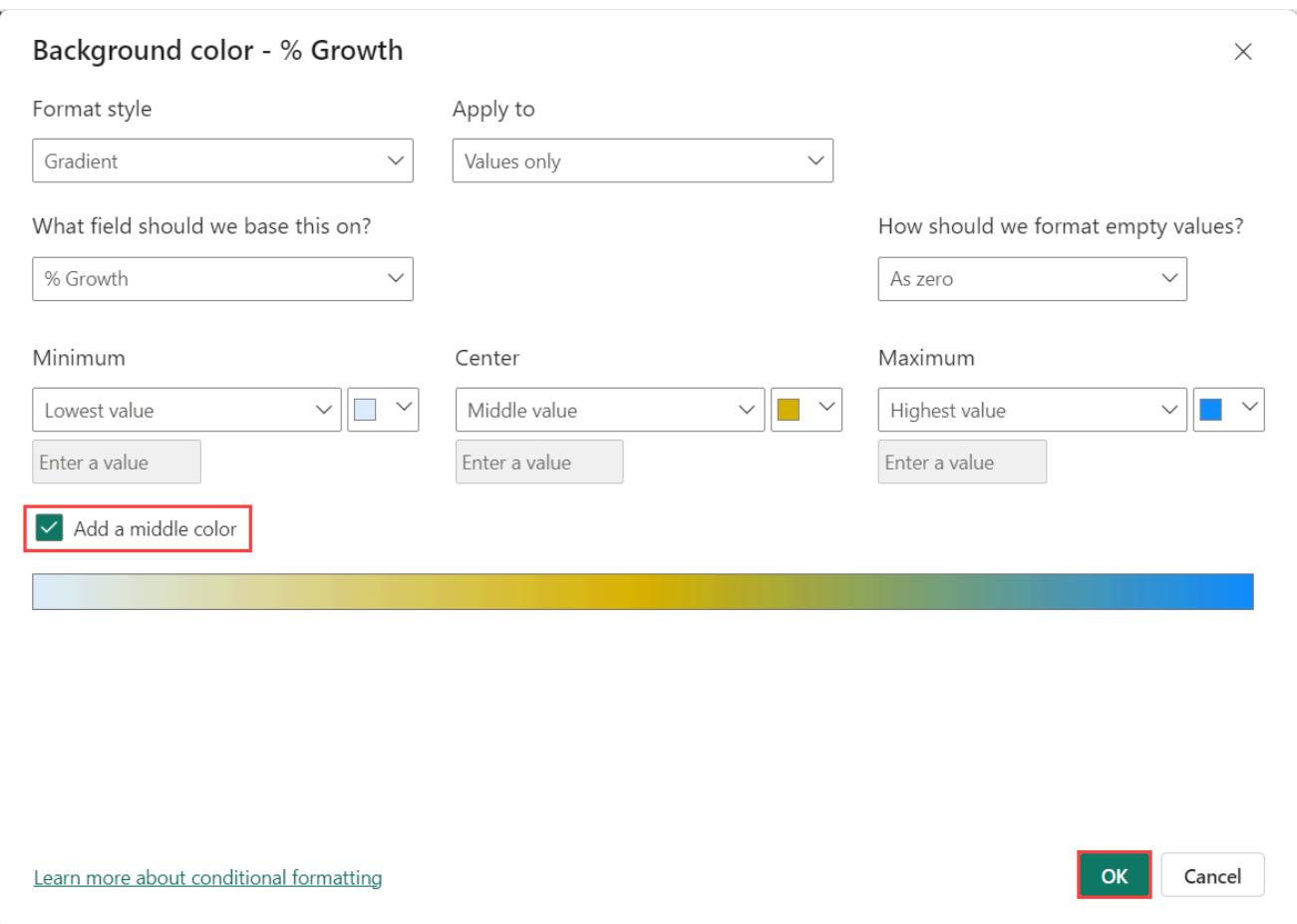
Now that we made a data model and added visuals, you now create a full report.

Let's get started. We begin where we left off at the end of **Module 4** within the report you saved titled **MyFirstPowerBIModel**. If you're starting the lab from this module, or missed the last modules, start with the **Lab 3 solution.pbix** file located in the **Reports** folder of the student files.

1. With the **Matrix** visual selected, navigate to the **Values** section in the **Visualizations** pane.
2. Select the arrow to the right of **% Growth**.
3. Select **Conditional Formatting** and then choose **Background color**. The **Background color** dialog box opens. This dialog provides options to format the report background color using either rules or diverging colors.



4. In the **Background color - % Growth** dialog box, select the **Add a middle color** checkbox.
5. Then, select **OK**.



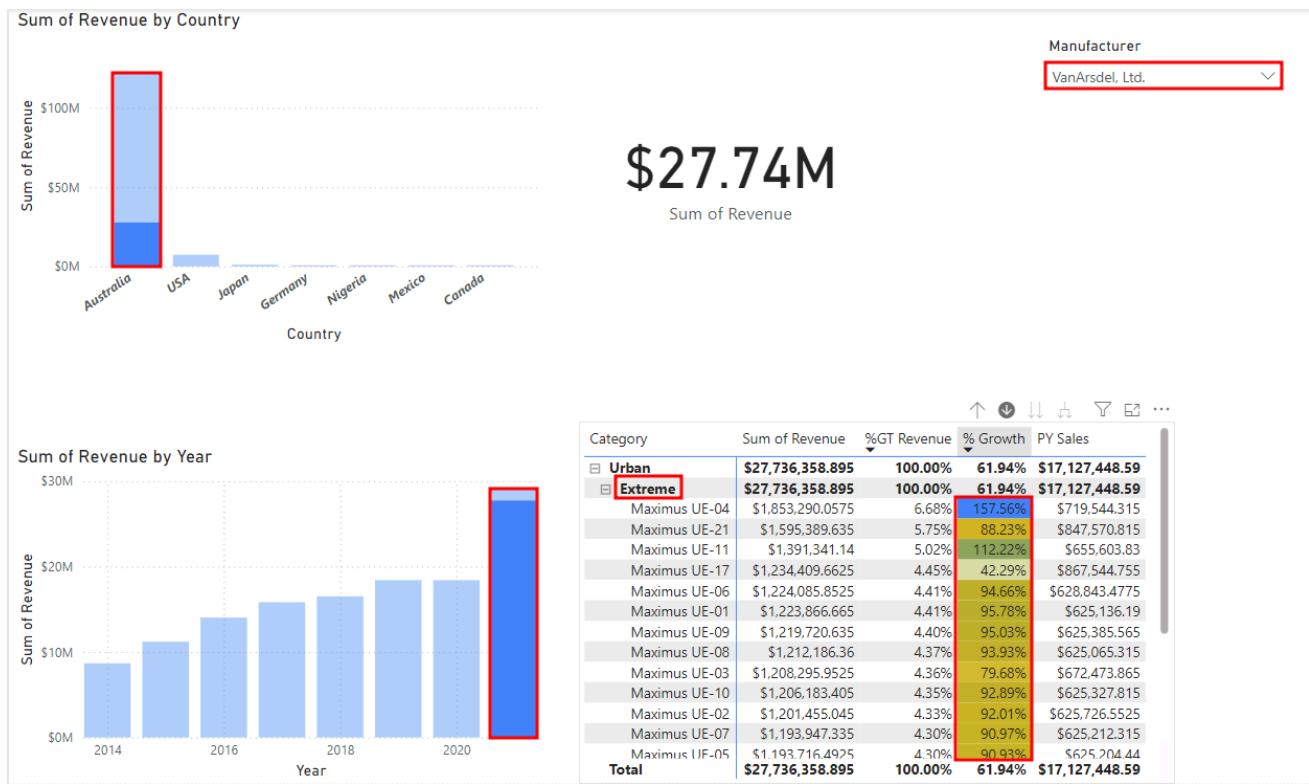
ⓘ Note

Conditional formatting can also be based on another column using the **Color based on** option from the drop-down menu.

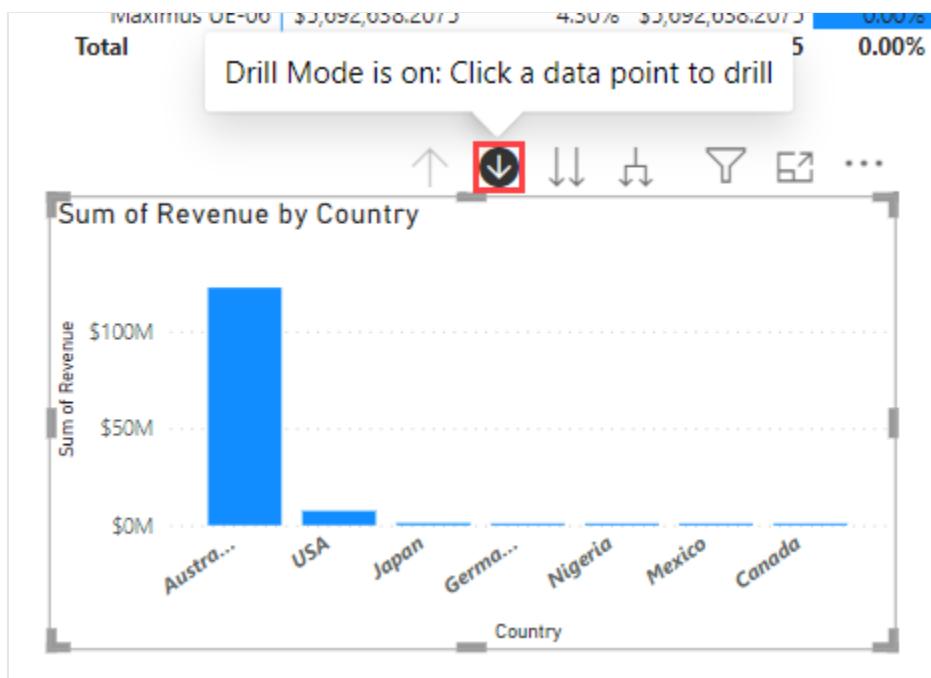
ⓘ Note

As a reminder if you see 0.00% for every value in the **% of Growth** column in the Matrix then you likely need to multi-select **Australia** and **2021**, and drill-down to the **Extreme** category in the **Matrix** visual, like you did in **Module 4**.

Make sure the report is filtered by **VanArsdel, Ltd.** using the **Manufacturer** slicer. Remove all the other filters.

