100 XP

Introduction

5 minutes

In this Module, you learn how to:

- Understand how to create relationships to link data property
- Learn how to add and use visualizations
- Learn how to create groups to organize data

Example scenario

You continue to act as the Chief Marketing Officer (CMO) for VanArsdel, Ltd. In this scenario, you need to build a data model for VanArsdel, Ltd. Then after you build the model, you need to use visualizations to help show your findings from exploring the data.

Continue to use your file from Module 2. If you're joining at this point or unable to complete Module 2, start this Module using the *Lab 1 solution.pbix* file in the **Reports** folder.

Tasks to complete

In the first unit, you'll:

- Create the model
- Explore data

In the second unit, you'll:

- Create relationships between the data
- Visualize the data

In the third unit, you'll:

- Group and bin the data

- Use slicers

In the final unit of this module, you'll:

- Create and use a data table

What is the main goal?

By the end of this session, you're able to:

- Create a range of different charts
- Highlight and cross-filter
- Organize data into bins and groups
- Use slicer visuals
- Hide data fields from tables

Next unit: Create model and explore the data

Continue >

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Create model and explore the data

20 minutes

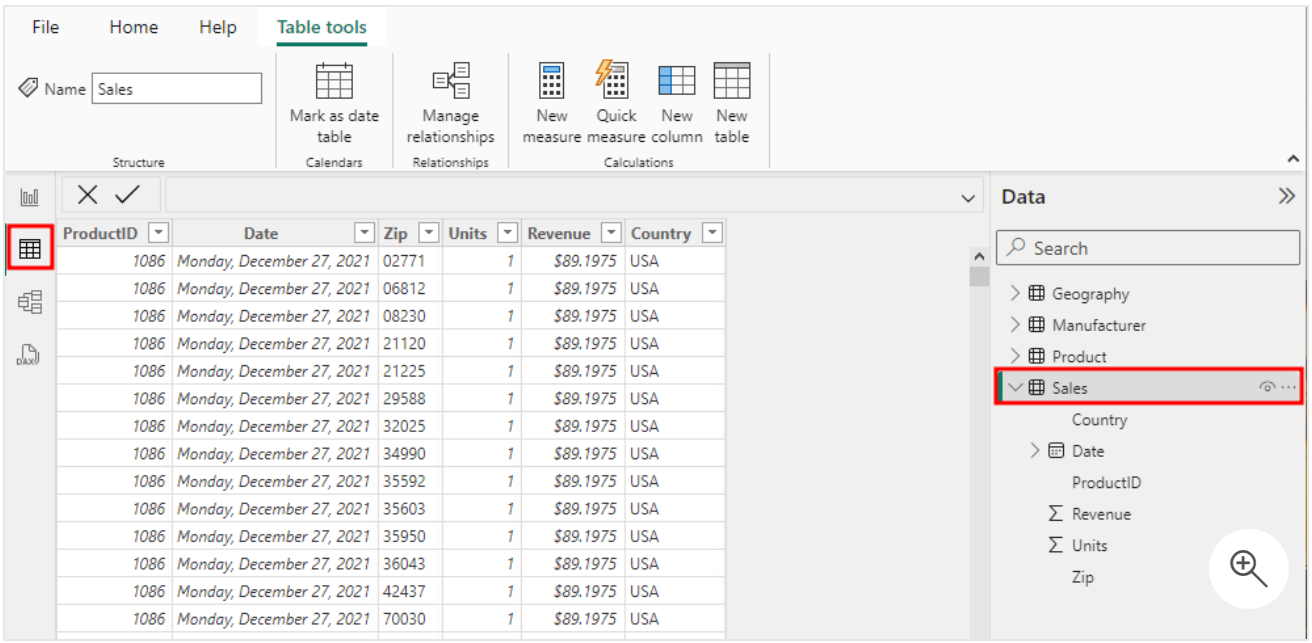
In this section, you learn about the key parts of the Power BI desktop. You also learn how to model and explore the data and build visuals.

Section 1: Data modeling

1. Open the *MyFirstPowerBIModel* file (the file you saved at the end of Module 2) and go to the main **Power BI Desktop** window.

2. Select the **Table view** icon in the left navigation menu.

3. Select and expand the **Sales** table in the **Data** pane.



ProductID	Date	Zip	Units	Revenue	Country
1086	Monday, December 27, 2021	02771	1	$89.1975	USA
1086	Monday, December 27, 2021	06812	1	$89.1975	USA
1086	Monday, December 27, 2021	08230	1	$89.1975	USA
1086	Monday, December 27, 2021	21120	1	$89.1975	USA
1086	Monday, December 27, 2021	21225	1	$89.1975	USA
1086	Monday, December 27, 2021	29588	1	$89.1975	USA
1086	Monday, December 27, 2021	32025	1	$89.1975	USA
1086	Monday, December 27, 2021	34990	1	$89.1975	USA
1086	Monday, December 27, 2021	35592	1	$89.1975	USA
1086	Monday, December 27, 2021	35603	1	$89.1975	USA
1086	Monday, December 27, 2021	35950	1	$89.1975	USA
1086	Monday, December 27, 2021	36043	1	$89.1975	USA
1086	Monday, December 27, 2021	42437	1	$89.1975	USA
1086	Monday, December 27, 2021	70030	1	$89.1975	USA

4. Scroll up and down to see how fast you can go through millions of rows.

5. Select the **Model view** icon in the left navigation menu.

   You see the tables you imported along with relationships. The Power BI Desktop can often automatically infer relationships between the tables:

- A relationship is created between the Sales and Product tables using the ProductID column.
- A relationship is created between the Product and Manufacturer tables using the ManufacturerID column.

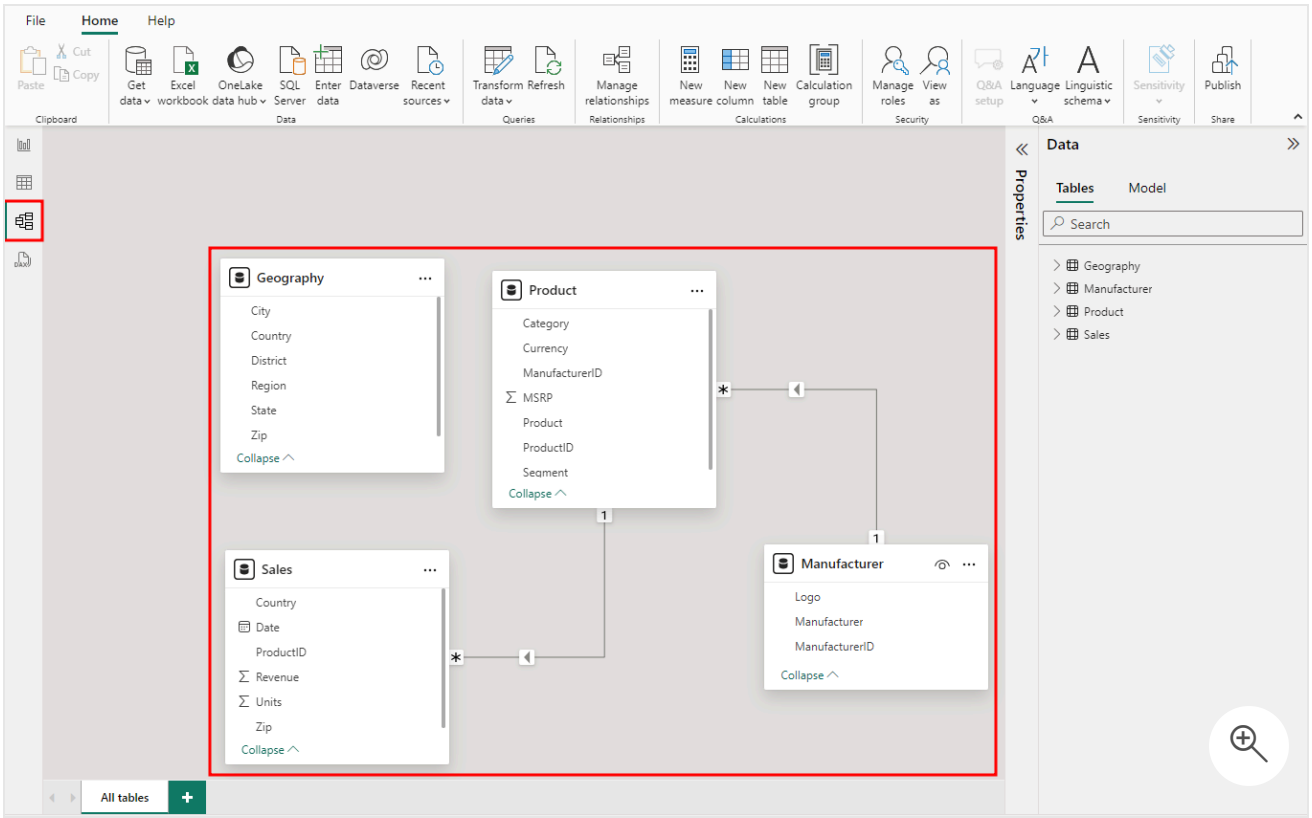
Power BI supports multiple types of relationships:

- 1 to many
- 1 to 1
- Many to many

6. For this exercise, use the 1 to many type of relationship, which is the most common type of relationship.

   This means one of the tables involved in the relationship should have a unique set of values. You create other relationships later in the Module.

7. Drag, resize, and move the tables to appear like those shown in the following screenshot.



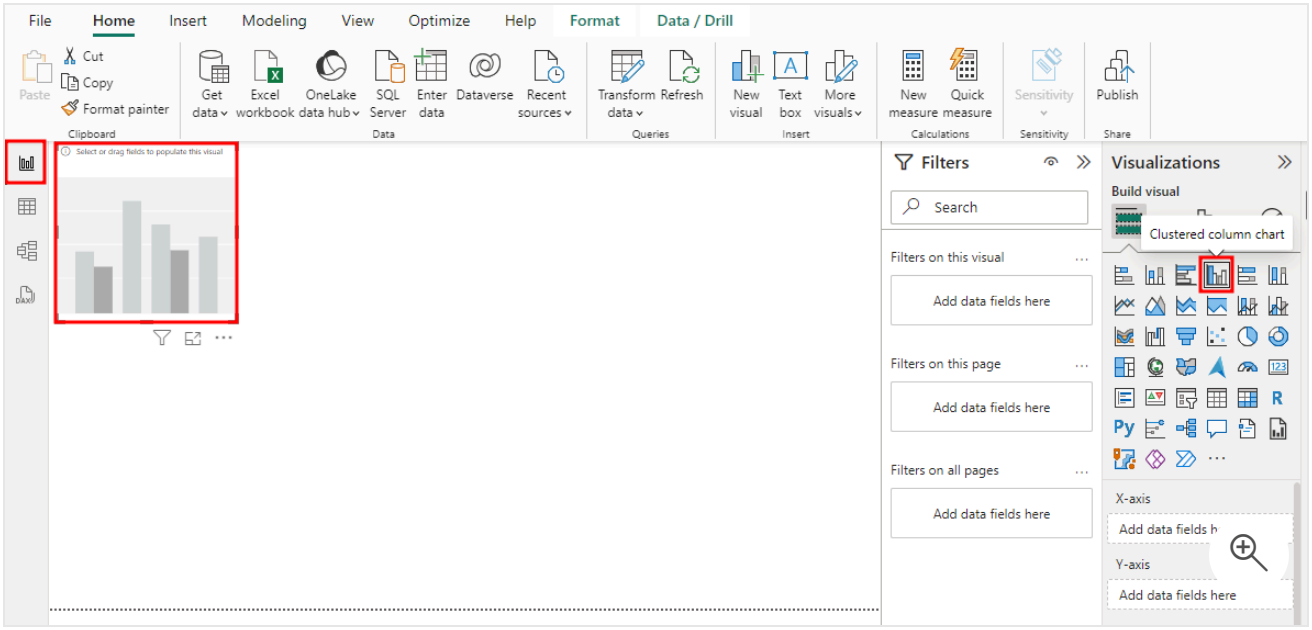
> **Note**

Tables might not look the same as shown in this screenshot. You can zoom in and out of the relationship models by dragging the zoom slider in the bottom right corner of the window. Also, if you want to make sure you can see all the tables, use the **Fit to Screen icon**. You can resize the tables by selecting the borders of the tables and dragging them.

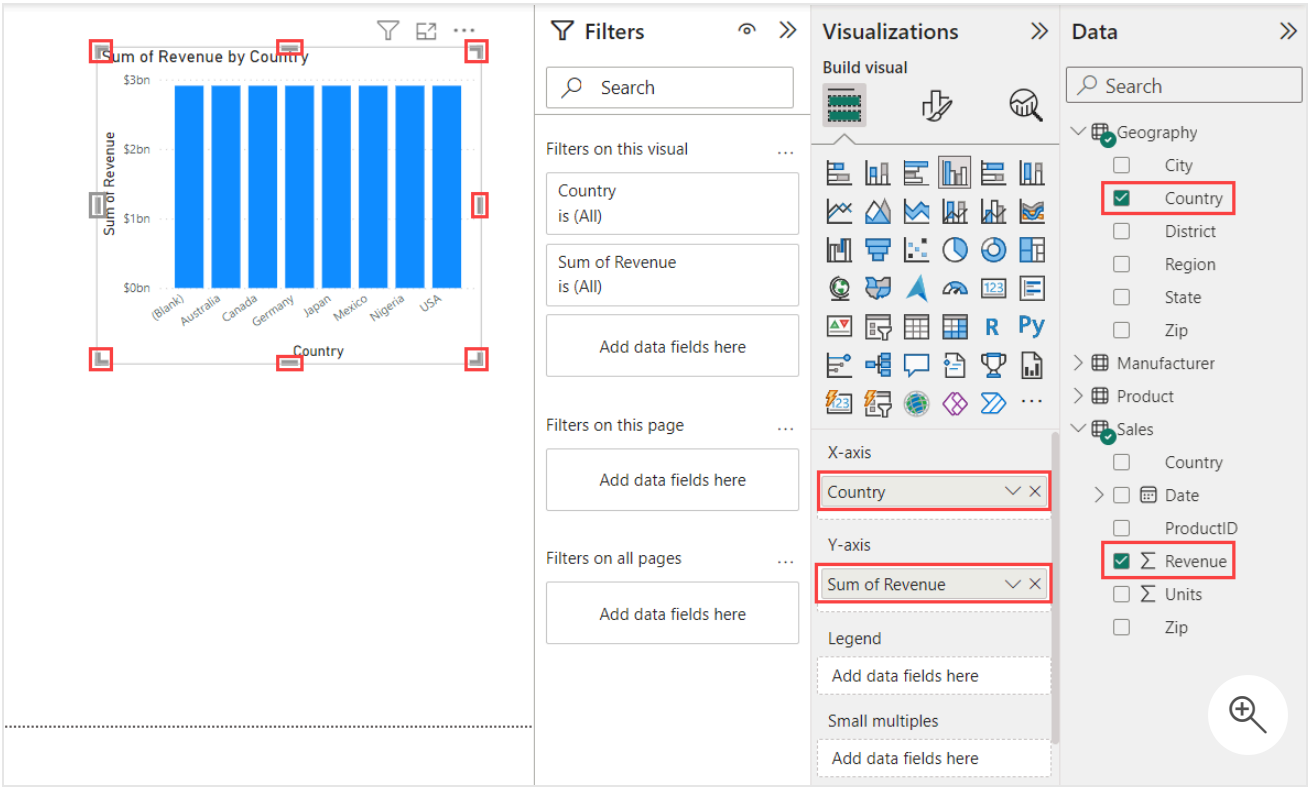
Section 2: Data exploration

Now that you loaded the data, analyze the sales by country. Make sure that you're currently viewing the report you created and titled *MyFirstPowerBIModel* in the previous Module.

1. Select the **Report view** icon from the left navigation menu.
2. Select the **Clustered column chart** visual from the **Visualizations** pane.



3. From the **Data** pane to the right of the screen, expand the **Geography** field.
4. Then, select the **checkbox** next to the **Country** field. The Country field is placed in the **X-axis** box in the **Visualizations** pane.
5. Still in the **Data** pane, expand the **Sales** table.
6. Select the **checkbox** next to the **Revenue** field. The Revenue field is placed in the **Y-axis** box in the **Visualizations** pane.
7. **Resize** the visual as needed by dragging the anchor points around the edges of the visual.



> **Note**
>
> The Sum of Revenue of each country is the same. This is because there is currently no relationship between the tables used in the visual. In the next unit, you'll learn more about visualization and how to create missing relationships.

Next unit: Create missing relationships and use data visualizations

Continue >

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Create missing relationships and use data visualizations

20 minutes

Make sure that you're viewing the report titled *MyFirstPowerBIModel* from the previous unit. Now you can create new relationships that are missing in your report.

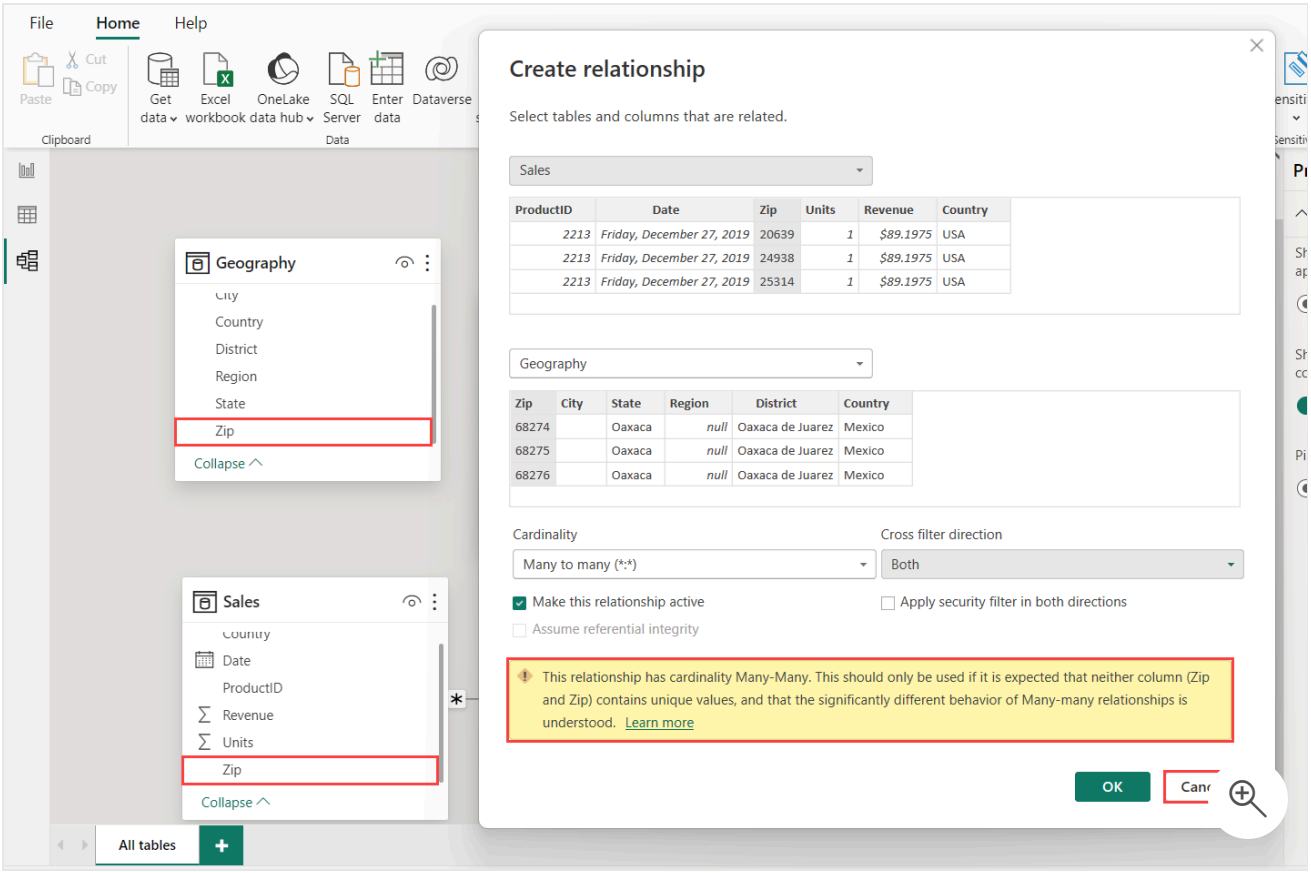
Section 1: Create missing relationships

Currently, there's no relationship between the **Sales** and **Geography** tables, so you need to make one:

1. Select the **Model** icon in the left navigation menu to go to the **Model view**.
2. The sales data is by Zip code, so you need to connect the **Zip** column from the **Sales** table with **Zip column** in the **Geography** table. Select, drag, and drop the **Zip** field in the **Sales** table and place on top of the **Zip** field in the Geography table.

   You see the **Create relationship** dialog box opens with a warning message at the bottom stating the relationship has a many-to-many cardinality. In this type of relationship, more than one record in one table is related to more than one record in another table.

   You see this warning because there aren't unique Zip values in the Geography table. Multiple countries could have the same Zip code, which triggers the warning. Let’s concatenate the Zip and Country columns to create a unique value field to fix the issue.
3. Select the **Cancel** button at the bottom of the **Create relationship** dialog box.



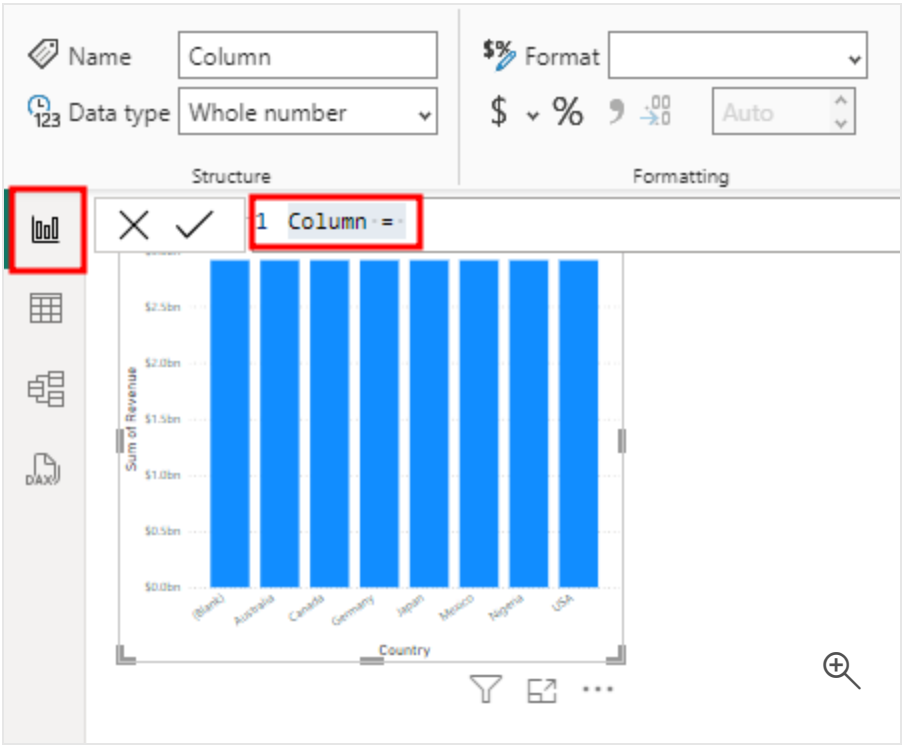
You need to create a new column in both the **Geography** table and the **Sales** table that combines the **Zip** and **Country** columns. Start by creating a new column in the **Sales** table.

4. Select the **Report** icon from the left navigation menu of the screen.

5. Go to the **Report view**.

6. In the **Data** pane, hover over the **Sales** table name, then select the ellipses (...) to the right of the table name.

7. Choose **New Column** from the options menu. Then, a formula bar appears to help create this new column.



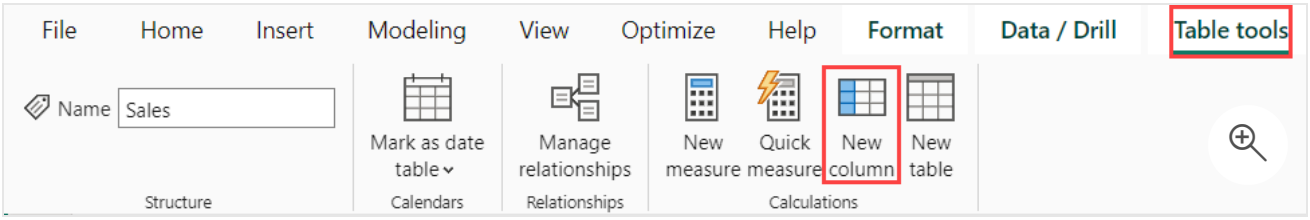
8. Now you can combine the Zip and Country columns into a new column called **ZipCountry**. To create this column called ZipCountry, type the following calculation in the formula bar:

```
ZipCountry = Sales[Zip] & “,” & Sales[Country]
```

9. Once the formula is in the formula bar, press **Enter** on your keyboard or select the **checkmark** to the left side of the formula bar.

> **Important**
>
> If you get an error creating a new column, make sure your Zip column is the Text Data Type.
>
> You'll see IntelliSense appears to guide you to choose the correct column. The language you used to create this new column is called Data Analysis Expression (DAX). You're connecting columns (Zip and Country) in each row by using the "&" symbol. The icon with an (fx), near the new column ZipCountry, indicates that you have a column containing an expression, also referred to as a calculated column.

10. An alternative way to add a new column is to select the table from the **Data** pane, then select the **Table Tools** or **Modeling** tab, and then choose **New Column** from the menu.



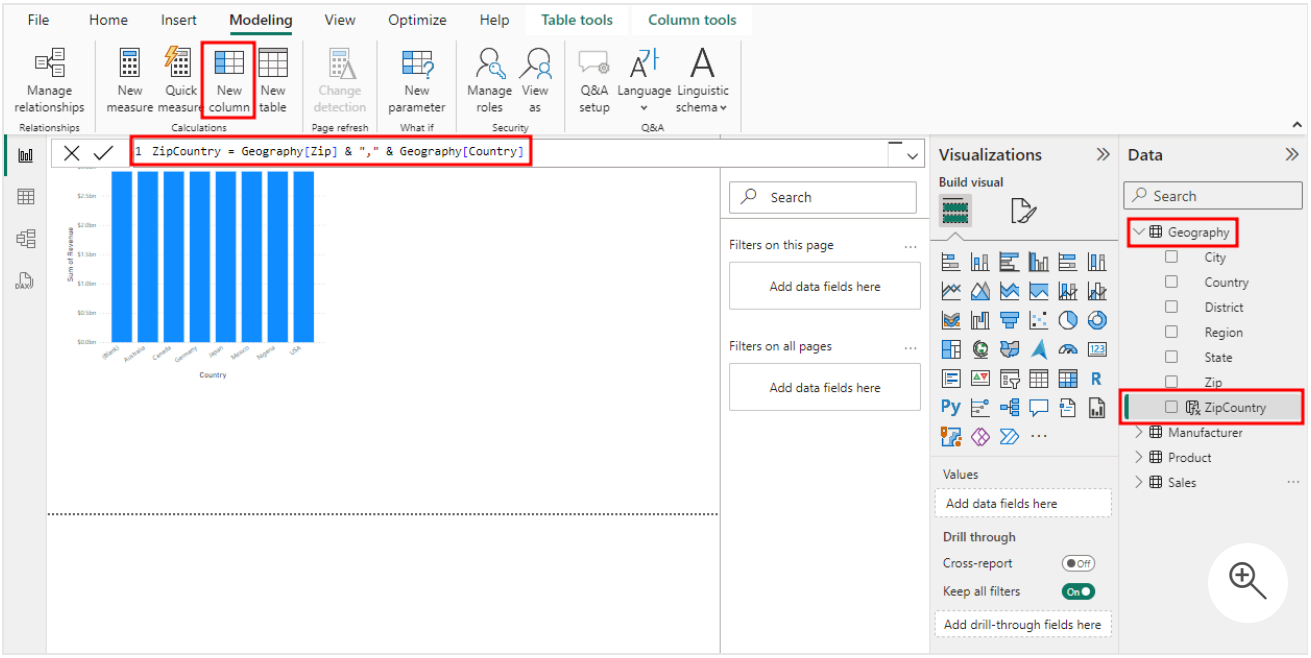
11. Use the alternative way to create columns mentioned in the previous step. To create a **ZipCountry** column in the **Geography** table, start from the **Data** pane.