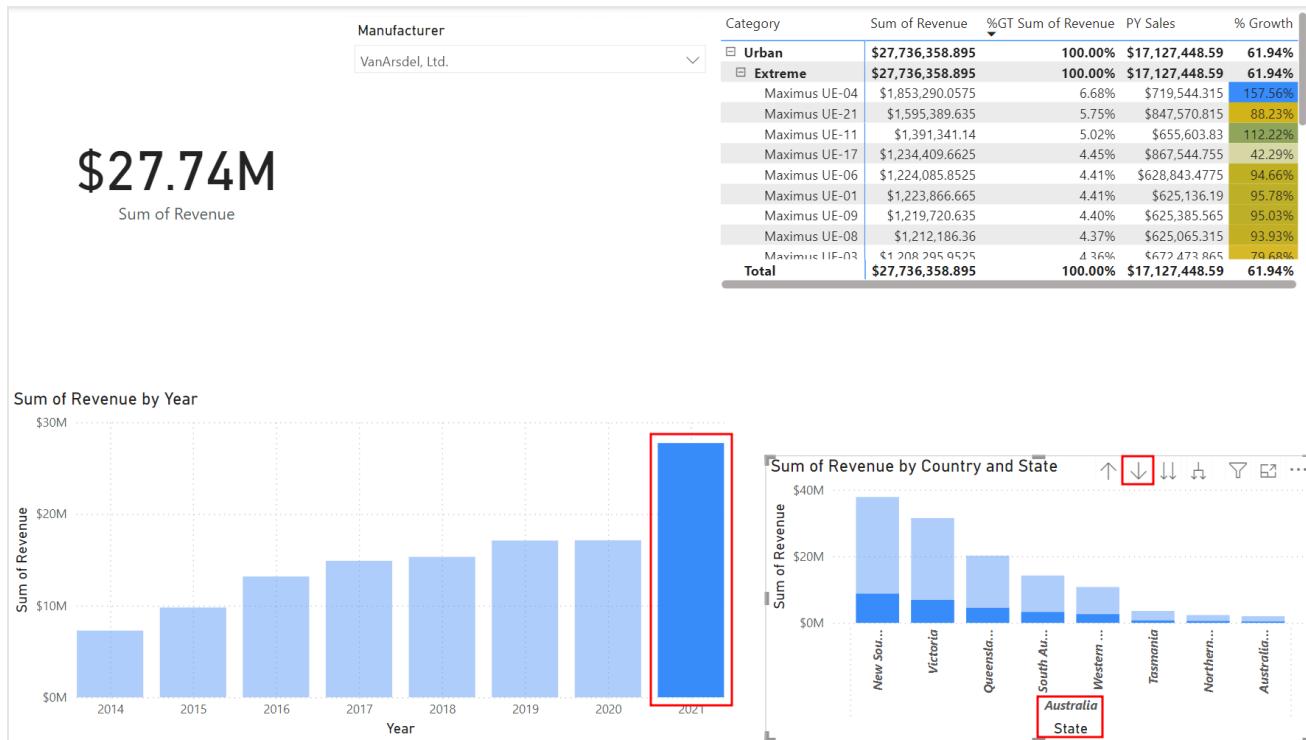


6. Select the down arrow in the header of the **Sum of Revenue by Country** visual to turn on the **drill down** mode (*this could also be located at the bottom of the visual based on how you placed the visual within the canvas*).

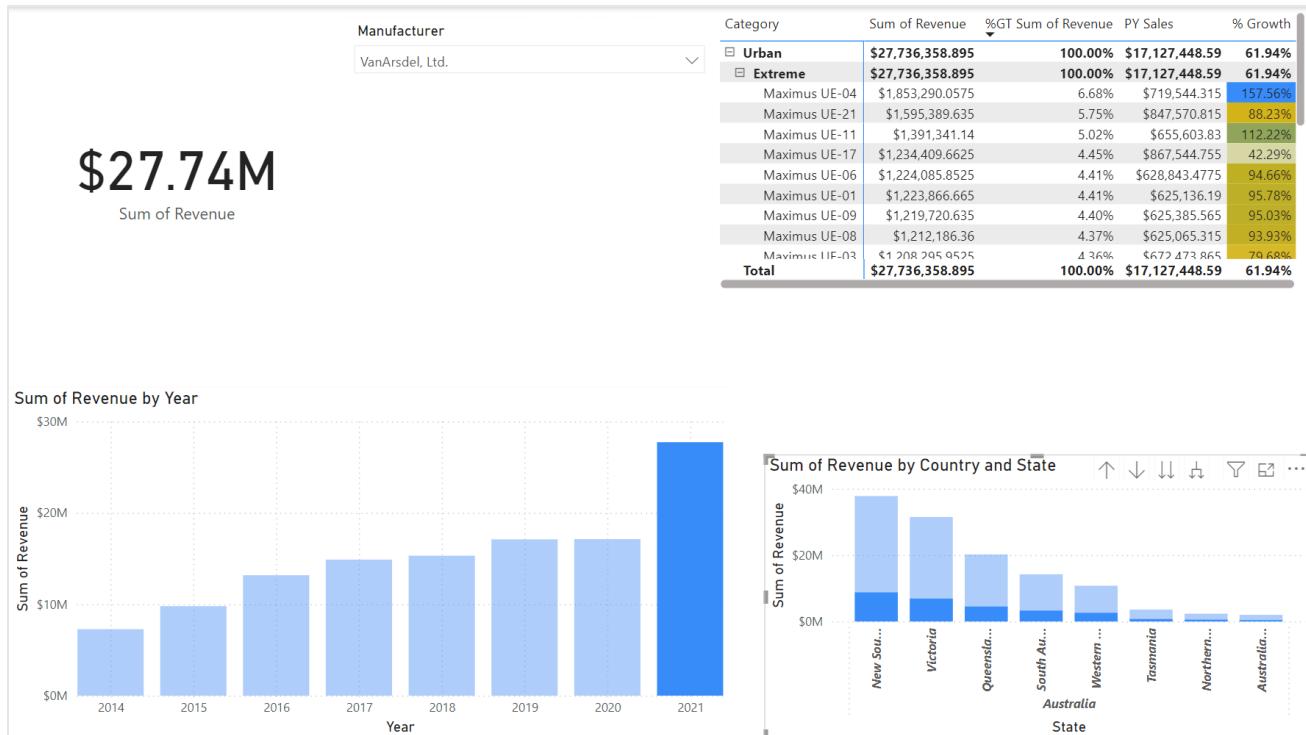


7. Within the visual, select the **Australia** column to drill down to the **State** level.
8. Disable drill down mode on the **Revenue by Country and State** visual.

9. Ensure you still have the year **2021** selected in the **Sum of Revenue by Year** visual. If you don't, hold down the **Ctrl** key on your keyboard and select the **2021** column.



At this point, your canvas and visuals should look like the figure here. You can resize and move visuals as you need.



10. Select the **Manufacturer** slicer visual in the canvas.

- In the **Visualizations** pane, switch to the **Format visual** tab.
- Expand the **Slicer settings** section, then expand the **Options** section.
- From the **Style** drop-down, select **Tile**. Notice that the Manufacturer slicer visual changes to a tile style. You might need to resize your visual so that you can view all the Manufacturers at once within the list.

The screenshot shows a Power BI interface with three main components:

- Manufacturer Slicer:** A 3x2 grid of manufacturer names: Fabrikam, Inc., VanArdel, Ltd., Nod Publishers, Wide World Importers, and Tailwind Traders. The entire grid is highlighted with a red box.
- Table:** A data table showing revenue metrics for different categories. The table includes columns for Category, Sum of Revenue, % GT Sum of Revenue, PY Sales, and % Growth. It lists categories like Urban, Extreme, and Maximus, along with their respective sub-categories and total values.
- Bar Chart:** A bar chart titled "Sum of Revenue by Country and State". The Y-axis is labeled "Sum of Revenue" with ticks at \$20M and \$40M. The X-axis shows several bars representing different countries or states, with the tallest bar reaching approximately \$40M.

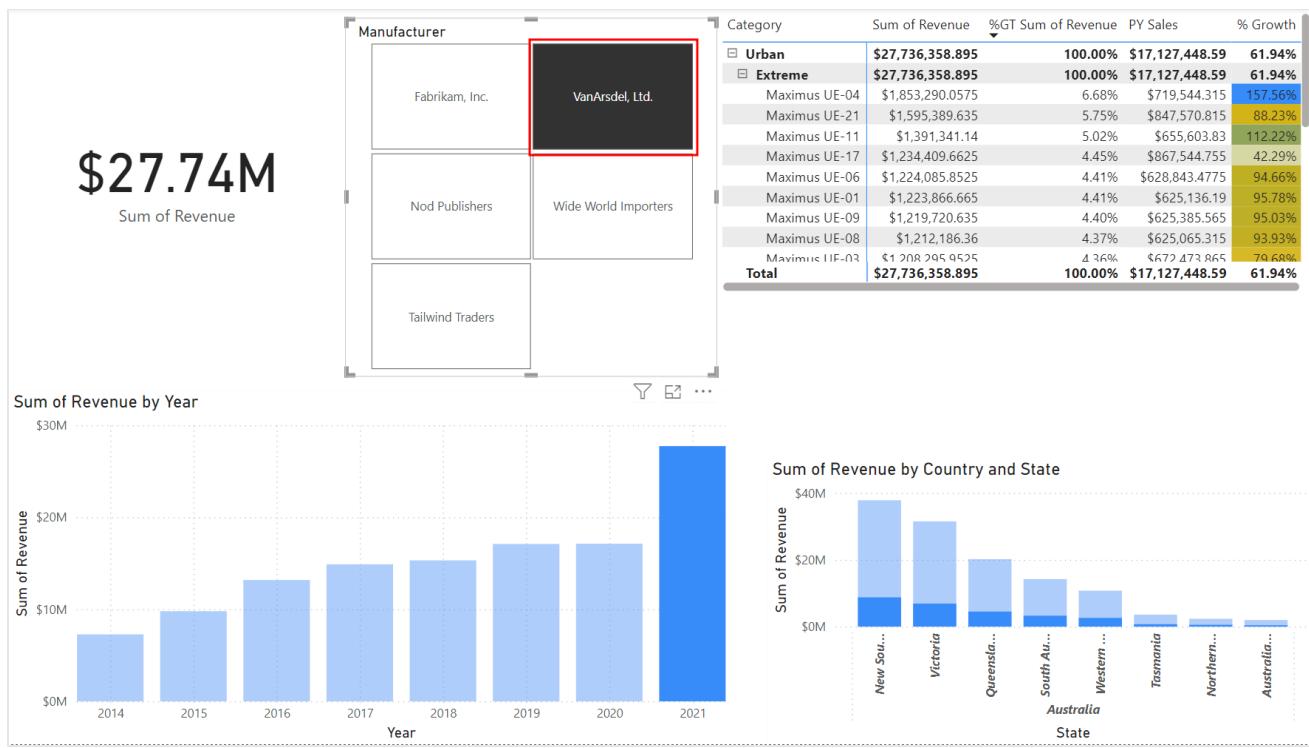
Visualizations pane (right side):

- Format visual:** The current tab is highlighted.
- Filters:** A search bar and a refresh button.
- Visual:** A section with tabs for General and Slicer settings.
- Slicer settings:** Expanded, showing the **Style** dropdown which is currently set to **Tile**.
- Options:** Other settings like Selection, Slicer header (On), and Values.

➊ Note

There are other options that can optionally be changed here to modify the outline color, weight, and more. There is an option to enable the **Select All** option in the visual. There is also an option to make the slicer **multi-select**. Feel free to explore other formatting options.

- Select **VanArdel, Ltd.** in the **Slicer** visual.



Now that we applied some conditional formatting and extended the Slicer visual to have clickable tiles, we'll work towards refining the report further in the next unit.

Next unit: Exercise - Add a logo to the manufacturer filter

[Continue >](#)



Exercise - Add a logo to the manufacturer filter

5 minutes

In this unit, we continue adding more functionality and visual elements to help wrap up our report. Ensure that you're working on the **MyFirstPowerBIModel** file that you have been using in the previous units.

Section 1: Add a logo

Now it would be nice to add logos of the manufacturer to the Slicer instead of just text. Let's do it.

1. Check that the **Manufacturer** slicer visual is still selected. From the **Data** pane, select the **Logo** field from the **Manufacturer** table. (*Do not* select the checkbox; only select the *name* of the field.)
2. From the ribbon, select the **Column tools** tab and choose the **Data Category** drop down.
3. Then, select **Image URL**. Setting the data category property to **Image URL** helps Power BI understand that the data in this field is a URL so it can render the image in the report.

The screenshot shows the Power BI ribbon with the "Column tools" tab selected. In the "Data" pane, the "Manufacturer" table is open, and the "Logo" field is selected. The ribbon tabs shown are: Optimize, Help, Format, Data / Drill, Table tools, Column tools (highlighted), and Data / Drill. The Data Category dropdown in the ribbon is set to "Image URL".