12. Select the **Geography** table.

13. Then from the ribbon, choose **Modeling**, and then select **New Column**.

14. A formula bar appears. Enter the following DAX expression in the formula bar:

```
ZipCountry = Geography[Zip] & “,” & Geography[Country]
```



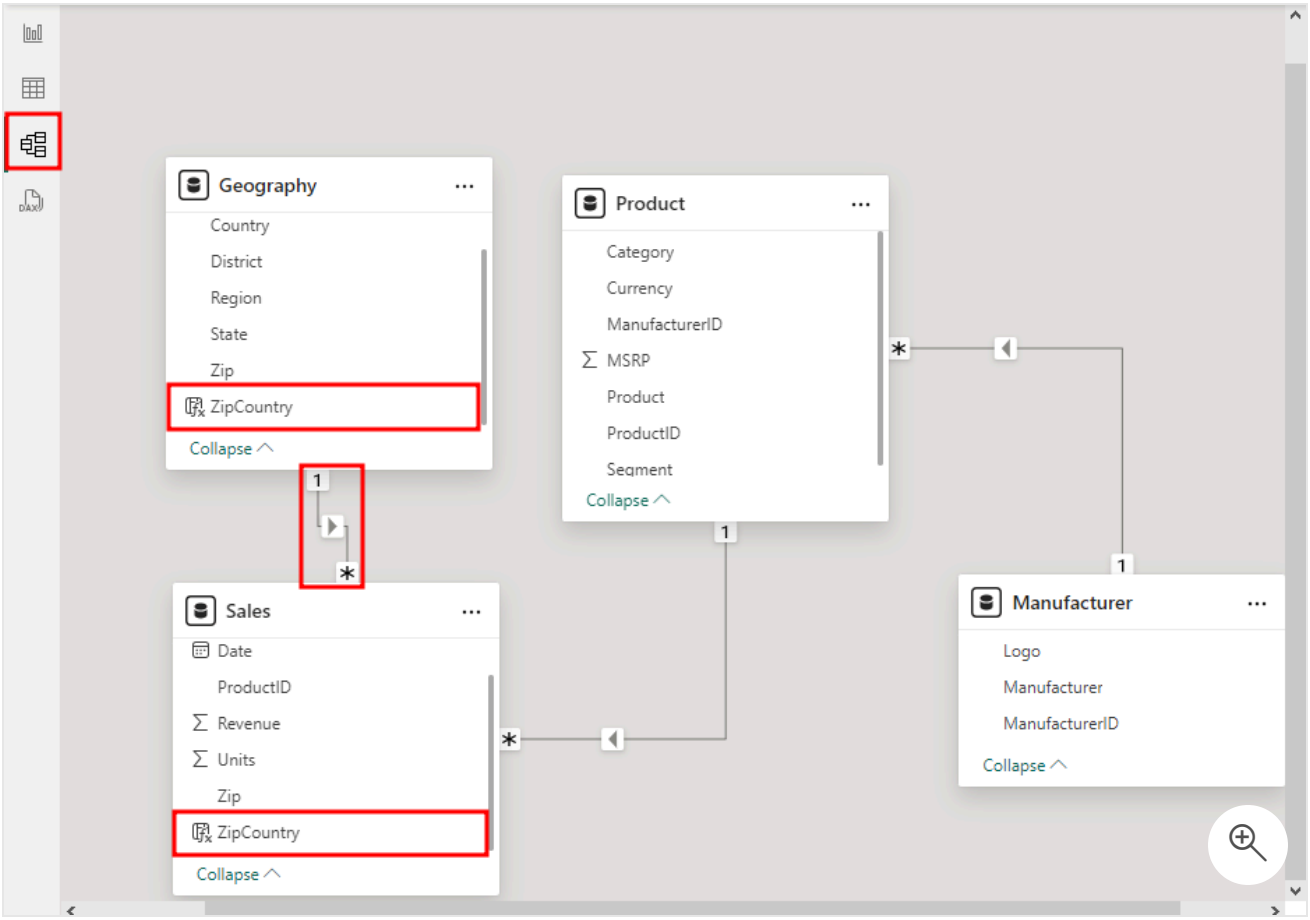
You see a new column, **ZipCountry**, in the **Geography** table. The final step is to set up the relationship between the two tables using the newly created **ZipCountry** columns in each of these tables.

15. Select the **Model** icon in the left navigation menu.

16. Go back to the **Model view**.

17. Drag and drop the **ZipCountry** field from the **Sales** table and place on top of the **ZipCountry** field in the **Geography** table, then select **Save** in the **Create relationship** window.

> **Note**
>
> If you don't see the ZipCountry column, select **Collapse** twice at the bottom of the **Geography** and **Sales** tables. You may need to scroll down on the list of columns in each table.



Now you successfully created a relationship. The number **1** next to **Geography** indicates it's on the one-side of the relationship and the * next to **Sales** means it's on the many-side of the relationship.

18. Select the **Report** icon in the left navigation menu.

19. Go back to the **Report view**.

    When you look at the clustered column chart you created earlier, it shows different sales for each country or region. The USA has the most sales, followed by Australia, then Japan.

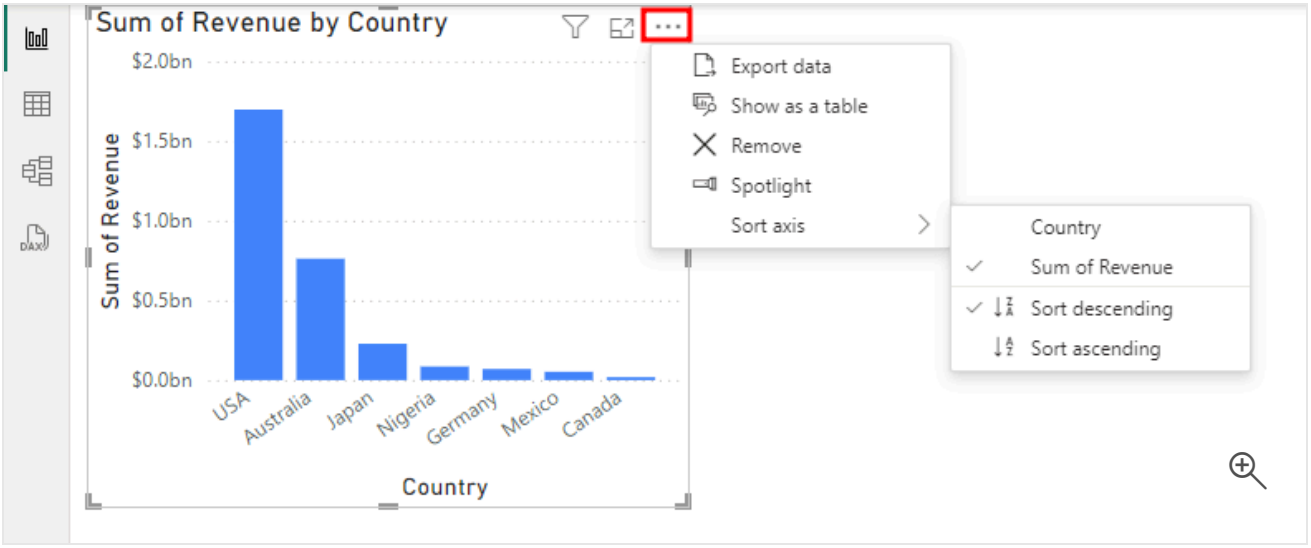
> **Note**
>
> If your clustered column chart is missing countries then you might have made an error in module 1.

By default, the chart is sorted by **Revenue**. Next, you begin to use data visualization for the data model you designed.

Section 2: Data visualization

1. Select the **Clustered column chart** visual.

2. Select the **ellipses (...)** located near the top right corner of the visual (or, the ellipses might be at the bottom of the chart). You can Sort axis by Country. Don't make any changes for now.

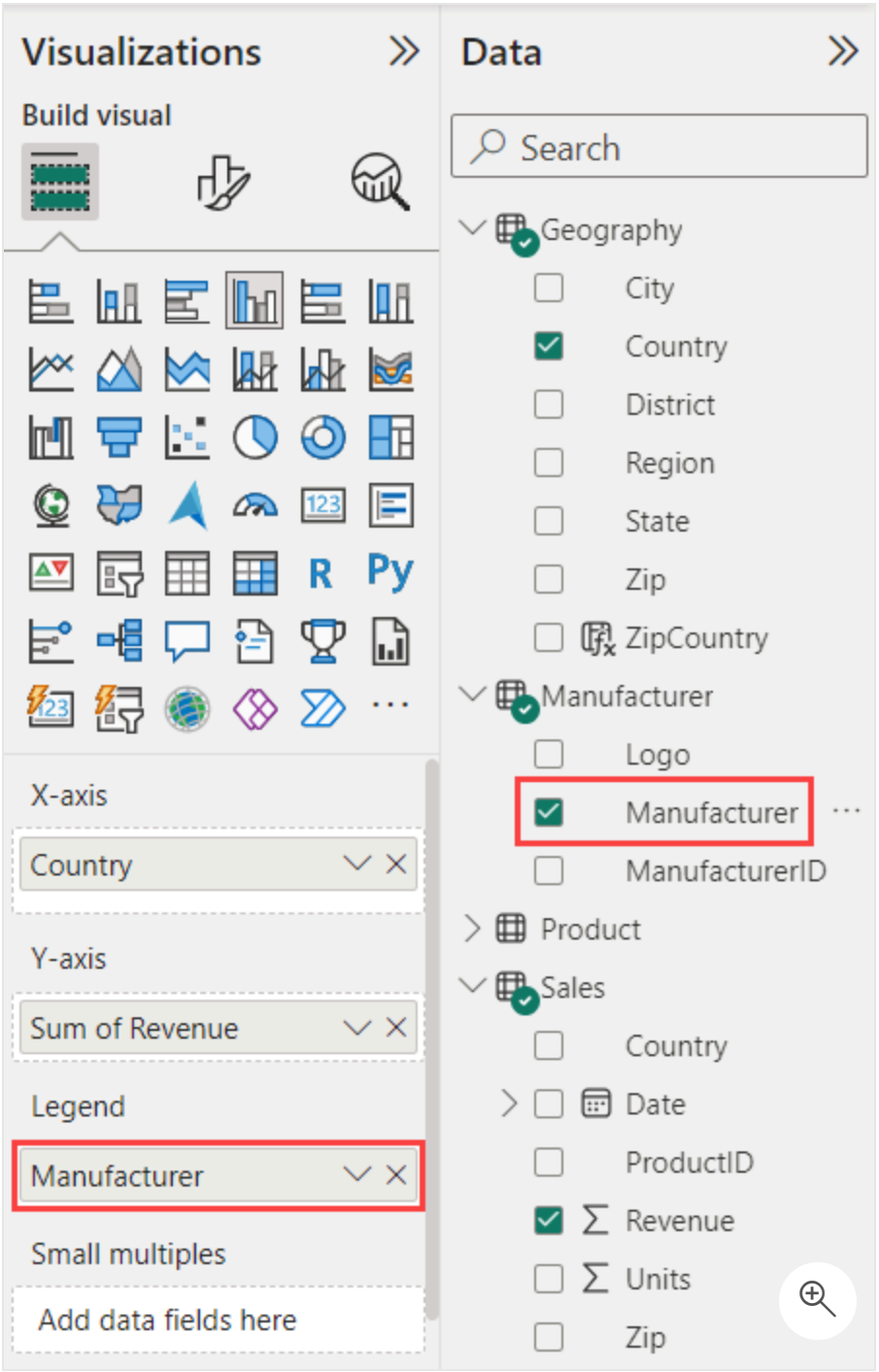


3. Select the background of the report to close out the options menu.

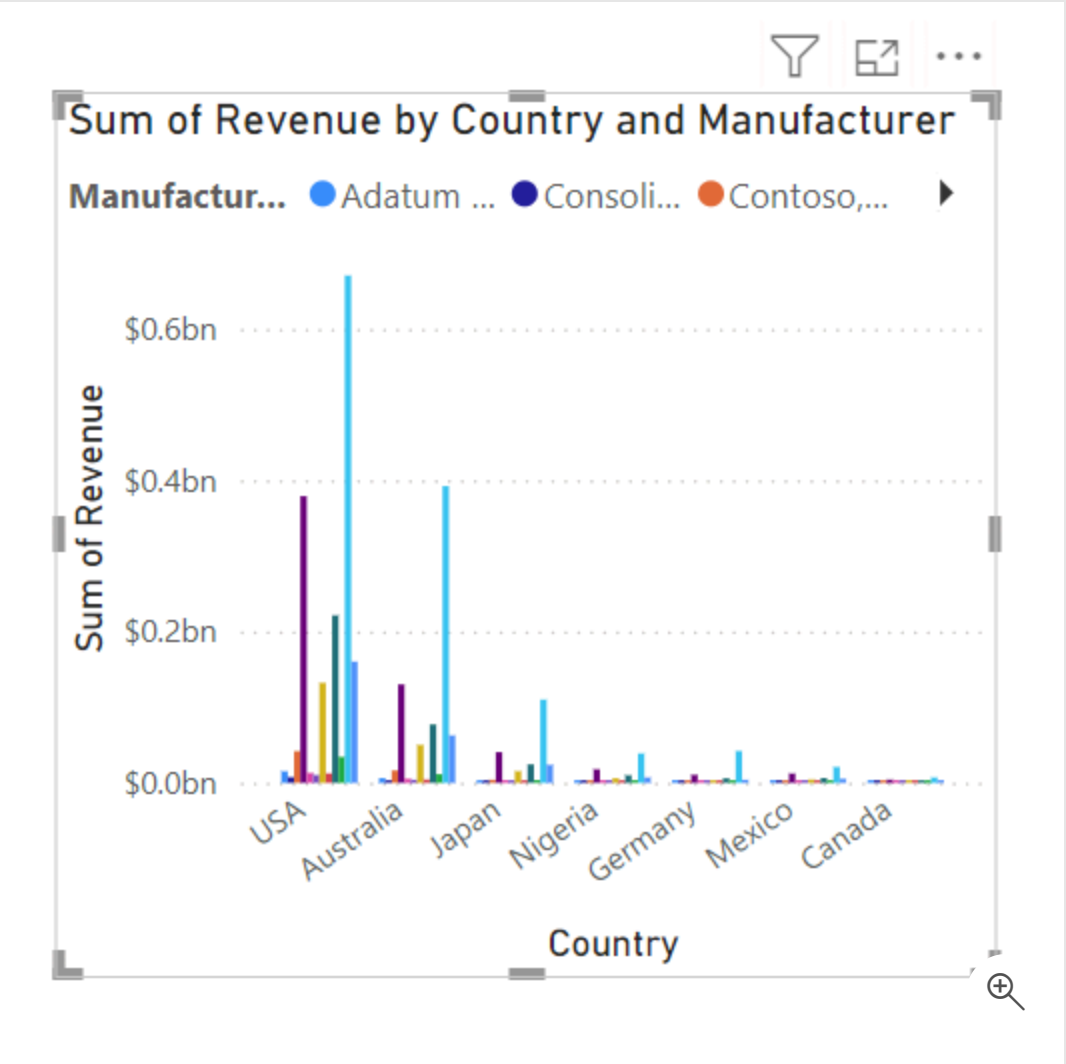
4. Select the **Clustered column chart** again.