Category	Sum of Revenue	% GT	Sum of Sales	% Growth
Urban	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%
Extreme	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%
Maximus UE-04	\$1,853,290.0575	6.68%	\$719,544.315	157.56%
Maximus UE-21	\$1,595,389.635	5.75%	\$847,570.815	88.23%
Maximus UE-11	\$1,391,341.14	5.02%	\$659,603.83	112.22%
Maximus UE-17	\$1,234,409.6625	4.45%	\$687,544.755	42.29%
Maximus UE-06	\$1,224,085.8525	4.41%	\$628,843.4775	94.66%
Maximus UE-01	\$1,223,866.665	4.41%	\$625,136.19	95.78%
Maximus UE-09	\$1,219,720.635	4.40%	\$625,385.565	95.03%
Maximus UE-08	\$1,212,186.36	4.37%	\$625,065.315	93.93%
Maximus UE-03	\$1,208,295.9525	4.36%	\$672,473.865	79.68%
Maximus UE-10	\$1,206,183.405	4.35%	\$625,327.815	92.89%
Maximus UE-02	\$1,201,455.045	4.33%	\$625,726.5525	92.01%
Maximus UE-07	\$1,193,947.335	4.30%	\$625,212.315	90.97%
Maximus UE-05	\$1,193,716.4925	4.30%	\$625,204.44	90.93%
Total	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%

Below the table, there is a chart titled "Sum of Revenue by Country and State" showing a bar chart with three bars labeled \$40M, \$30M, and another unlabeled bar.

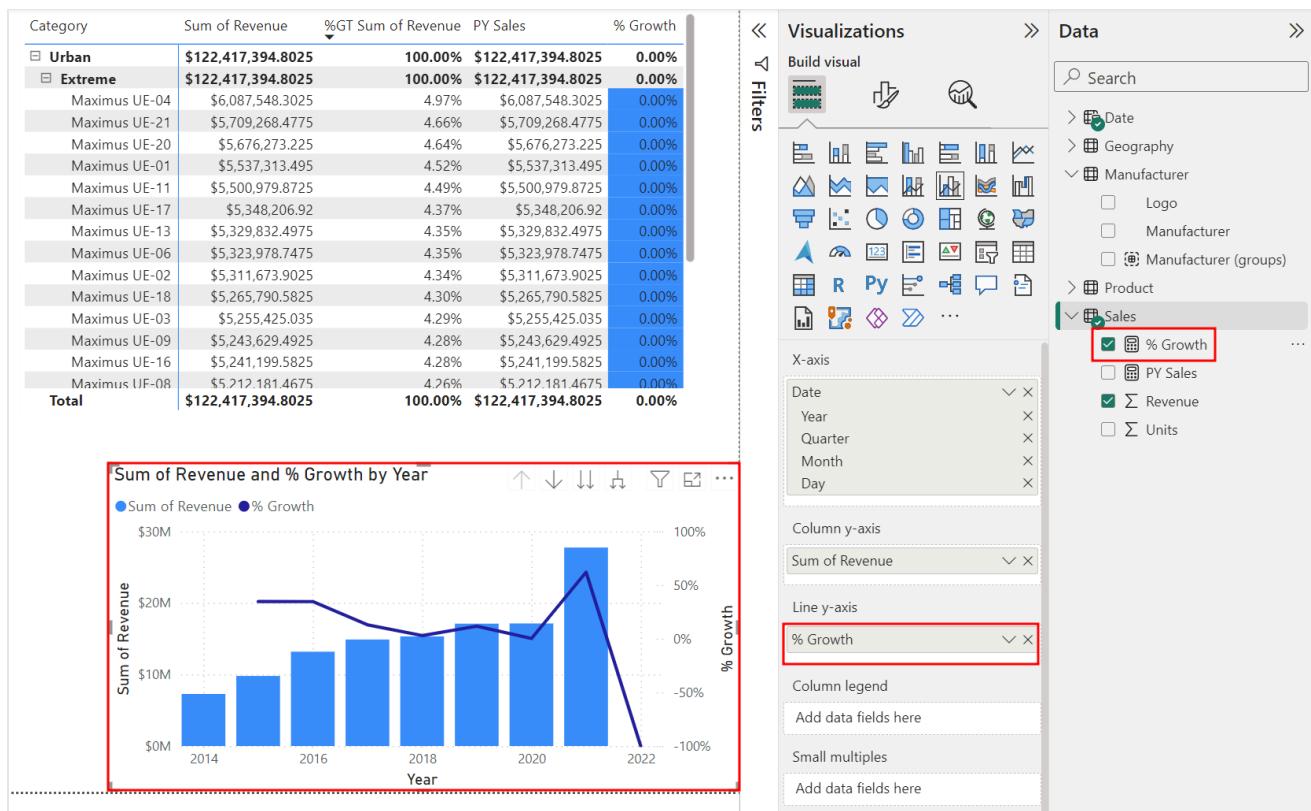
The Data pane on the right shows the "Visualizations" section with the "Logo" field selected under the "Manufacturer" node. Other nodes include "Date", "Geography", "Product", and "Sales".

- From the Data pane, drag and drop the **Logo** field from the **Manufacturer** table to below the **Manufacturer** column in the **Field** box in the **Visualizations** pane.
- Select the **X** to the right of the **Manufacturer** field in the box so that the **Logo** field replaces it.

The screenshot shows a Power BI report interface. On the left, there is a Slicer visual with four categories: 'Fabrikam, Inc.', 'VanAarsdel, Ltd.', 'Mad Publishers', and 'TAILWIND TRADERS'. A red box highlights the 'Fabrikam, Inc.' and 'VanAarsdel, Ltd.' sections. To the right of the slicer is a Table visual showing revenue data for different categories. At the bottom is a Bar chart titled 'Sum of Revenue by Country and State'. On the far right is the Data pane, which includes a 'Visualizations' pane with various chart icons, a 'Data' pane with a search bar and filter options, and a 'Filters' pane where the 'Logo' field is selected. A red box highlights the 'Logo' field in the 'Filters' pane.

Category	Sum of Revenue	% GT Sum of Revenue	PY Sales	% Growth
Urban	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%
Extreme	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%
Maximus UE-04	\$1,853,290.0575	6.68%	\$719,544.315	157.56%
Maximus UE-21	\$1,595,389.635	5.75%	\$847,570.815	88.23%
Maximus UE-11	\$1,391,341.14	5.02%	\$655,603.83	112.22%
Maximus UE-17	\$1,234,409.6625	4.45%	\$628,843.4775	42.29%
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Maximus UE-01	\$1,223,866.665	4.41%	\$625,385.565	95.03%
Maximus UE-09	\$1,219,720.635	4.40%	\$625,065.315	93.93%
Maximus UE-08	\$1,212,186.36	4.37%	\$625,065.315	93.93%
Maximus UE-n2	\$1,208,205.9525	4.36%	\$672,473.865	70.68%
Total	\$27,736,358.895	100.00%	\$17,127,448.59	61.94%

- Resize and move the visuals as needed.
- Select the **VanAarsdel, Ltd.** logo in the **Manufacturer** slicer visual to filter all the other visuals.
- Select the **Sum of Revenue by Year** visual.
- From the **Visualizations** pane, select the **Line and clustered column chart** to change the visual type.
- From the **Data** pane, drag and drop the **% Growth** field from the **Sales** table to the **Line y-axis** box.

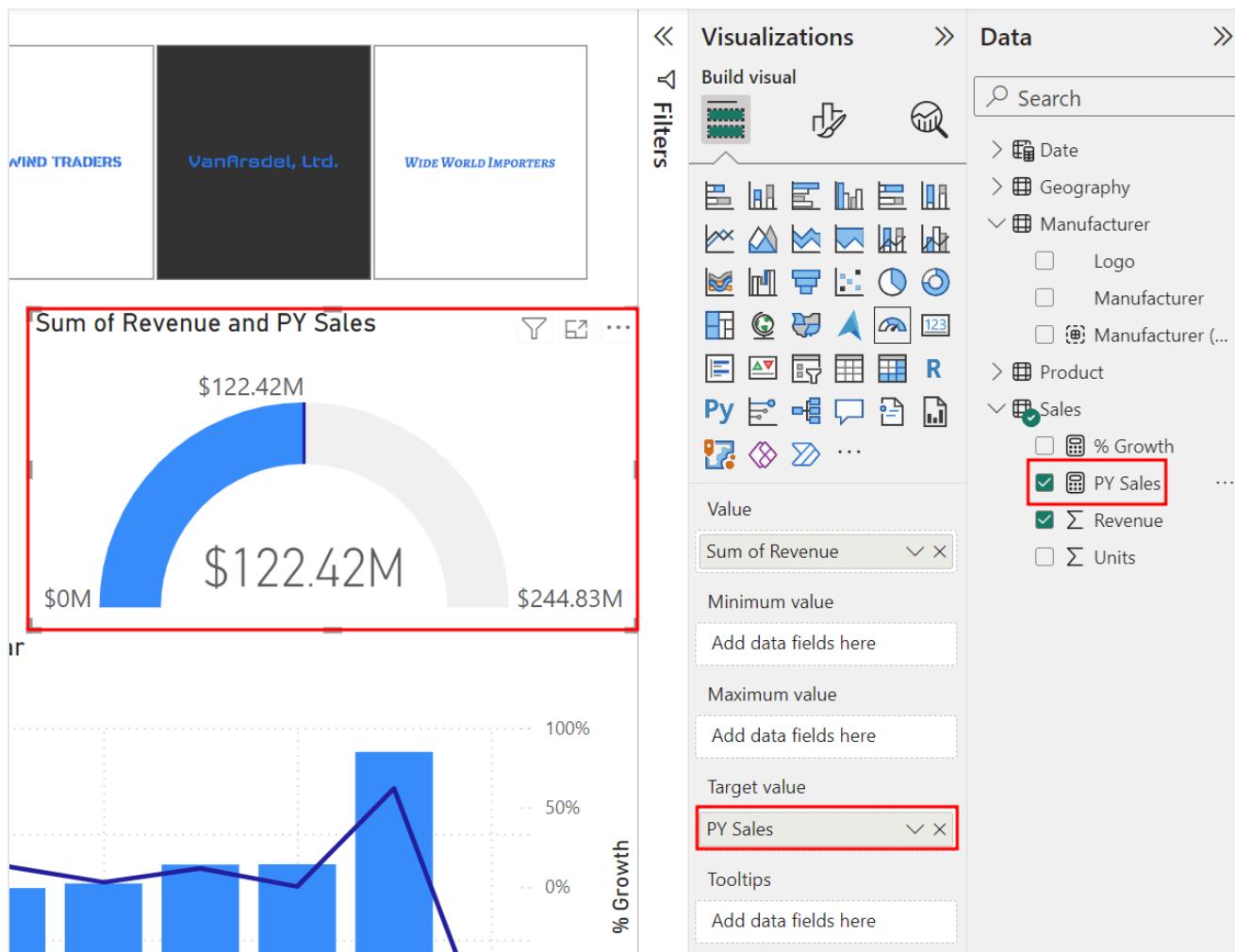


This provides a representation of the revenue and growth over time.

Section 2: Gauge visual

Now, let's select the **Sum of Revenue** card visual so we can change it to a **Gauge** visual.

1. Make sure that the **Sum of Revenue** card visual is selected within the report. From the **Visualizations** pane, select the **Gauge** visual.
2. From the **Data** pane, drag and drop the **PY Sales** field from the **Sales** table to the **Target value** in the **Visualizations** pane.



3. Resize and move the visuals as needed. Now we can compare **Revenue** with the target.

Let's take time to select the colors for the visual.

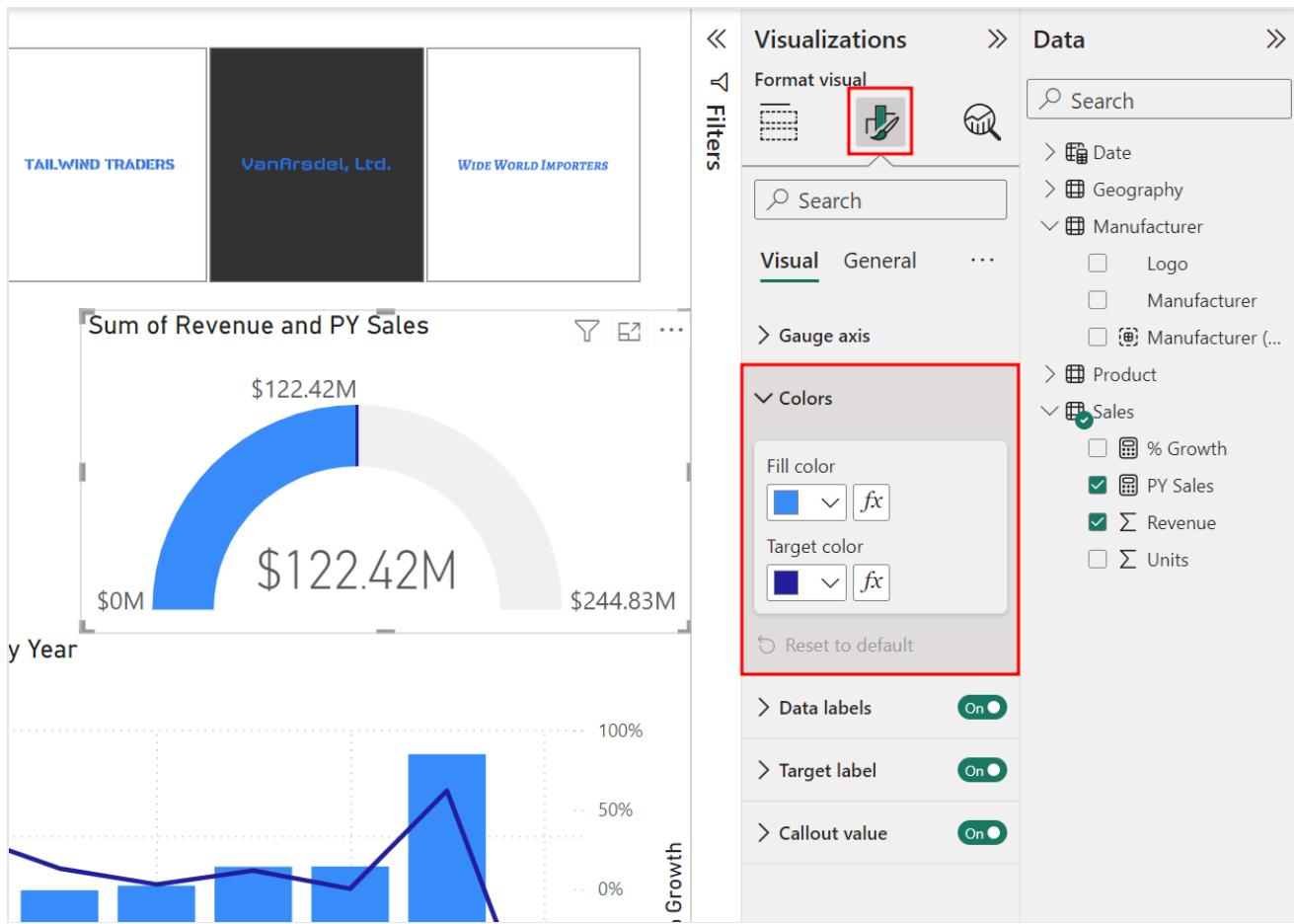
4. Select the **Gauge** visual.

5. From the **Visualizations** pane, select the **Format visual** tab (*the paint brush icon*).

6. Expand the **Colors** section.

7. Select the drop-down for **Fill color**.

Notice you can pick a color from the default color palette or pick **More colors**. No need to make a change here because the next steps will standardize all the report colors used.



Let's check out some of the **themes** available.

8. Ensure that the **Gauge** visual is still selected.
9. From the ribbon, select the **View** tab and choose the drop-down arrow within the **Themes** menu.
10. Then, select the **Temperature** theme.

File

Home

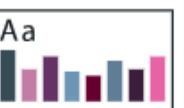
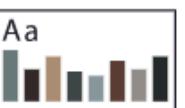
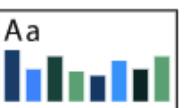
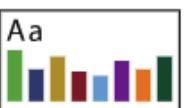
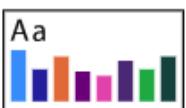
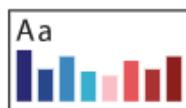
Insert

Modeling

View

Optimize

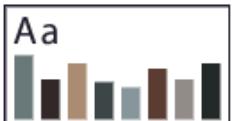
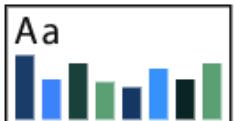
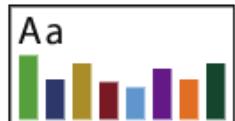
Help



This report



Accessible themes



Power BI



Temperature

themes



Notice that the colors on all the visuals are updated. Feel free to try the other out-of-the-box themes.

Now that we covered adding logos to the manufacturer slicer, changed the clustered column chart, adapted the card visual to a gauge, and looked through report themes, in the next unit we'll cover the application of custom report themes.

Next unit: Exercise - Apply a custom report theme

[Continue >](#)

100 XP

Exercise - Apply a custom report theme

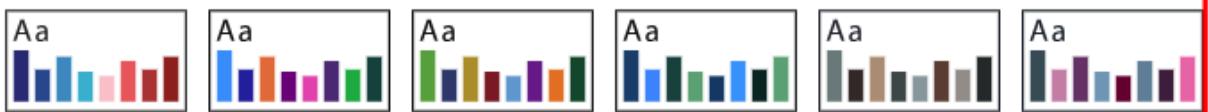
8 minutes

In our scenario, the Marketing department provides standard color themes to be used across reports. We can use the **Report Theme** feature in Power BI by uploading a theme. The **Report Theme** requires a **JSON file** where the data colors, background, foreground, and a table of accent colors are defined. The JSON file can be used across all the reports.

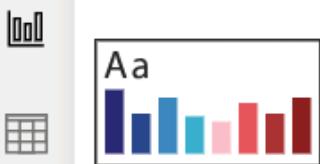
Make sure you're using the file titled **MyFirstPowerBIModel** you've been working on in the previous units.

Section 1: Apply a custom report theme

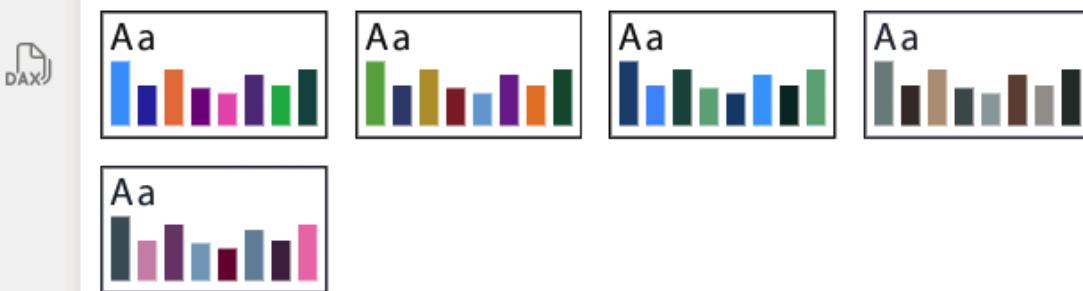
1. From the ribbon, select the **View** tab and choose the drop-down within the **Themes** menu.
2. Then, select **Browse for themes**.