5. Then, from the **Data** pane, expand the **Manufacturer** table.

6. Drag and drop the **Manufacturer** column to the **Legend** section of the **Visualizations** pane.

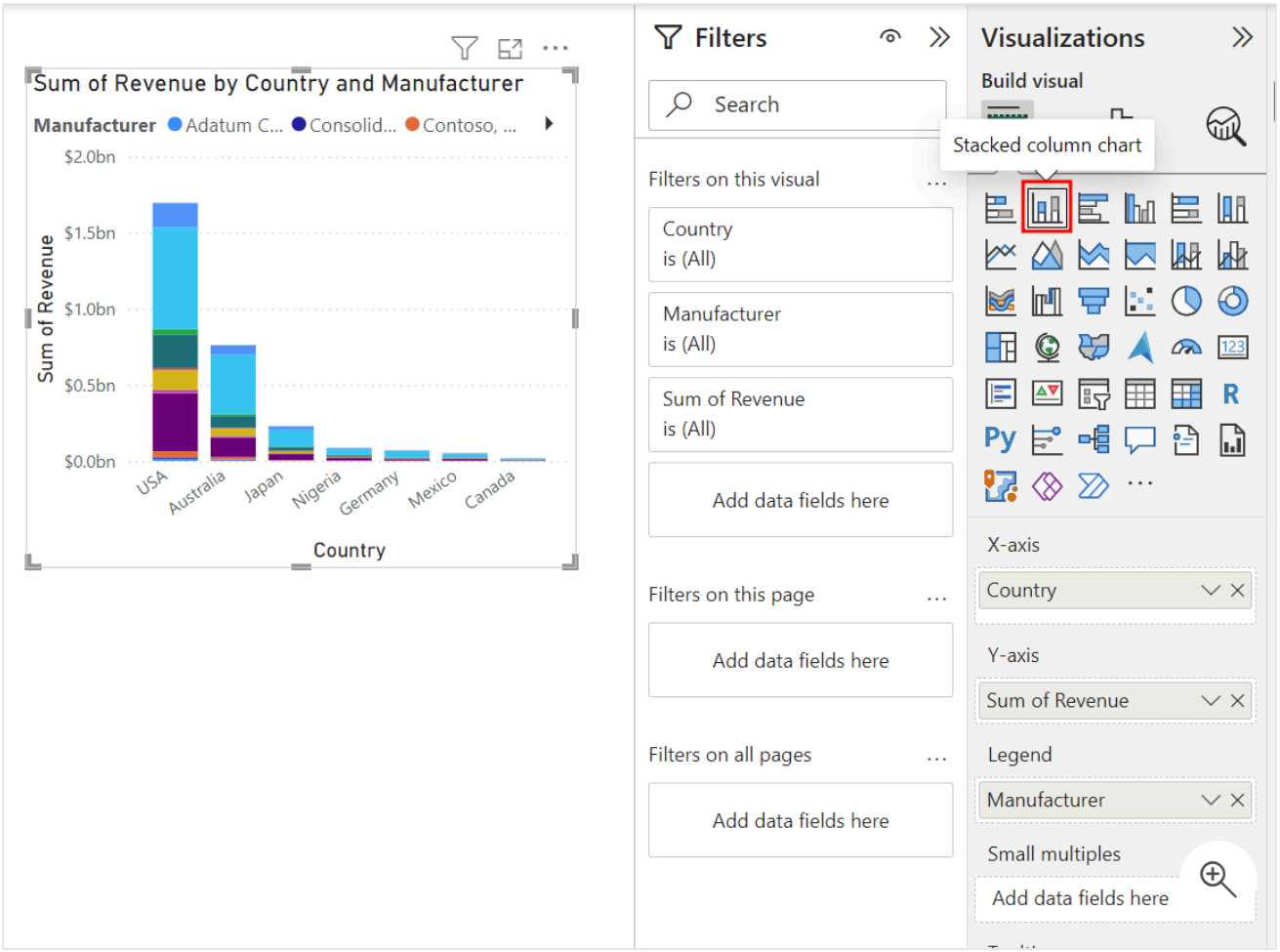


7. **Resize** the visual as needed in the canvas. Now you can see the top manufacturers by country.



Now you can try different visuals to see which chart represents the data the best.

8. With the **Clustered column chart** visual selected in the design space, select and change the chart to a **Stacked column chart** by choosing that visual type in the **Visualizations** pane.



9. Select the **ellipses (...)** in the corner of the visual to sort the **legend** in **descending**.

10. If the Filters pane isn't yet expanded, select the **two less than symbols (<<)** at the top right corner of the collapsed pane to expand it.

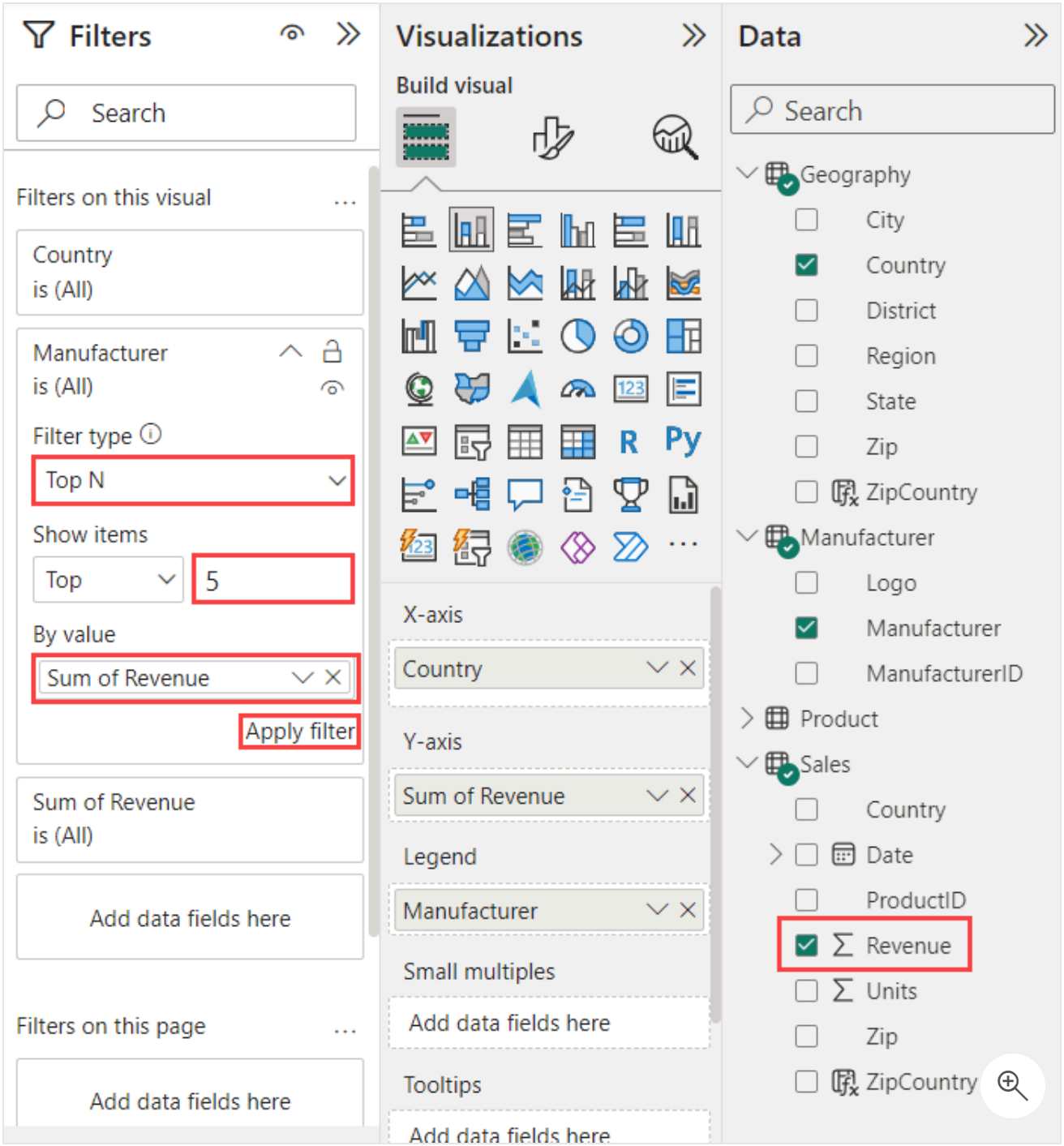
11. In the **Filters** pane, expand **Manufacturer** under the **Filters on this visual** section. A drop-down arrow will appear for you to expand when you hover your mouse over Manufacturer.

12. Using the **Filter type** dropdown menu, select **Top N**.

13. Enter **5** in the text box next to **Top**.

14. From the **Sales** table, drag and drop the **Revenue** field into the **By value** section.

15. Select **Apply filter** at the bottom of the **Manufacturer** section in the **Filters** pane to turn on the filter.

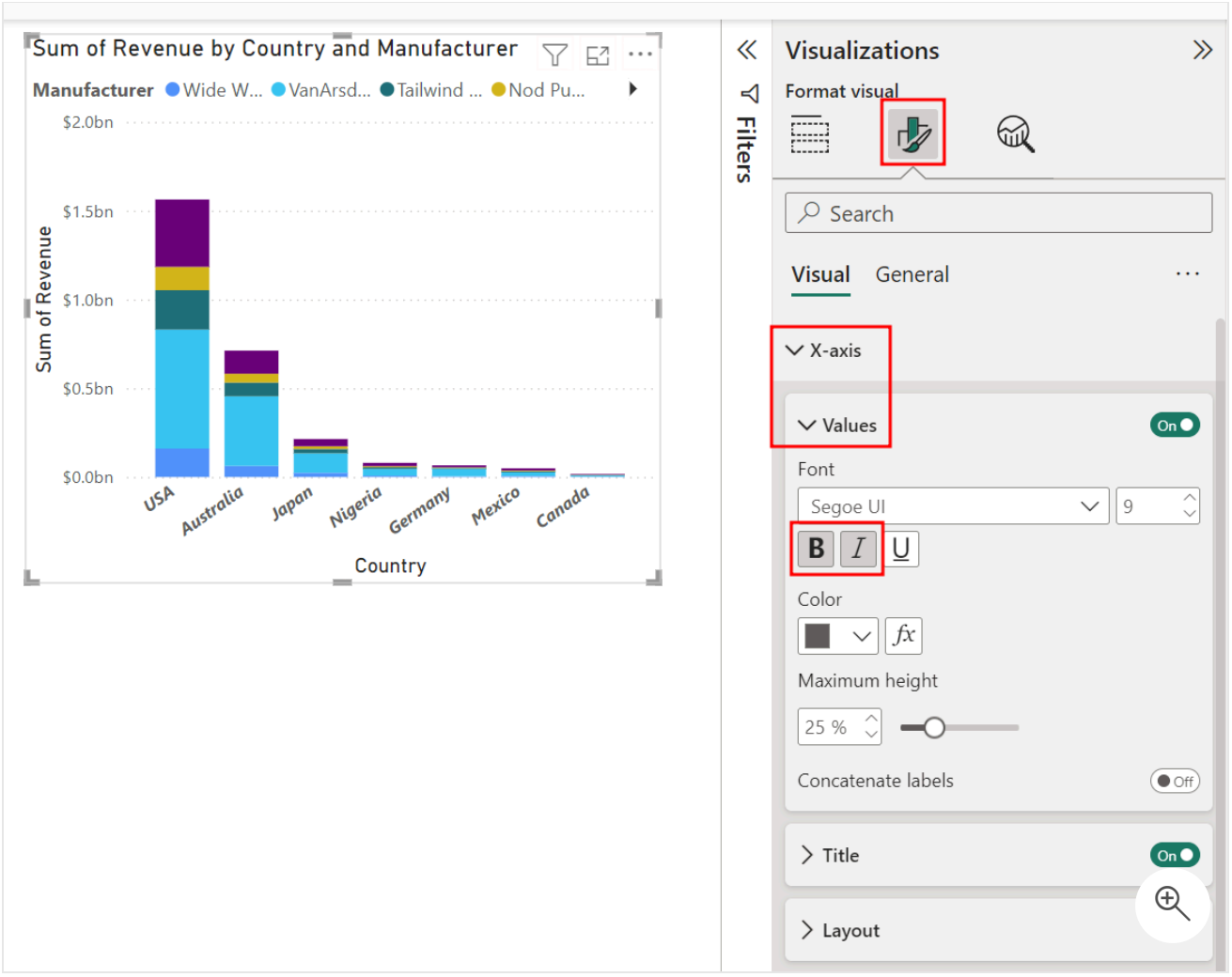


Notice the visual is filtered to display the top five manufacturers by Sum of Revenue. The manufacturer VanArsdel has a higher percentage of sales in Australia compared to other countries or regions.

16. If you want, you can now collapse the **Filters** pane until it's needed again. Now add total labels to the stacked visuals. You start with font formatting options.

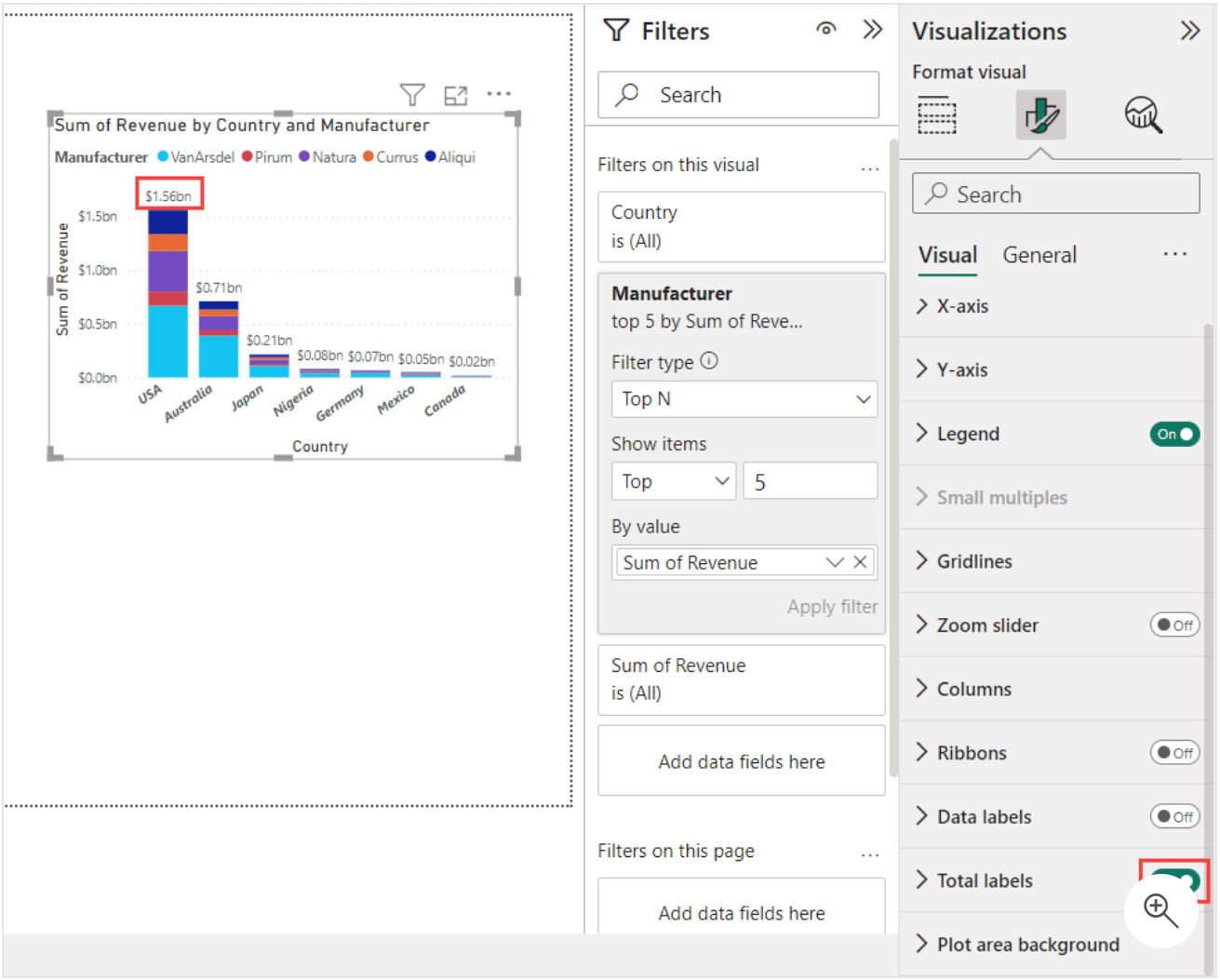
17. Select the **Format visual** (the paintbrush icon) tab at the top of the **Visualizations** pane, and then expand the **X -axis** section.