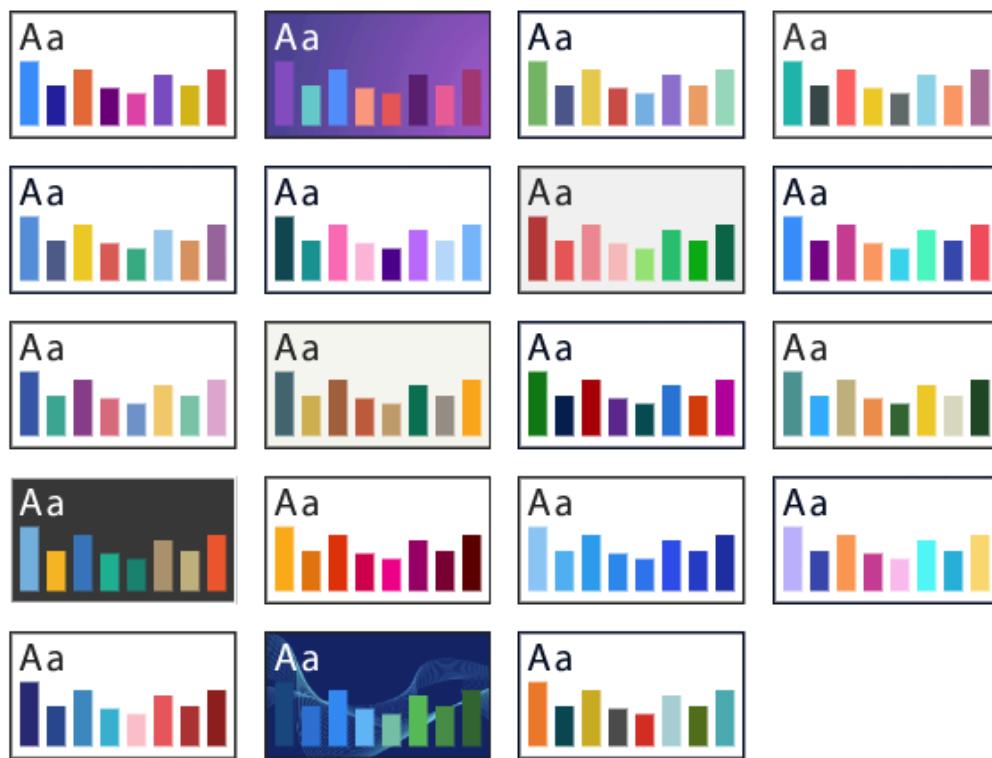
This report



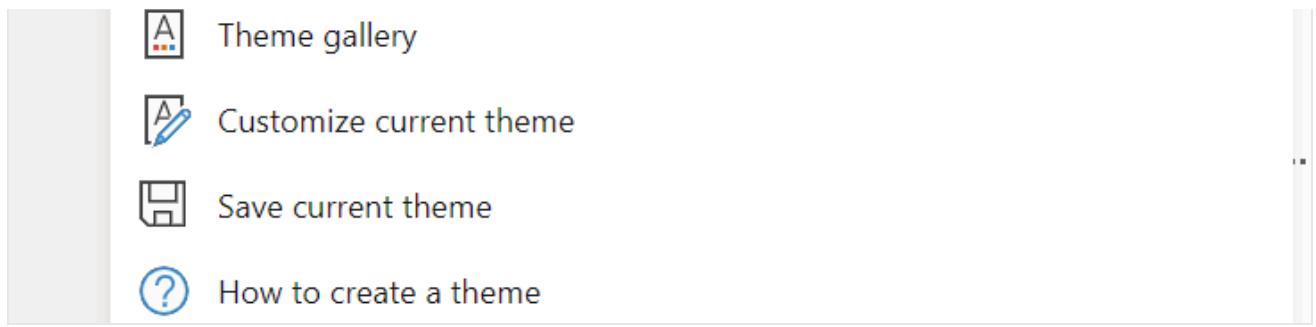
Accessible themes



Power BI

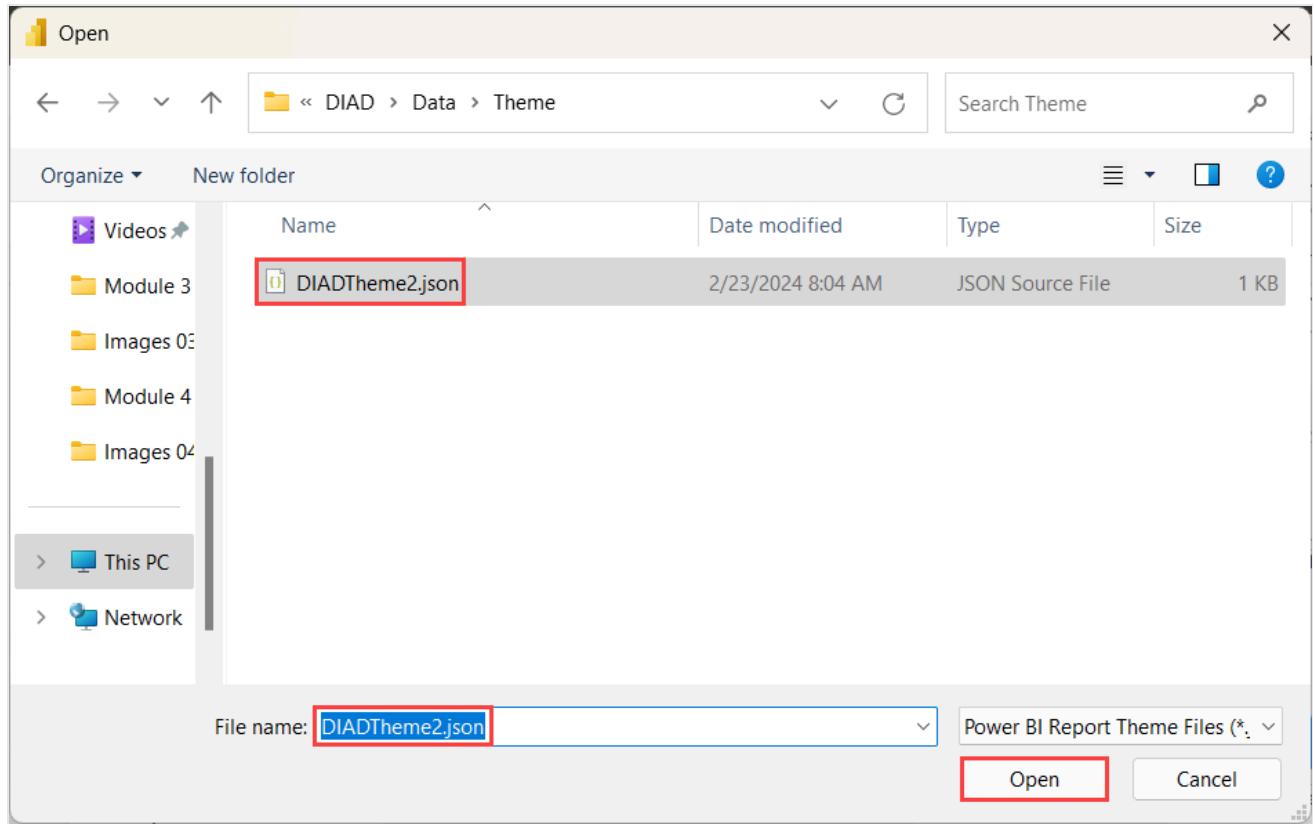


 Browse for themes



3. A file browser dialog box opens. Navigate to the **Data** folder, then the **Theme** folder (DIAD/Data/Theme).

4. Select the **DIADTheme2** file and then choose **Open**.



ⓘ Note

Here you can save and add your custom themes.

5. Once the theme is imported, a success dialog box opens. Select **Got it**.

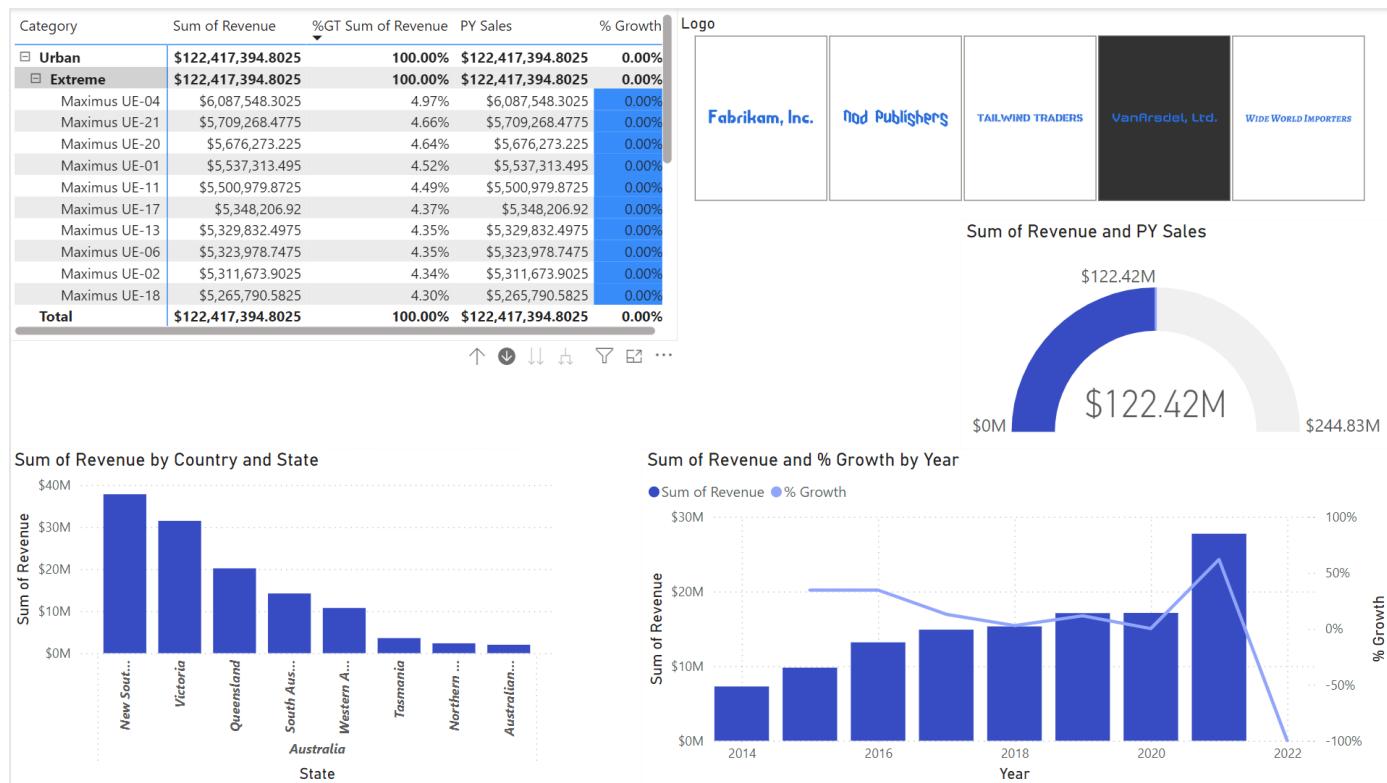
File successfully added

X

Your custom report theme is ready to use.

Got it

Notice colors on all the visuals are updated. Your report should look like the figure below. This theme looks good. Now, most of the visuals are blue, so let's add some contrast.

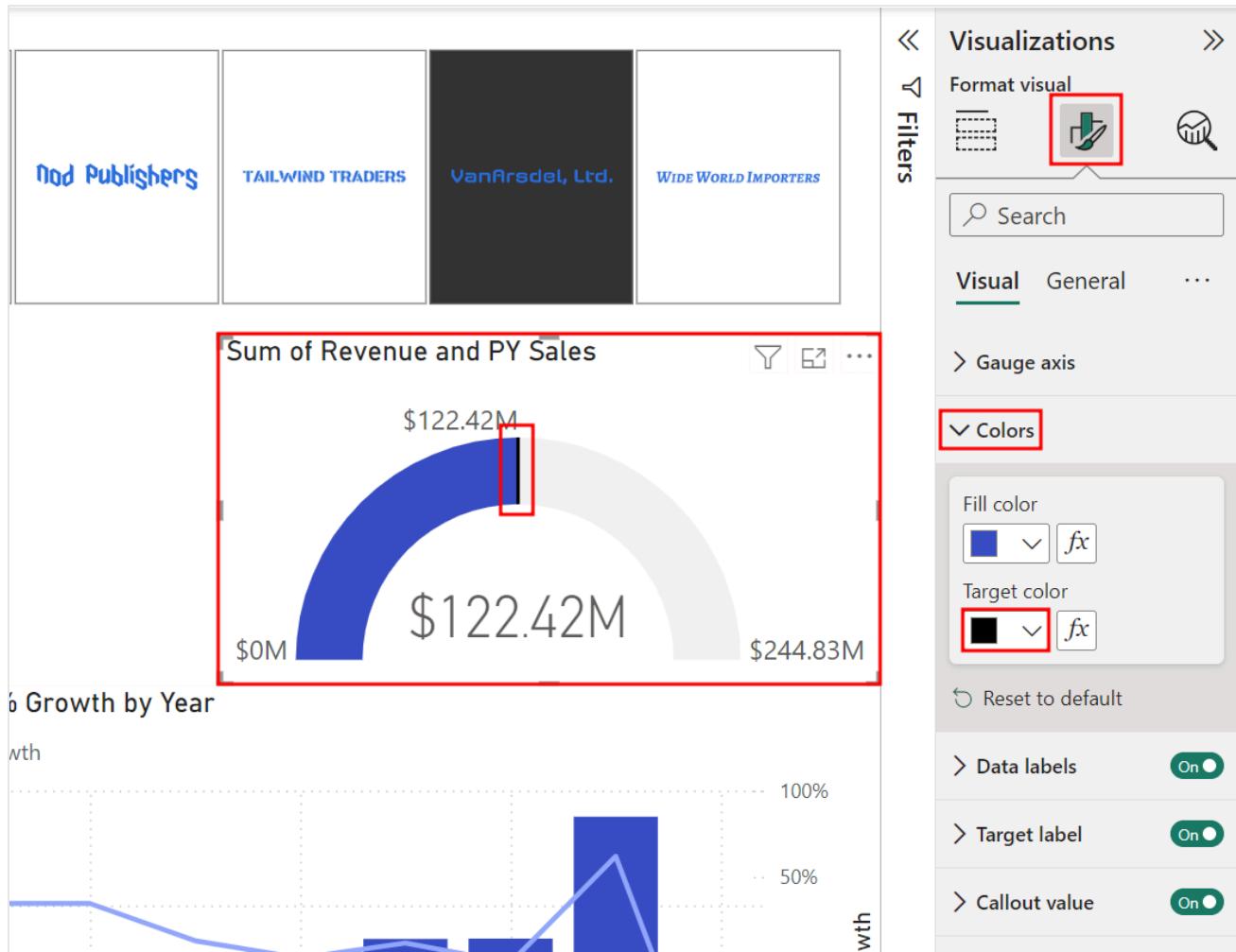


Section 2: Other formatting options

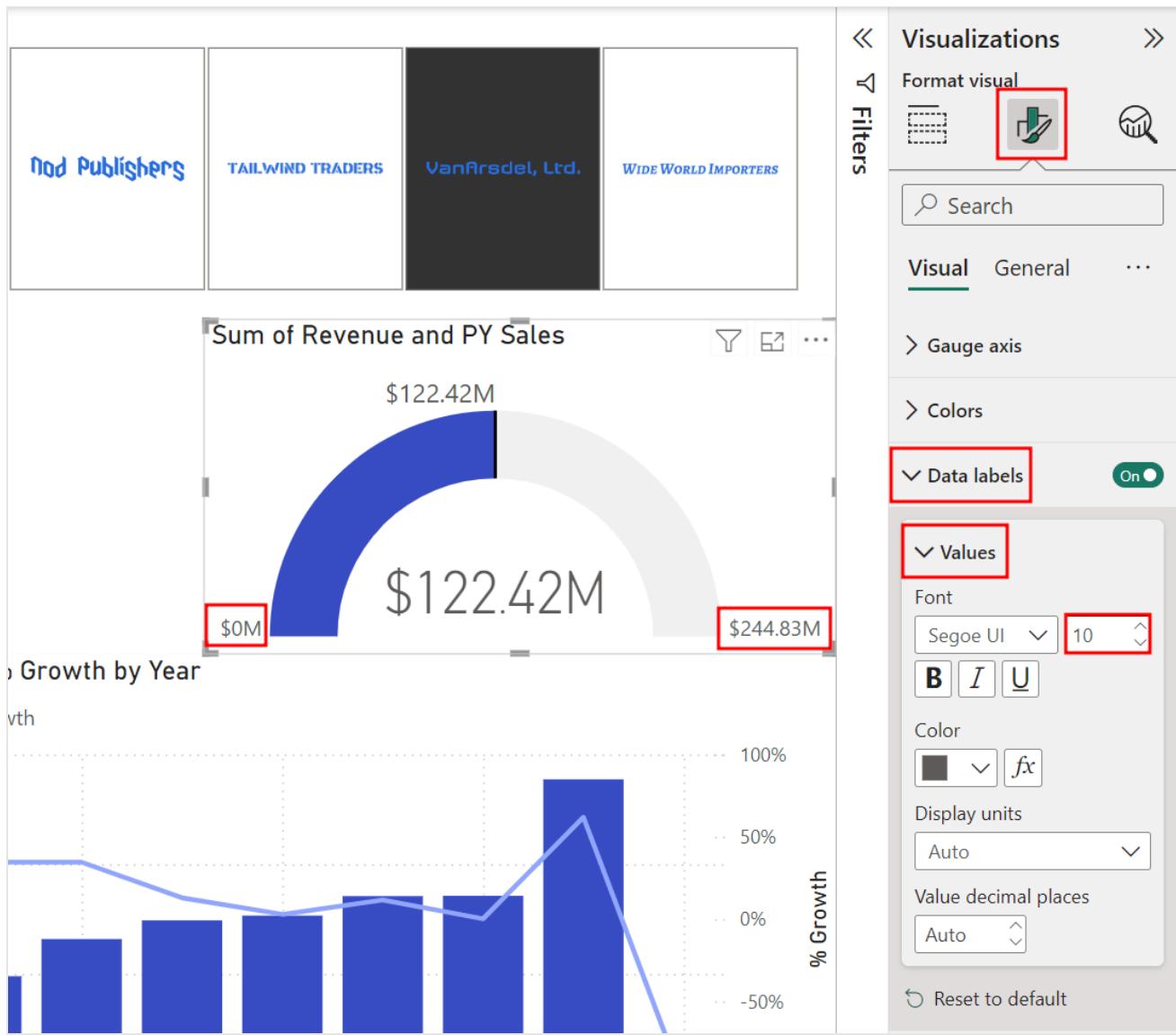
Now that we have our own custom theme applied, let's make more formatting changes for the theme to stand out.

1. Select the Gauge visual.
2. From the Visualizations pane, select the Format visual tab (*the paint brush icon*).
3. Expand the Colors section.

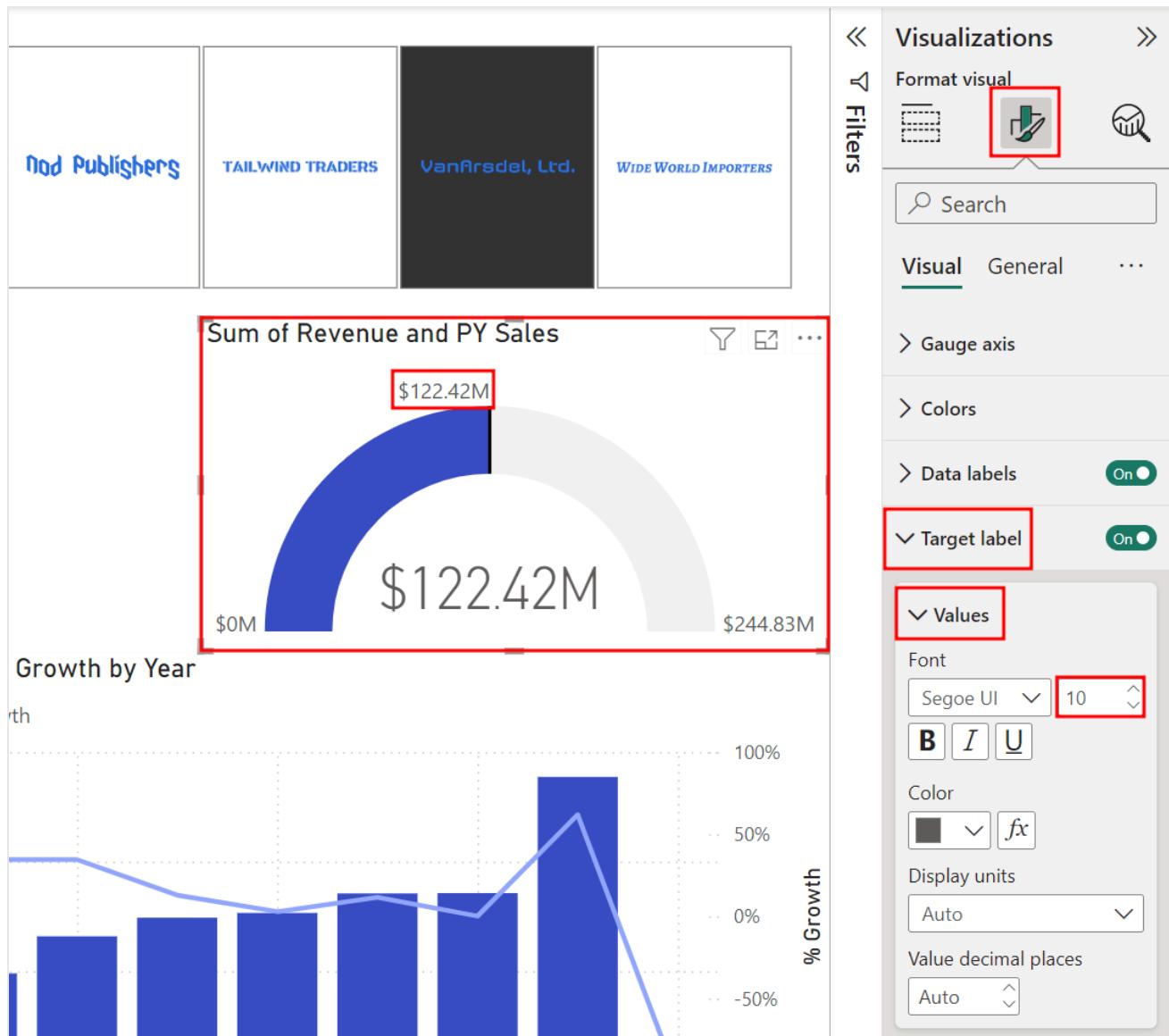
4. Select the drop-down menu below **Target color**. Notice the color palette is different now.
5. Select the color **black**. Notice the subtle change to the target line in the visual.
6. Collapse the **Colors** section.



7. In the **Visualizations** pane, under the **Format visual** tab, expand the **Data labels** section.
8. Then, expand the **Values** section and change the **Font size** to 10.



9. While still in the **Visualizations** pane, expand the **Target label** section under the **Format visual** tab.
10. In the **Values** section, change the **Font size** to **10**.



11. Select the Matrix visual.

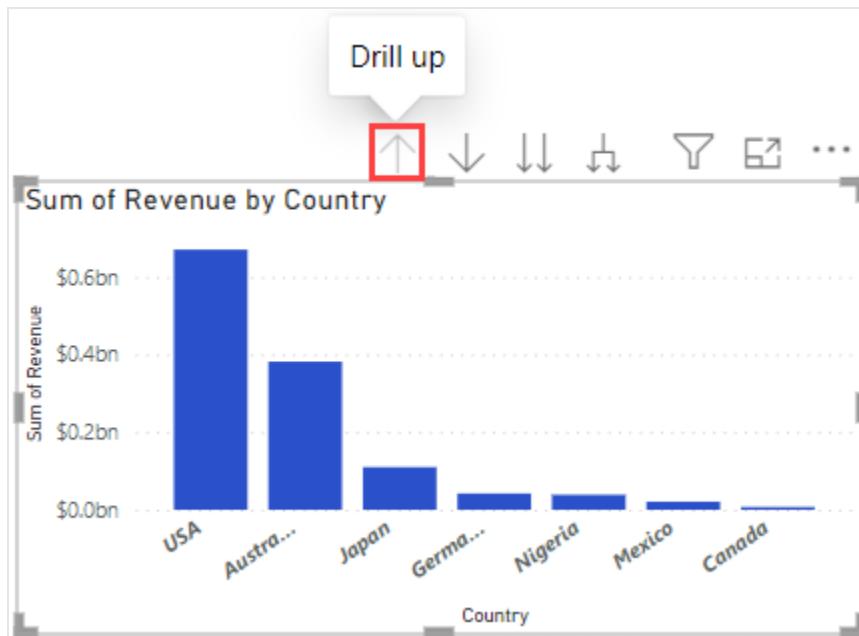
12. Using the arrows within the visual header, Drill up to the Segment level.