18. Select the **Bold** and **Italic** options.



19. Go to the **Total labels** section in the **Visualizations** pane.

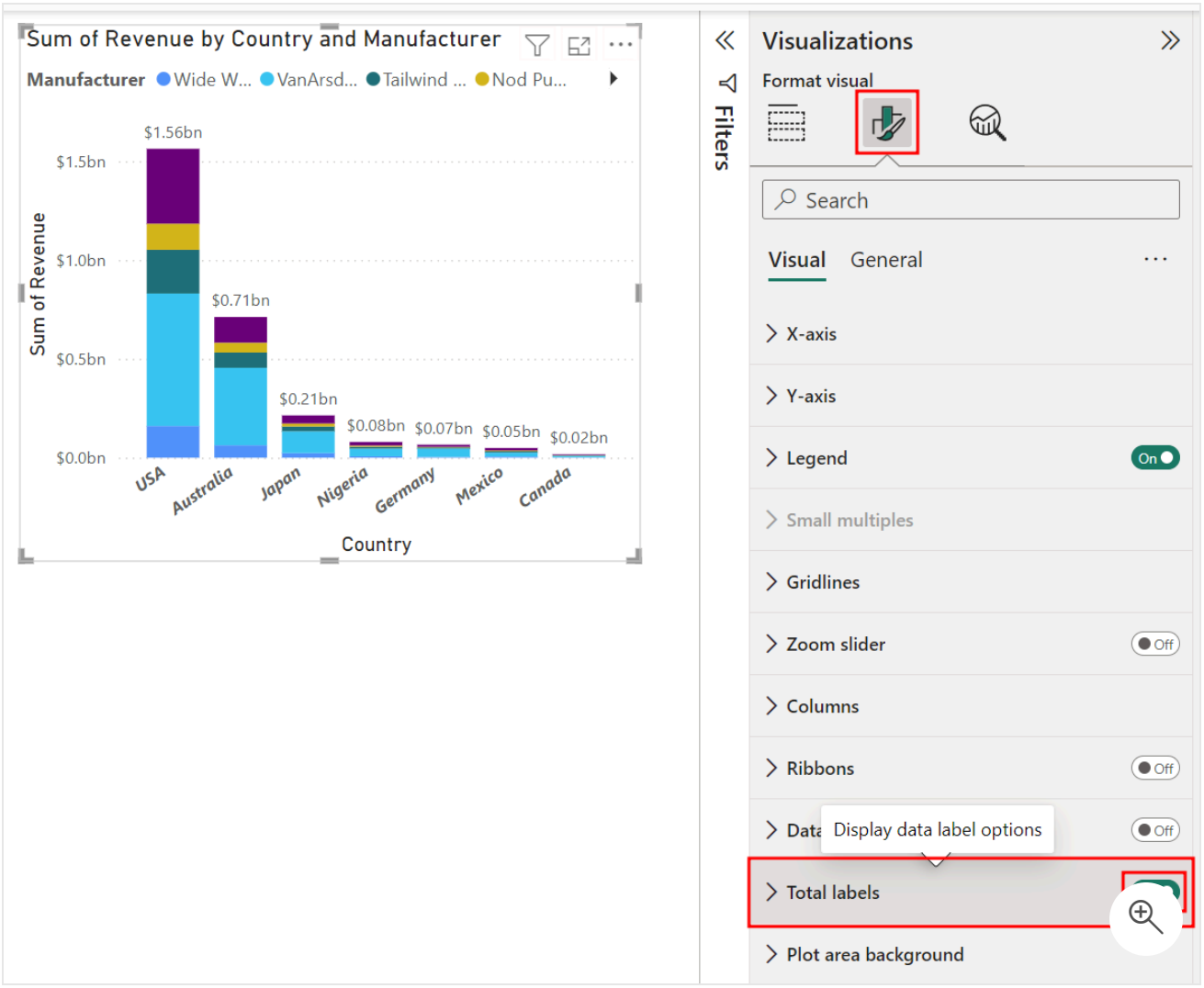
20. Switch the setting to **On**.



Notice the total labels now appearing above each of the columns in the Stacked column chart. Any of these properties can easily be changed or turned on/off whenever you like.

21. Now let's remove the total labels. Select the **On/Off** toggle setting next to **Total labels** to switch the setting to **Off** again.

    Switch the setting to **Off**.



Now that you learned various visualization techniques, in the next unit you'll learn how to group elements so that you don't need to add filters to each visual.

Next unit: Group and bin data

Continue >

100 XP

Group and bin data

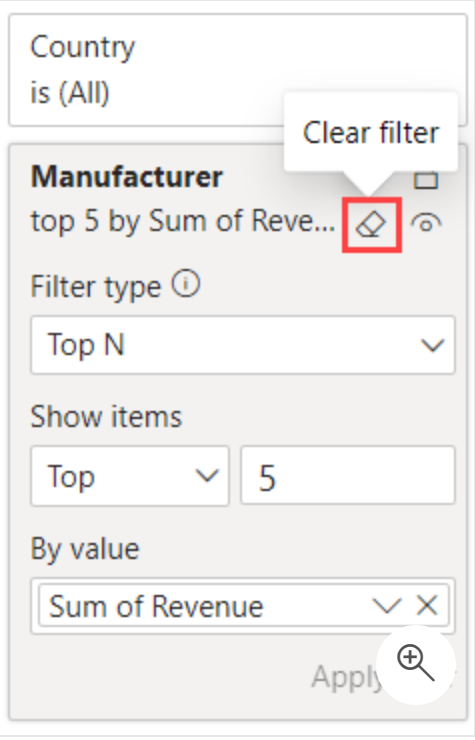
20 minutes

In this unit, you learn the process of grouping data to ensure filters can be applied to multiple elements.

As you continue working as the CMO for VanArsdel, Ltd., you want to know who are the top five competitors by revenue. For this task, you can group them you don't have to add a filter to every visual. Before you do that, you must remove the Top 5 visual level filter you added earlier.

Section 1: Create Groups

1. Select the **Stacked column chart** in the canvas area.
2. Hover over and select the **Clear filter** (eraser) icon next to the Manufacturer field in the **Filters** pane. You might need to expand the Filters pane if you previously collapsed it.



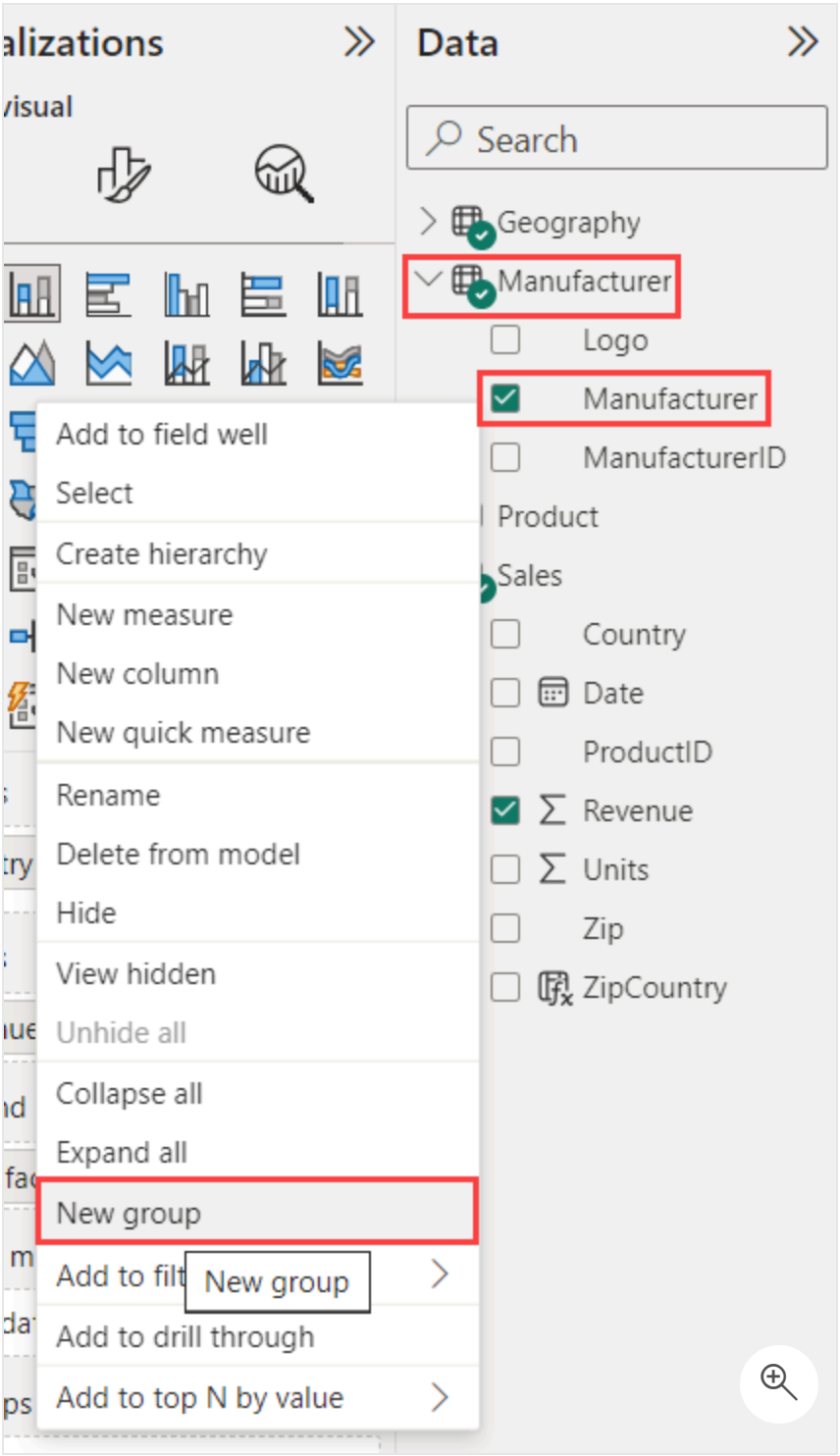
Note

You'll only see the eraser icon if you hover your mouse over the Manufacturer filter section.

3. From the **Data** pane, expand the **Manufacturer** table.
4. Right-click on the **Manufacturer** field.

> **Note**
>
> Do not select the checkbox.

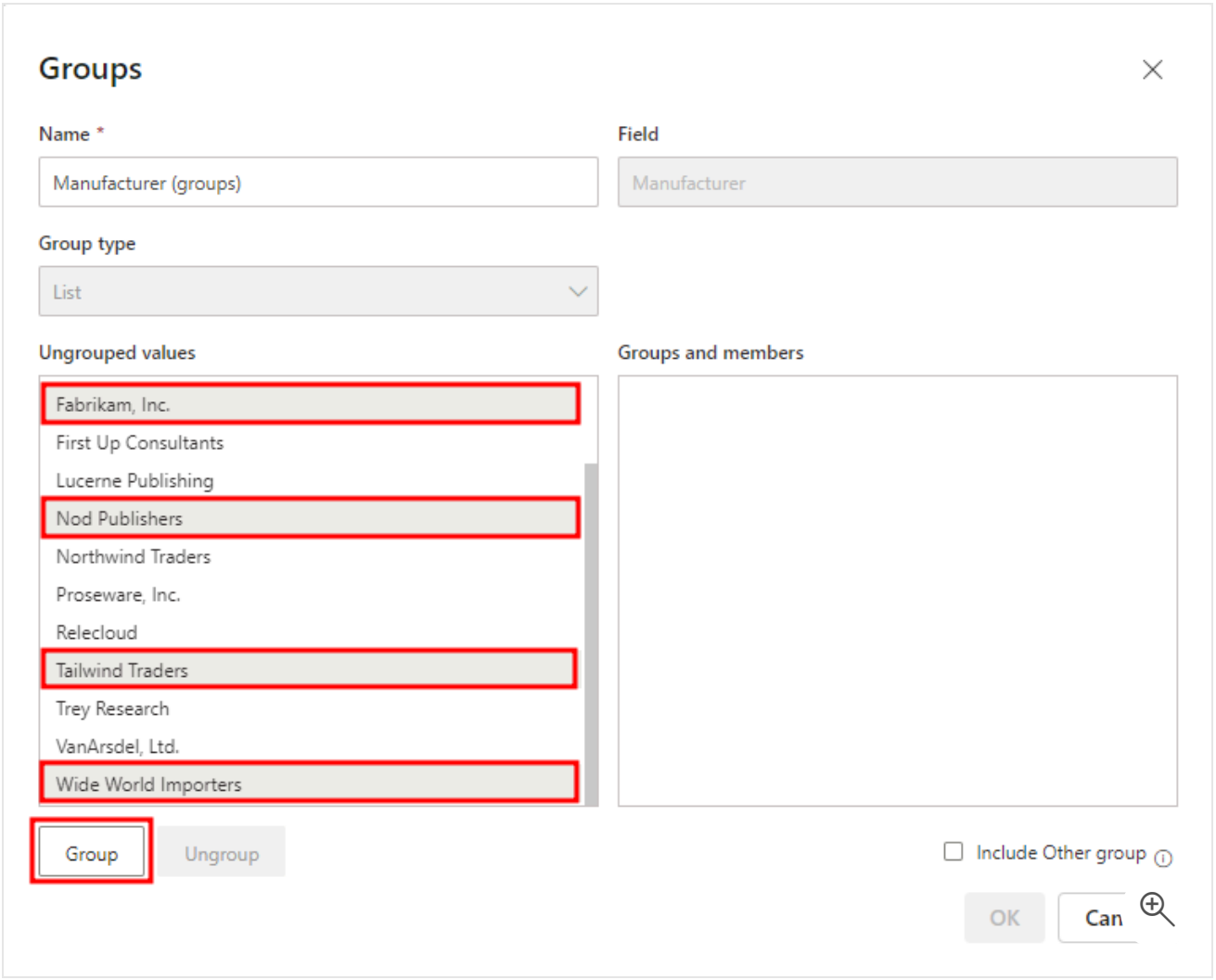
5. Select **New Group** from the options menu.