Category	Sum of Revenue	% GT Revenue	PY Sales	% Growth
<input type="checkbox"/> Urban	\$381,718,814.925	100.00%	\$381,718,814.925	0.00%
<input type="checkbox"/> Convenience	\$139,204,192.9425	36.47%	\$139,204,192.9425	0.00%
<input type="checkbox"/> Extreme	\$122,417,394.8025	32.07%	\$122,417,394.8025	0.00%
<input type="checkbox"/> Moderation	\$119,360,326.68	31.27%	\$119,360,326.68	0.00%
<input type="checkbox"/> Regular	\$736,900.5	0.19%	\$736,900.5	0.00%
Total	\$381,718,814.925	100.00%	\$381,718,814.925	0.00%

Drill up

13. Select the **Sum of Revenue by Country** visual.

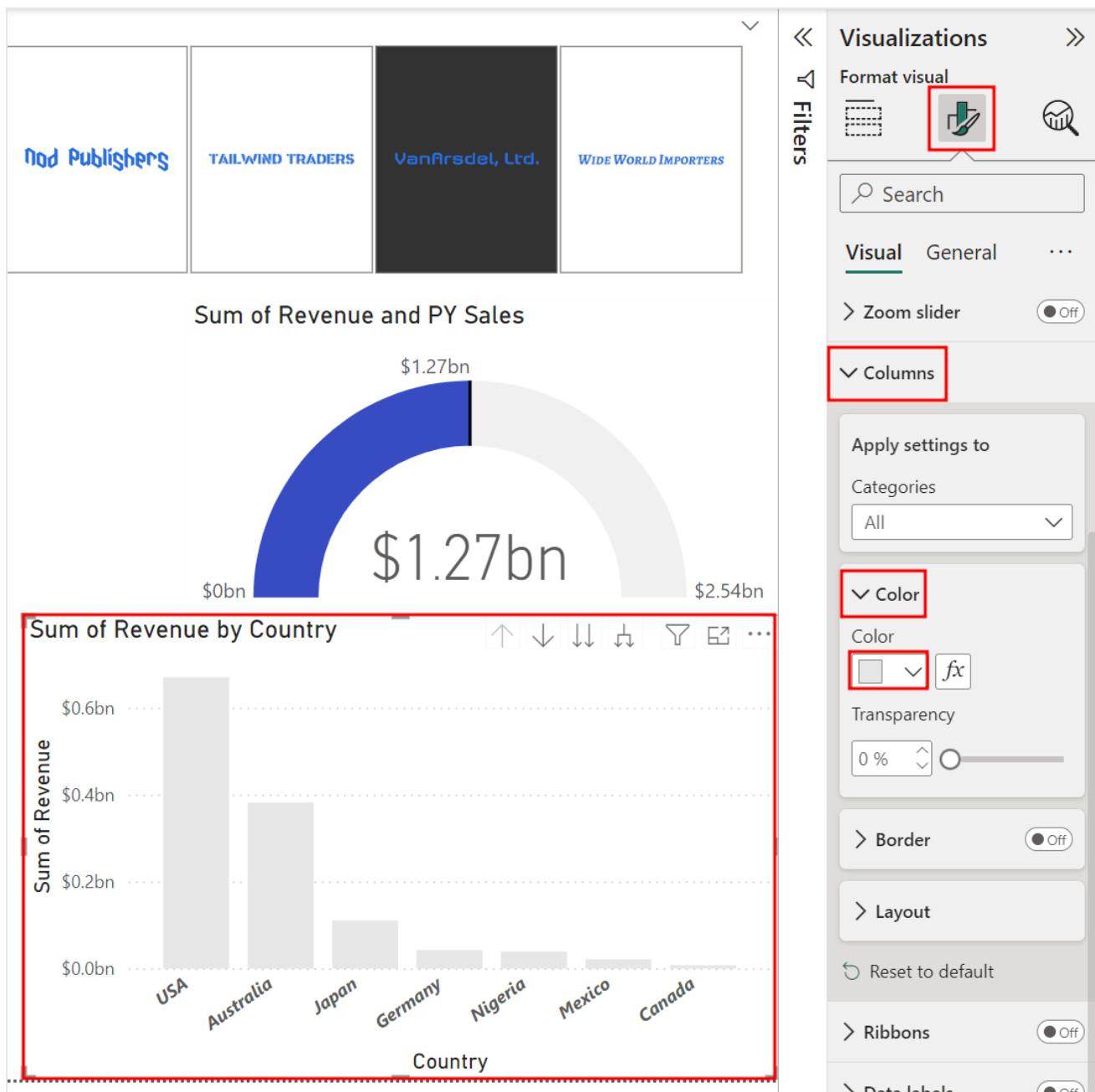
14. Using the arrows within the visual header, Drill up to the **Country** level.



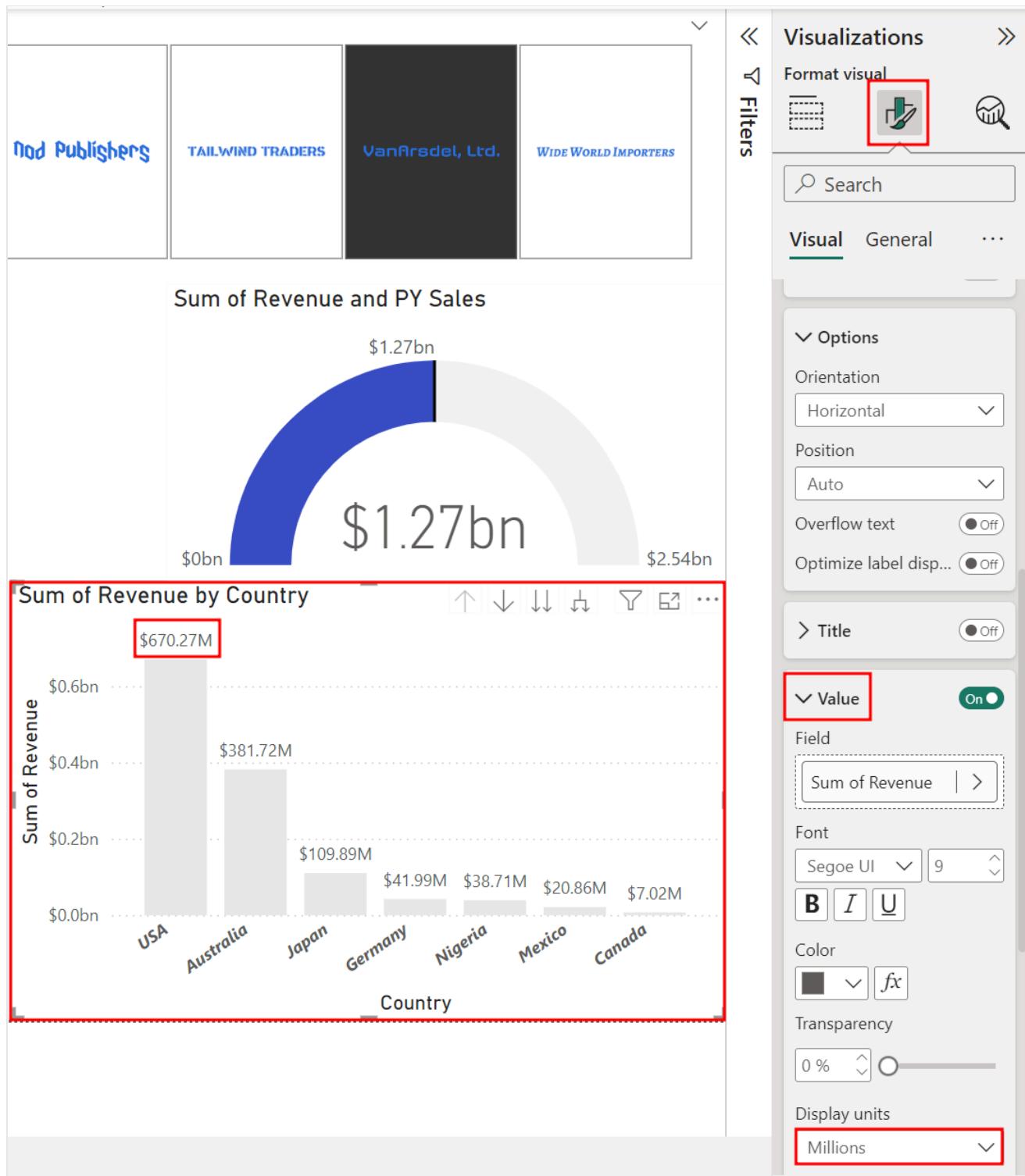
15. While the **Sum of Revenue by Country** visual is still selected, in the **Visualizations** pane, select the **Format visual** tab (*the paint brush icon*).

16. Expand the **Columns** section, then the **Color** section.

17. Using the drop-down menu, select a *light shade of gray* as the **Default color**.



18. Check that the **Sum of Revenue by Country** visual is still selected.
19. In the **Visualizations** pane under the **Format visual** tab, turn **On** the **Data labels**, and expand this section.
20. Expand the **Value** sub-section in the **Data labels** section.
21. Change the **Display units** to **Millions**.



Notice there are many formatting options. For example, a visual title can be changed and formatted, or you can add a border and background to the visual. Feel free to explore other options.

Let's move to another visual.

22. Select the **Sum of Revenue and % Growth by Year** visual.

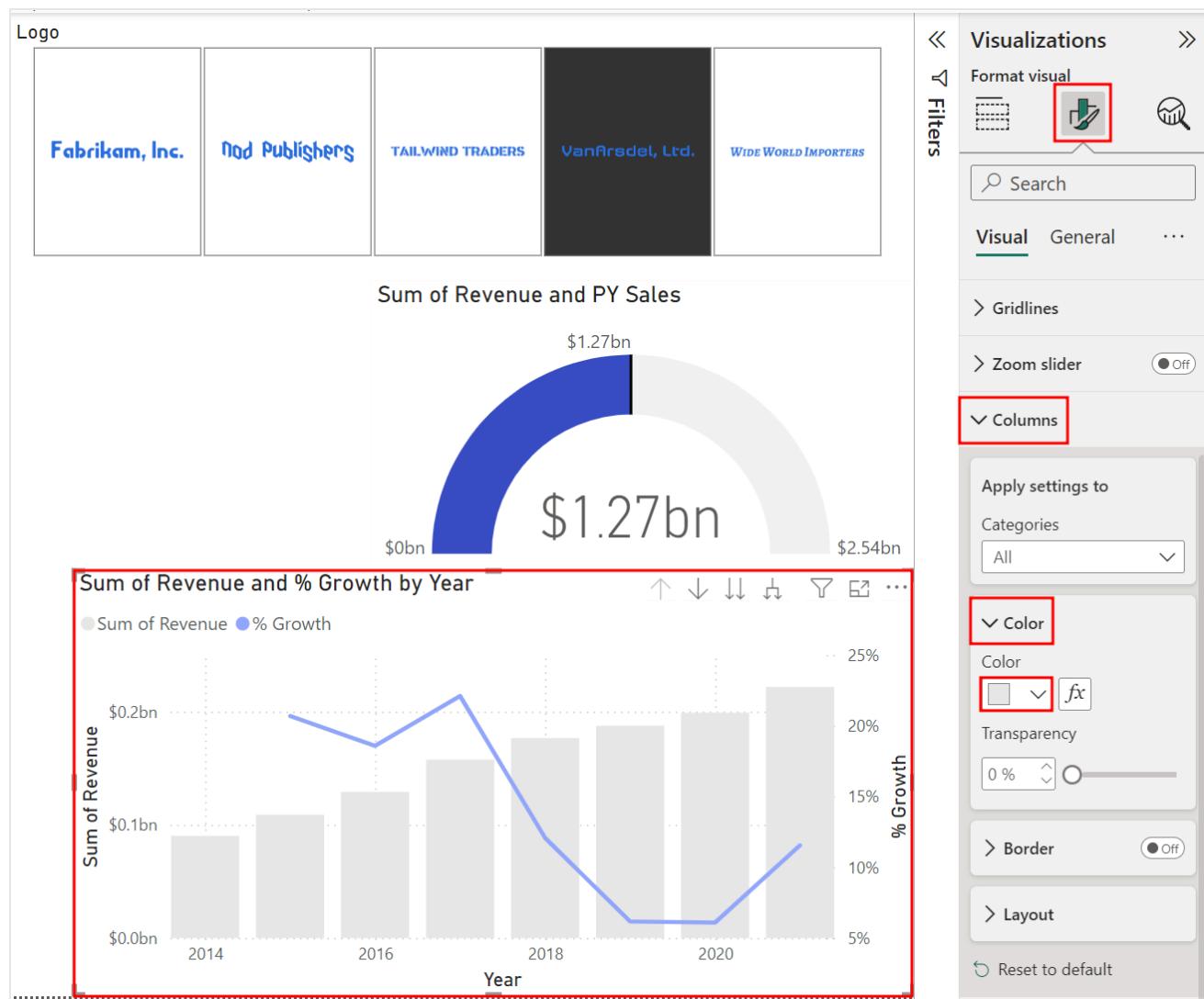
① Note

You may need to move or resize the visuals to see all the information that will be needed in the next steps.