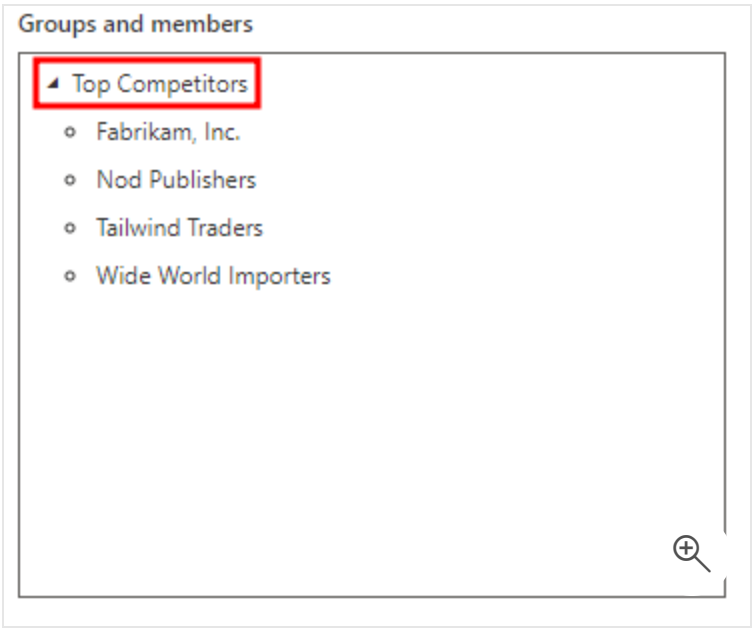
6. Go to the **Ungrouped values** section of the **Groups** dialog.

7. Use the CTRL key to multi-select: **Fabrikam, Inc.**, **Nod Publishers**, **Tailwind Traders**, and **Wide World Importers**.

8. Select the **Group** button. This adds a new group in the Groups and members section.



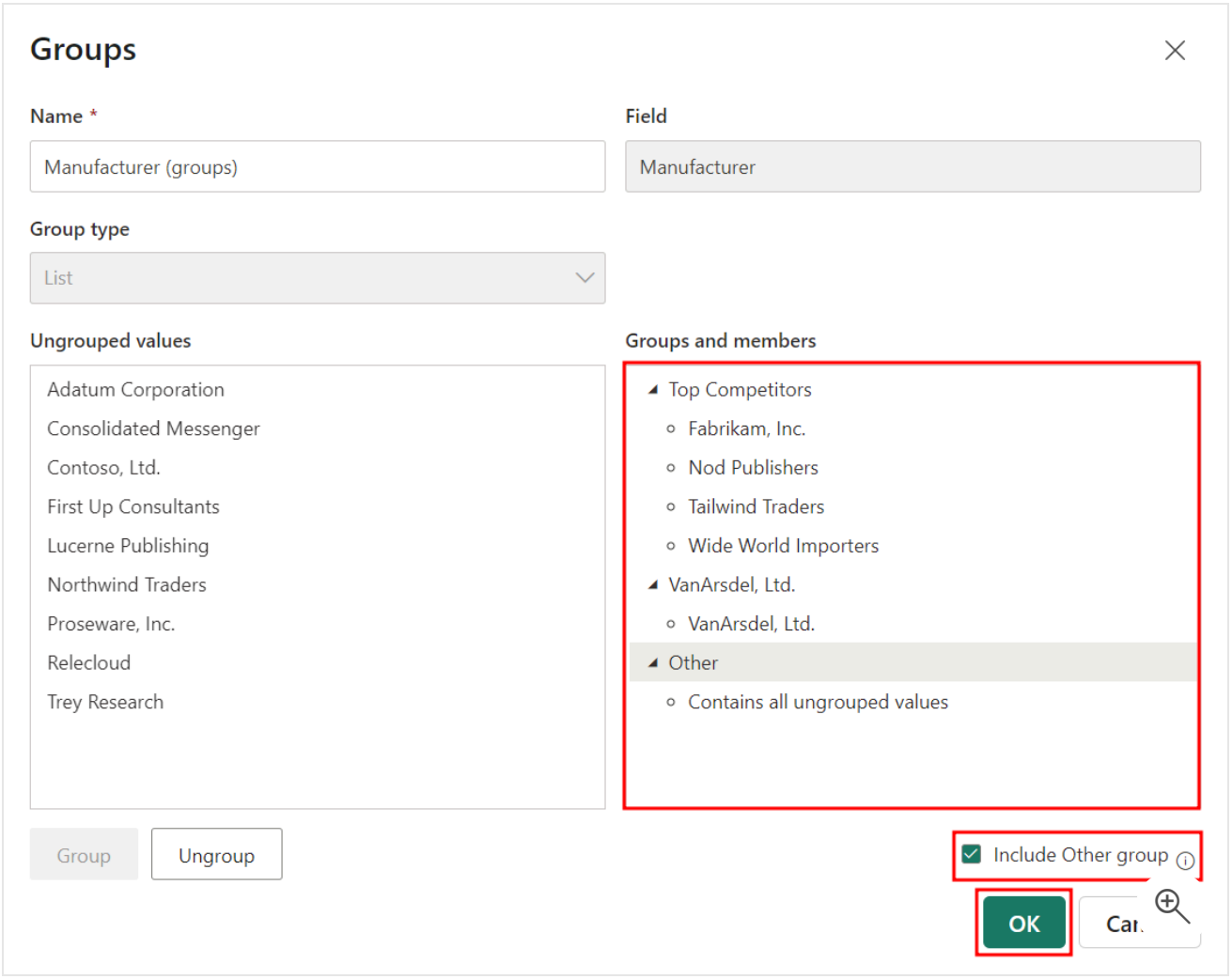
9. Double-click the newly created group and rename it **Top Competitors**.



10. Select **VanArsdel, Ltd.** from the **Ungrouped values** section and select the **Group** button to create the **VanArsdel, Ltd.** group.

11. Select the checkbox **Include Other group**. This action creates an **Other** group that includes all the other manufacturers.

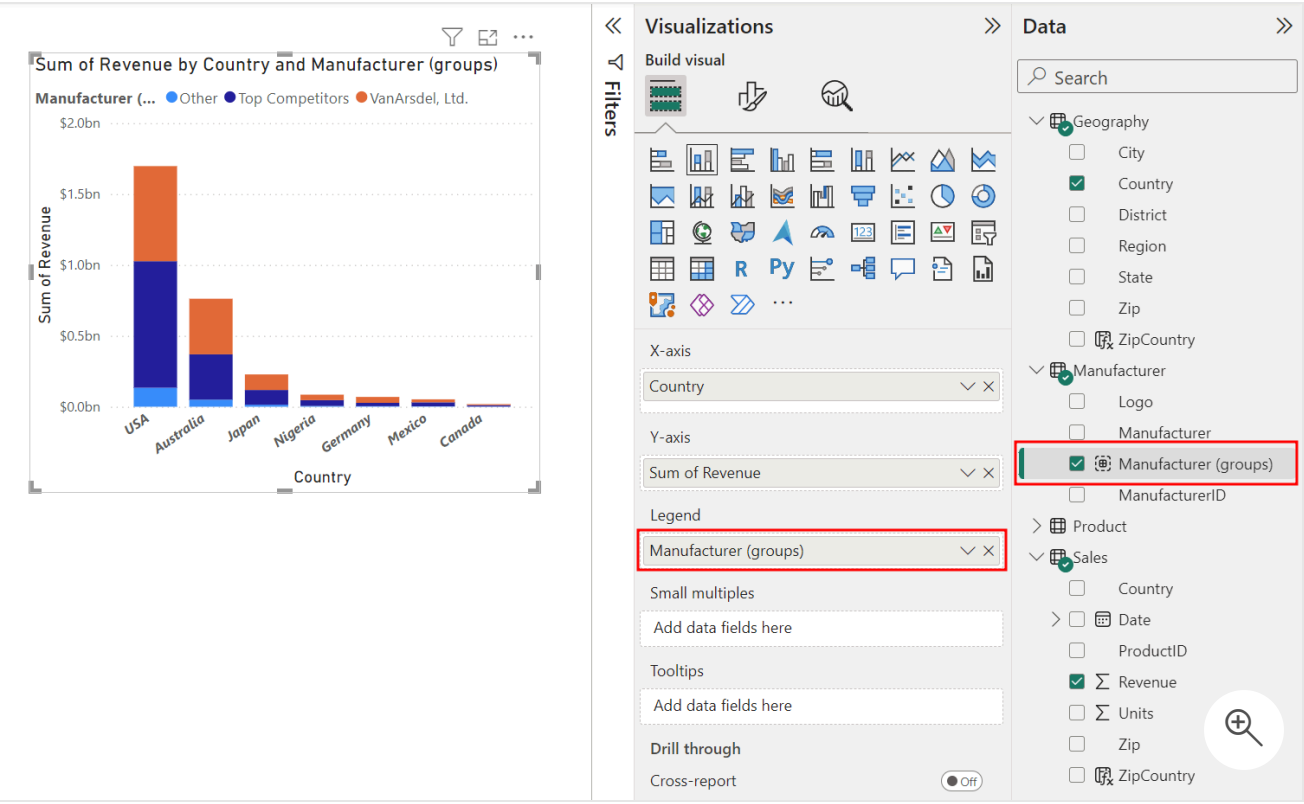
12. Select **OK** to close the **Groups** dialog box.



13. Go back to the **Build visual** tab of the **Visualizations** pane.

14. With the **Stacked column chart** selected in the canvas, select the **X** next to **Manufacturer** in the **Legend** section of the **Visualizations** pane. This action removes the Manufacturer field from the Legend.

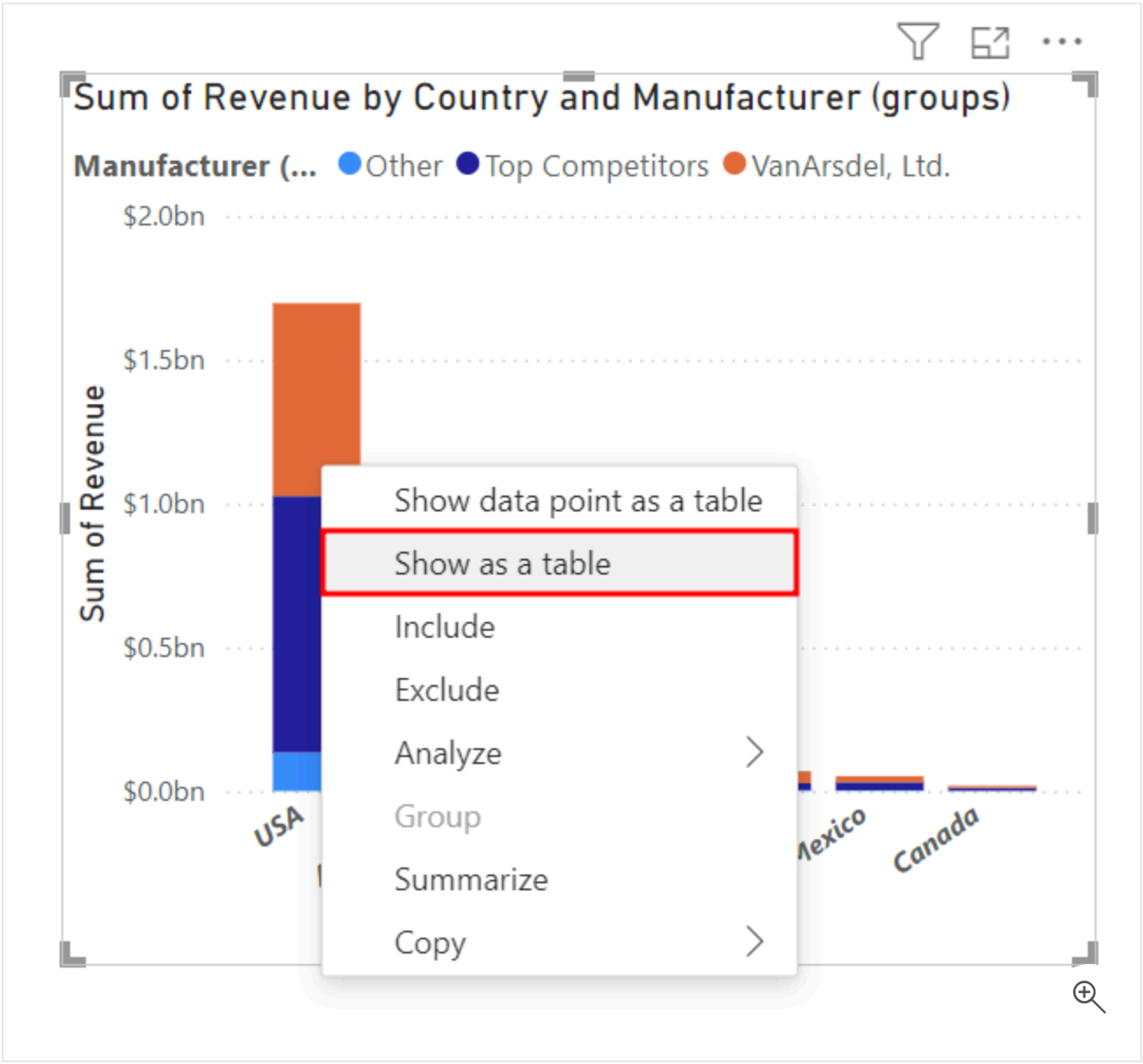
15. From the **Data** pane, drag and drop the newly created **Manufacturer (groups)** to the **Legend** section of the **Visualizations** pane. Now you can see that VanArsdel has nearly 50% share in Australia.



> **Note**
>
> It's ok if the colors used in your column chart are in a different order than what appears in the screenshot. You can change the Legend sort order if you want.

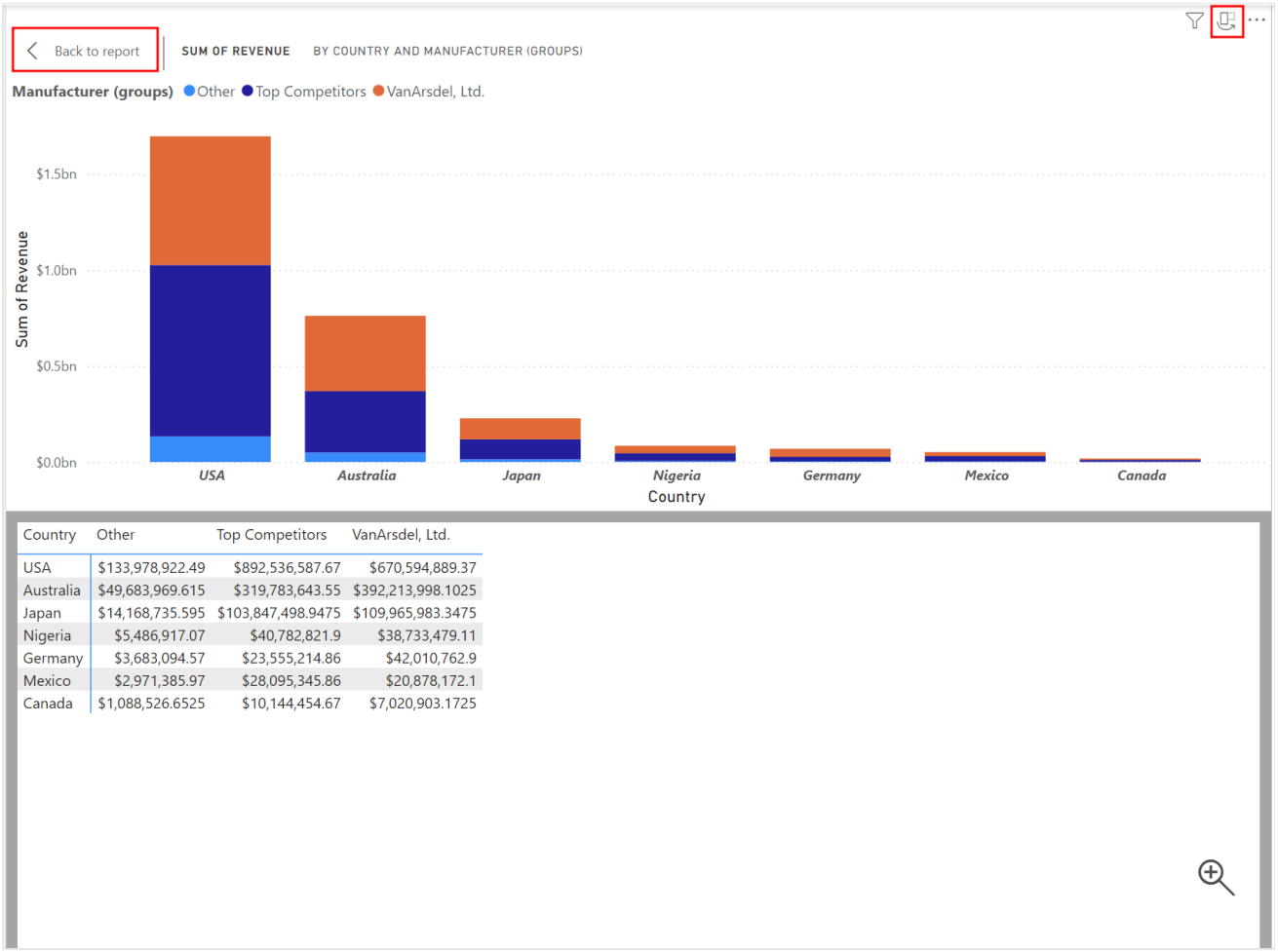
16. Hover over one of the columns in the **Stacked column chart** and right-click.

17. Select **Show as a table** from the menu. This action starts the **Focus** mode with the chart displayed on top and the data displayed below. You can see VanArsdel has a large percent of the Australian market.



18. Use the **Orientation** icon in the top right corner of the chart to switch to the **vertical layout**. In this layout, you see the chart in the left panel and the data in the right panel.

19. Go back to the **horizontal layout**, then select **Back to Report** to go back to the **Report** canvas.

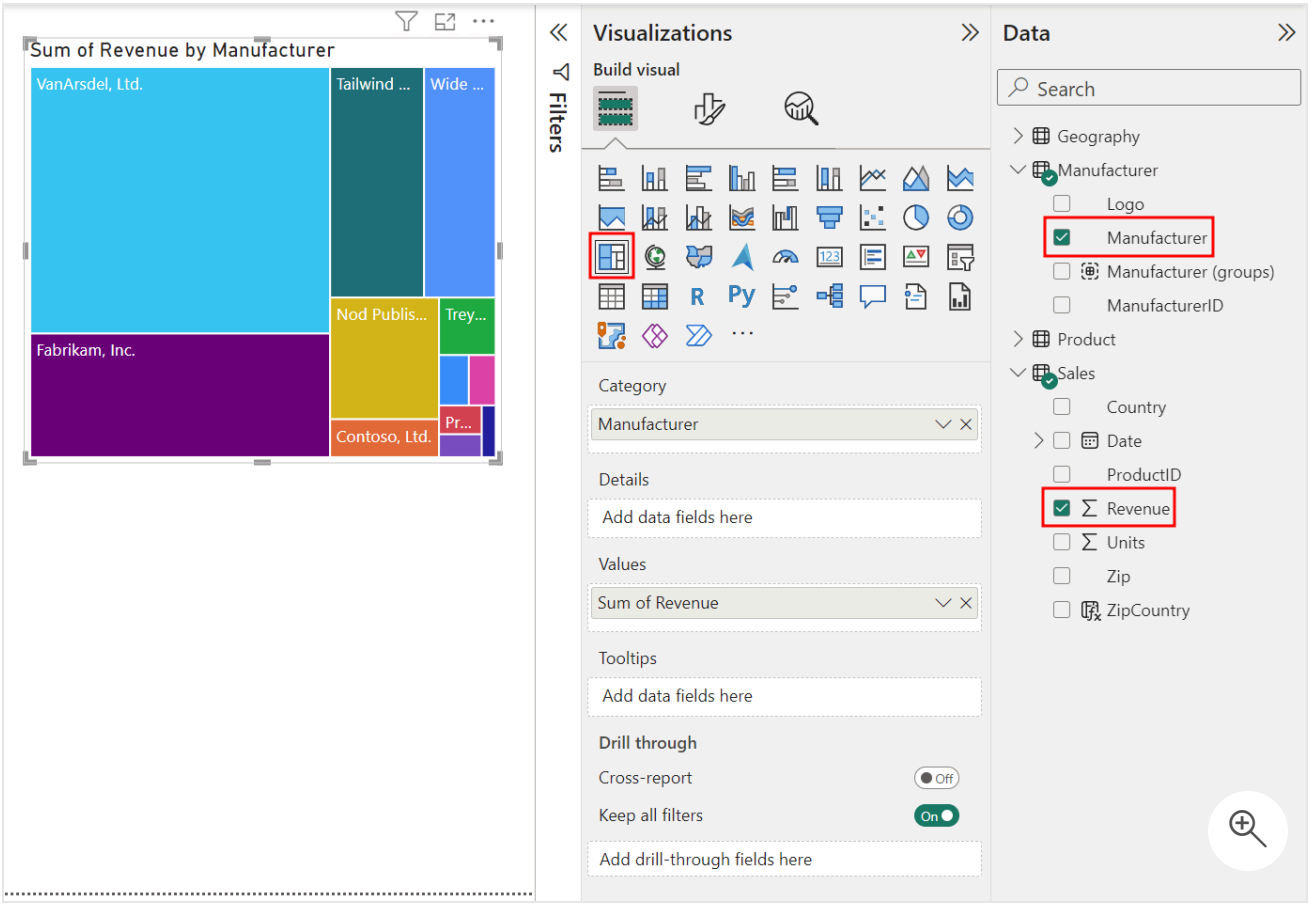


Country	Other	Top Competitors	VanArsdel, Ltd.
USA	$133,978,922.49	$892,536,587.67	$670,594,889.37
Australia	$49,683,969.615	$319,783,643.55	$392,213,998.1025
Japan	$14,168,735.595	$103,847,498.9475	$109,965,983.3475
Nigeria	$5,486,917.07	$40,782,821.9	$38,733,479.11
Germany	$3,683,094.57	$23,555,214.86	$42,010,762.9
Mexico	$2,971,385.97	$28,095,345.86	$20,878,172.1
Canada	$1,088,526.6525	$10,144,454.67	$7,020,903.1725

Note

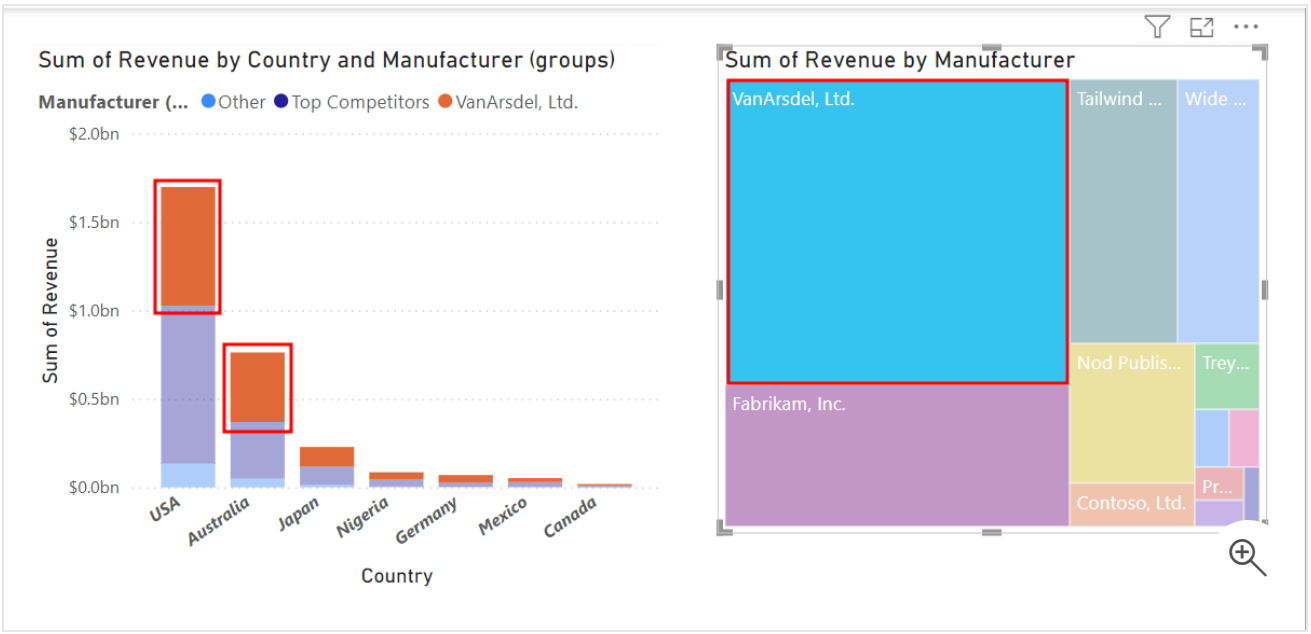
You can also right-click on a column in the chart and select **Show data point as a table** to see records for a specific data point.

13. Create a **Sum of Revenue by Manufacturer** visual. Select the white space in the canvas to deselect the Stacked column chart visual.
14. From the **Data** pane, select the checkbox next to the **Revenue** field in the **Sales** table.
15. From the **Data** pane, select the checkbox next to the **Manufacturer** field in the **Manufacturer** table.
16. From the **Visualizations** pane, select the **Treemap** visual. This action creates a **Sum of Revenue by Manufacturer Treemap** visual.



Next, you see how the Stacked column chart and Treemap visual interact with each other.

17. In the **Treemap** visual, select **VanArsdel, Ltd.** Now you see the **Stacked column chart** highlights only the values related to VanArsdel, Ltd. This confirms that VanArsdel, Ltd. has a large percentage of the Australian market.



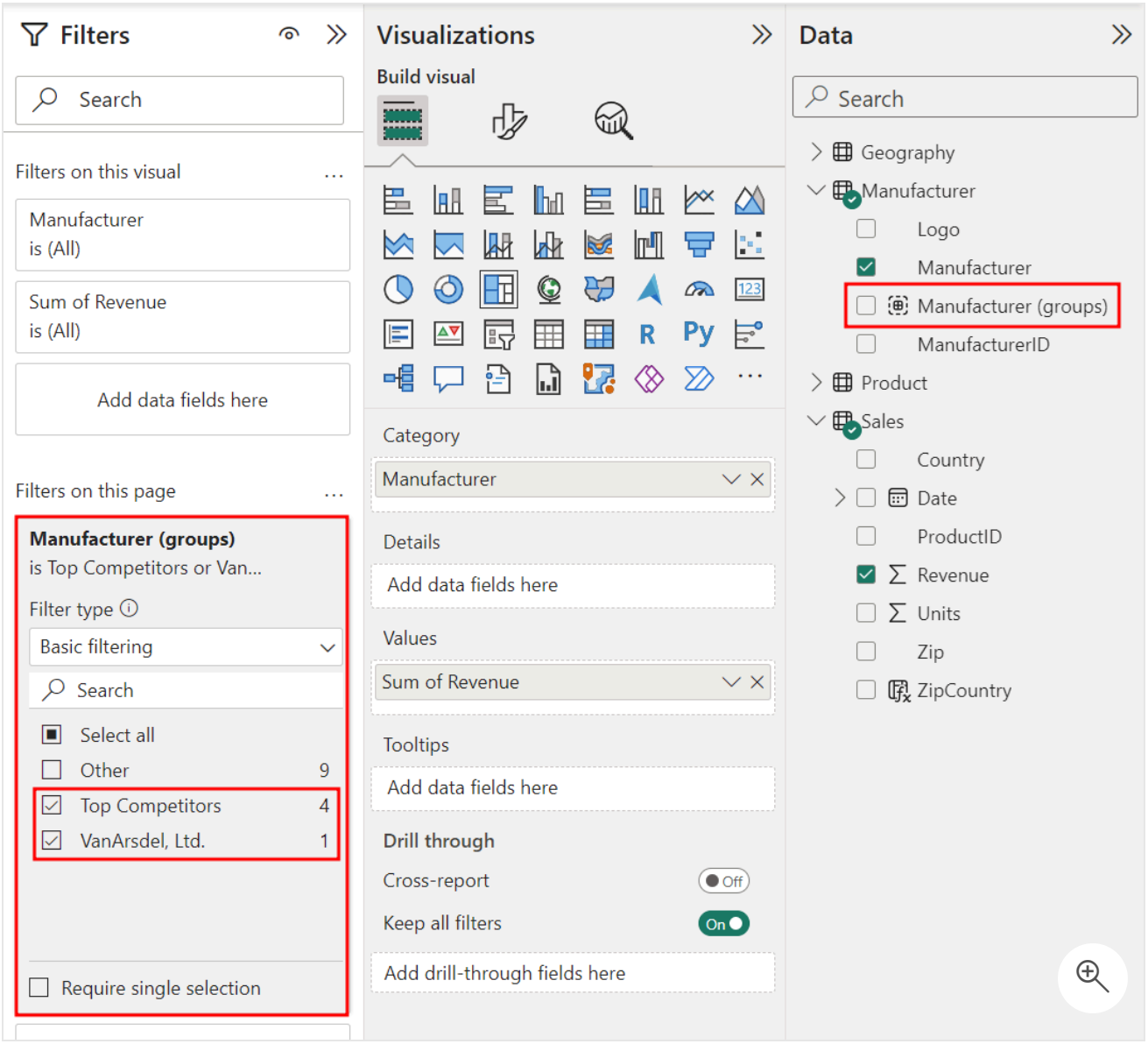
18. To remove the highlight, select **VanArsdel, Ltd.** again. This interaction between visuals is called **cross-highlighting**.

Section 2: Visual level filters

Earlier in the module, you added a Top 5 Visual level filter. Now you need to add a filter to the Page level, so you can work with the top competitors and VanArsdel, and filter out all the other manufacturers. Make sure the **Filters** pane is expanded and open.