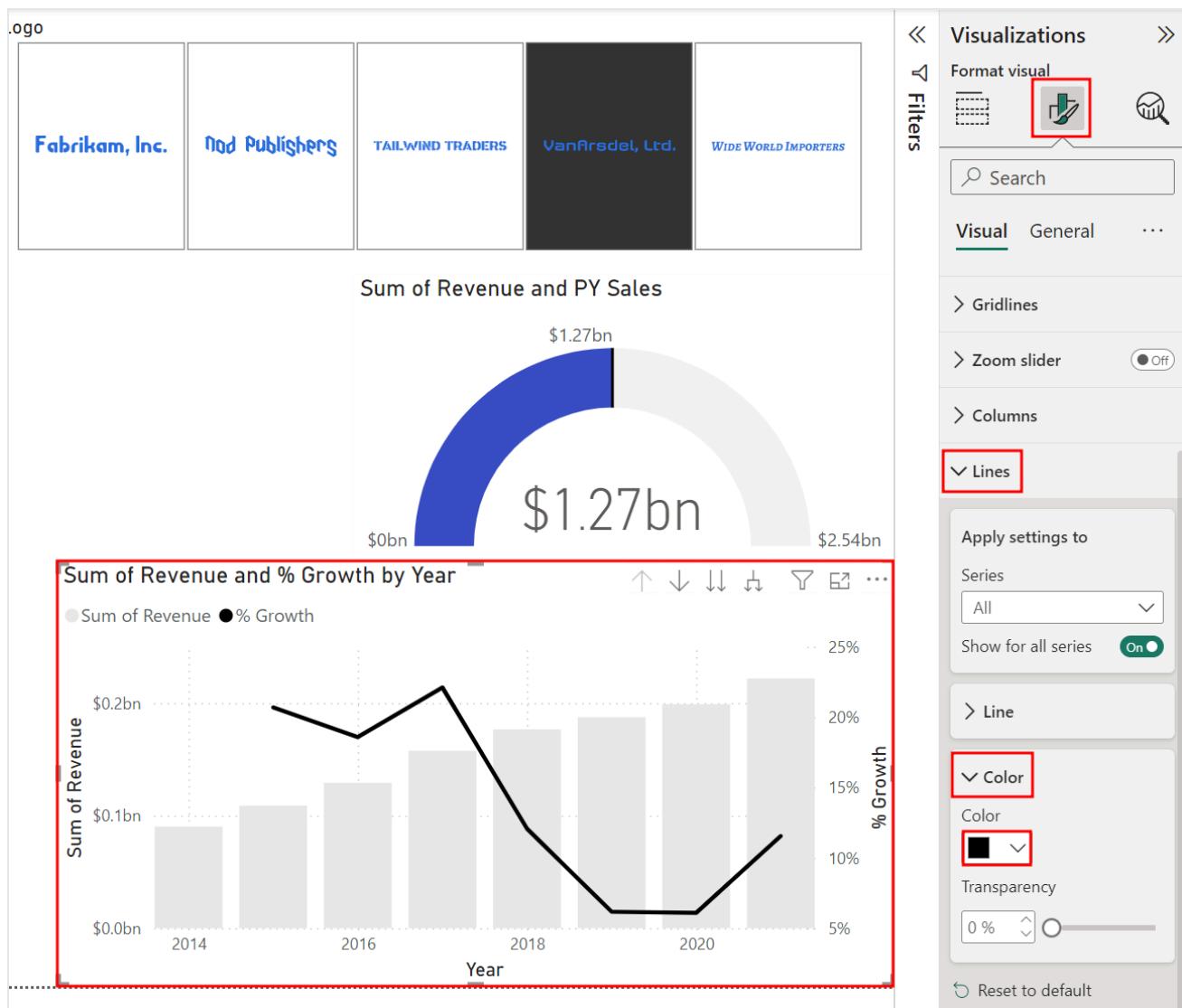
23. Since there's no Revenue value in the year 2022, right-click on the line above 2022 and select **Exclude**.



24. Next, from the **Visualizations** pane, select the **Format visual** tab (the paint brush icon).
25. Expand the **Columns** section.
26. Expand the **Color** section.
27. Select a *light shade* of gray as the **Default color**.



28. Check that the **Sum of Revenue and % Growth by Year** visual is still selected.
29. In the **Visualizations** pane under the **Format visual** tab, expand the **Lines** section.
30. Then, expand the **Color** section.
31. Set the **% Growth** color to **black**.



Now let's add a **report title**.

32. From the ribbon, select the **Home** tab and then choose **Text box** under *Insert*. Notice a text box visual is added.
33. Resize and move the visuals as needed.
34. Enter **Manufacturer Analysis** in the text box.
35. Highlight **Manufacturer Analysis** to format the text.
36. Select **Segoe (Bold)** as the font.
37. Select **32** as the font size.
38. Resize the text box as needed.

The screenshot shows the Microsoft Power BI desktop interface. The ribbon at the top has the 'Home' tab selected, indicated by a red box. Below the ribbon, there are several tabs: Insert, Modeling, View, Optimize, Help, Format, Data / Drill. Under the 'Insert' tab, there are icons for Paste, Cut, Copy, Format painter, Clipboard, Get data, Excel, OneLake, SQL Server, Enter data, Data hub, Recent sources, Transform data, Refresh data, and Queries. On the right side, there are sections for 'Logo' (Fabrikam, Inc., Nad Publishers, TAILV) and 'Text box' (with a red box around it), More visuals, New measure, Quick measure, Calculations, and Sensitivity.

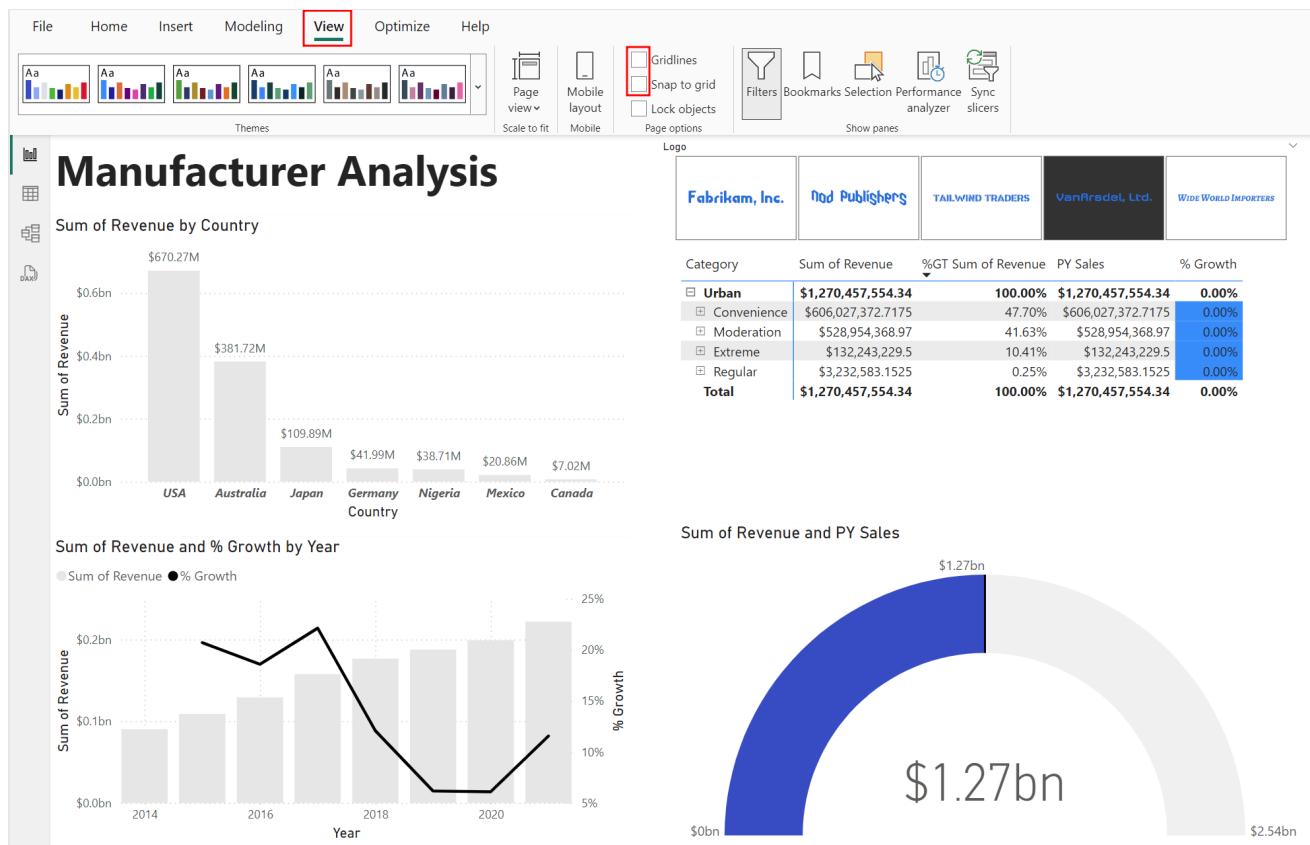
39. From the ribbon, select the **View** tab.

40. In the **Page options** section, select the **checkboxes** next to **Gridlines** and **Snap to grid**. This helps with aligning the visuals.

The screenshot shows the Microsoft Power BI desktop ribbon. The 'View' tab is selected, indicated by a red box. Below the ribbon, there are sections for Themes, Page view, Mobile layout, Scale to fit, and Page options. The 'Page options' section contains checkboxes for 'Gridlines' (checked), 'Snap to grid' (checked), and 'Lock objects' (unchecked).

41. Now, use the **Gridlines** and **Snap to grid** features to **position** and **resize** your visuals like the figure below.

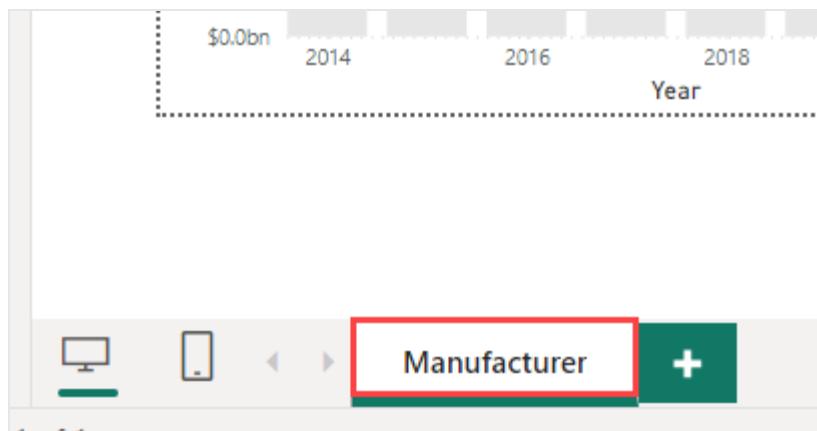
42. Uncheck the **Gridlines** and **Snap to grid** options to disable these features once you finish moving the visuals into the correct places.



43. Right-click the page name in the lower-left corner.

44. Then, select Rename Page from the options menu.

45. Rename the page to Manufacturer.



Now that we have a basis for the report, in the next Unit we'll cover how to import and implement custom visual elements.

Summary

1 minute

During this Module, you began to create a full report that to publish on the Power BI Service. In the report, you learned how to use conditional formatting, add logos, and import custom visuals.

Learned concepts:

- Conditional formatting
- Using tiles in a Slicer visual
- Adding logos from Image URLs
- Using Gauge visuals
- Applying themes and importing custom ones
- Displaying measurement units
- Changing a visual element's color
- Using gridlines and the Snap to grid feature