> ⓘ **Note**
>
> Page-level filters apply to all visuals on the page. Visual-level filters apply only to the visual.

1. Keep the **Treemap** visual selected.
2. From the **Data** pane, drag and drop **Manufacturer (groups)** from the **Manufacturer** table to the **Filters on this page** box in the **Filters** pane.
3. Select both **Top Competitors** and **VanArsdel, Ltd.**



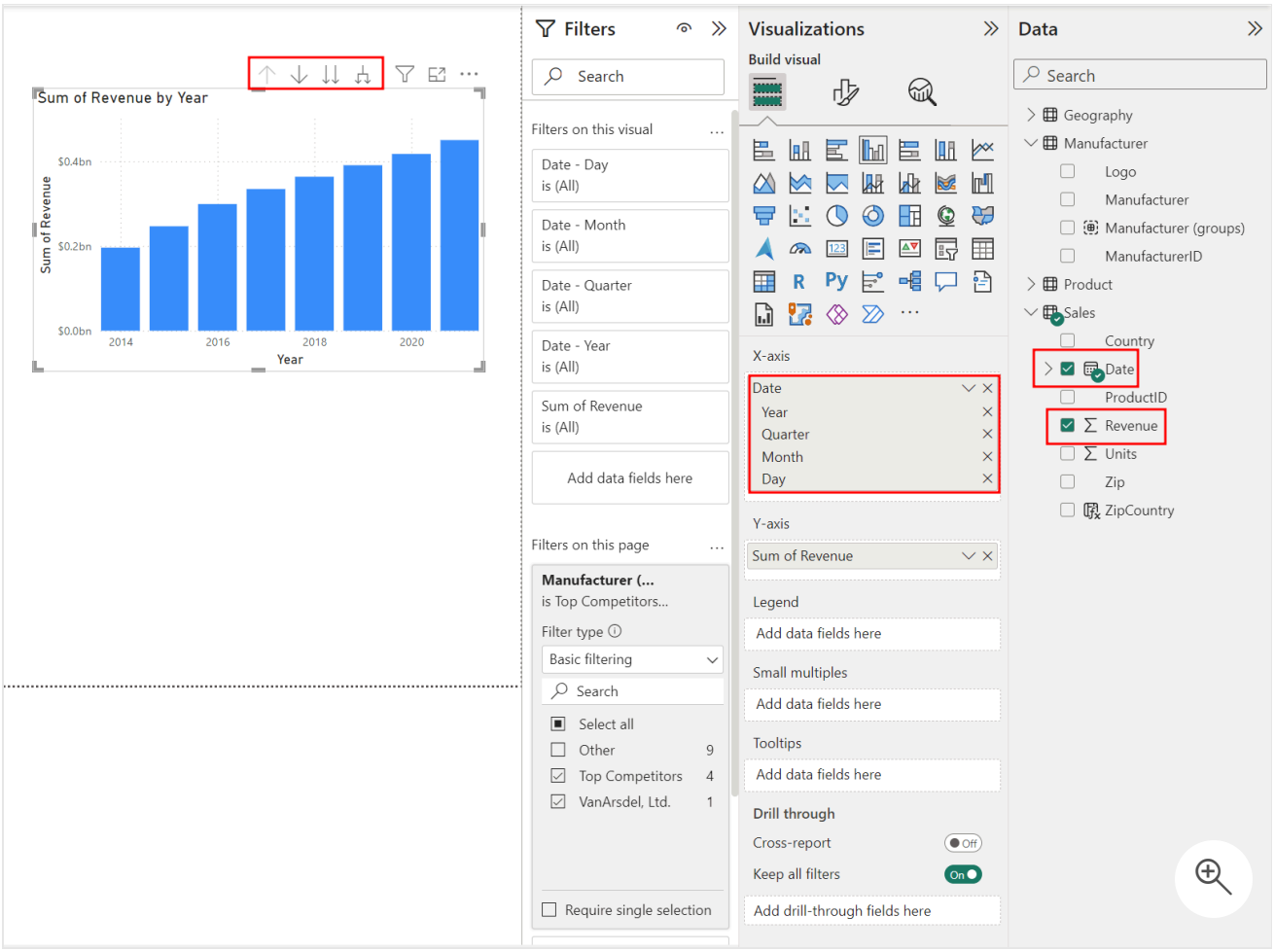
4. Now, add a visual that provides sales information over time. First, select the white space in the **canvas** to make sure nothing is selected.

5. Select the checkbox next to the **Date** field in the **Sales** table.

> **Note**
>
> A date hierarchy is created if you have Auto date/time turned on. If you don't see the date hierarchy go to **File** -> **Options and settings** -> **Options** -> **Current file** -> **Data load** -> **Auto date/time** to turn it on.

6. Select the checkbox next to the **Revenue** field in the **Sales** table. This action creates a visual.

7. Change the visual to a **Clustered column chart**. In the X-axis section, a date hierarchy is used. There are arrows on the visual header you can use to go through the hierarchy.



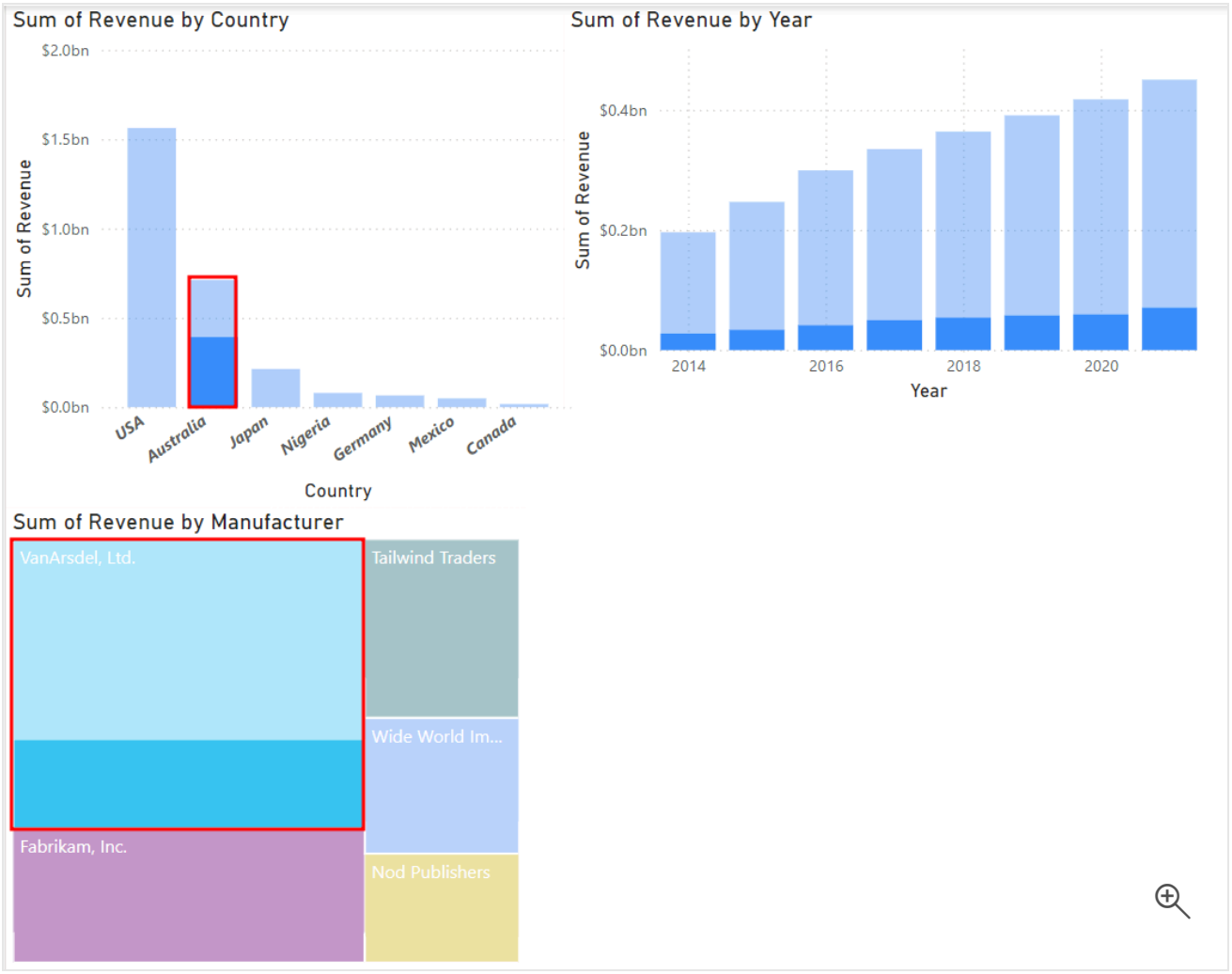
You already know from the data that VanArsdel, Ltd. has a large share of the market in Australia, but now you want to know how VanArsdel, Ltd. performed over time in Australia.

8. Select the **Sum of Revenue by Country and Manufacturer (groups)** chart.

9. Select the **X** in the **Visualizations** pane to remove **Manufacturer (groups)** from the legend.

10. Select **VanArsdel** in the **Sum of Revenue by Manufacturer** visual (Treemap).

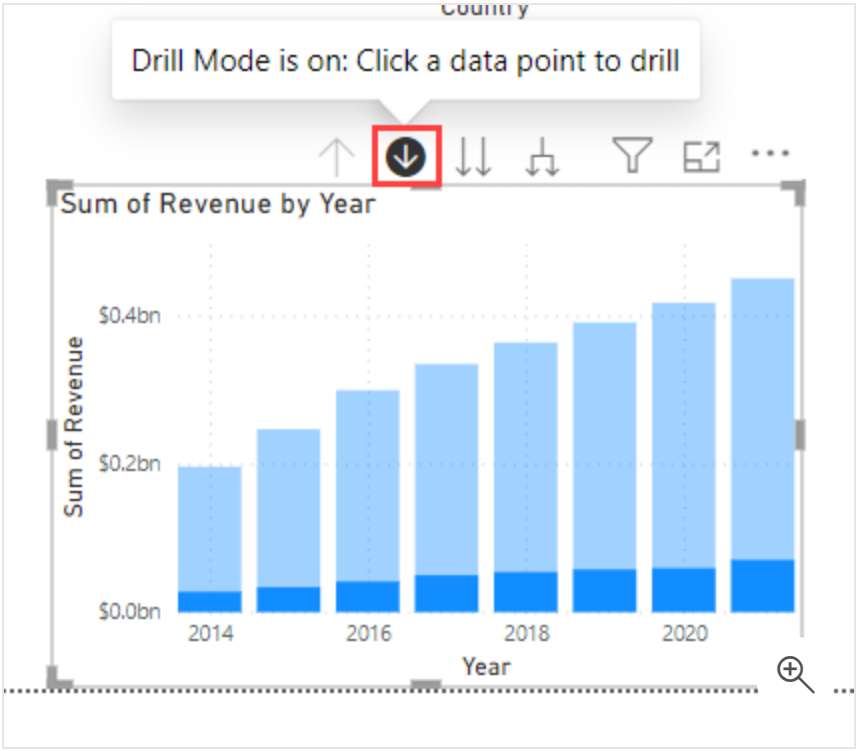
11. Then, hold the CTRL key and select **Australia** in the **Sum of Revenue by Country** visual. This action multi-selects and highlights both values.



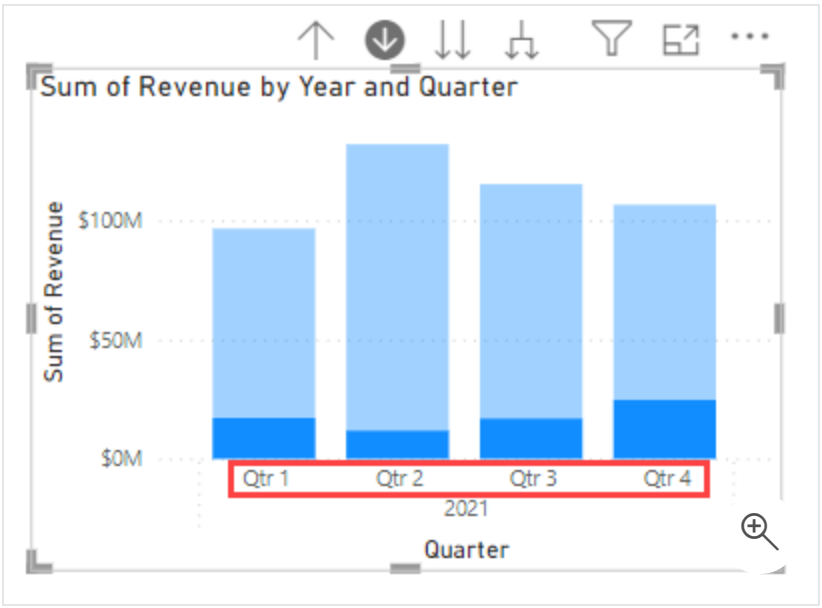
With both VanArsdel, Ltd. and Australia selected, you can see a spike in 2021 sales for VanArsdel, Ltd. in Australia. You decide to investigate this spike in sales further.

12. Hover over the **Sum of Revenue by Year** visual.

13. Select the **down arrow** at the top of the **Sum of Revenue by Year** visual to turn on the **Drill Mode**.

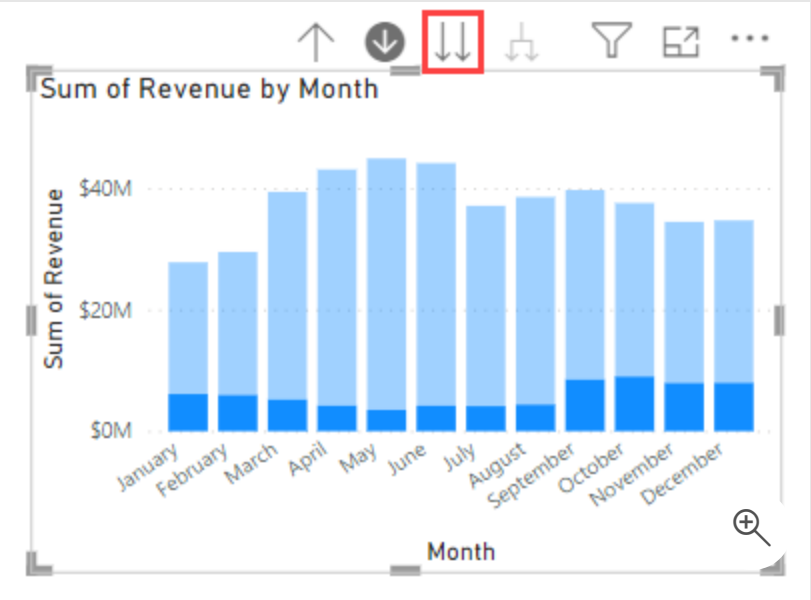


14. Select the **2021** column in the **Sum of Revenue by Year** visual.



Now at that you drilled down to the quarter level of 2021, you see a large spike in the fourth quarter. You decide to investigate more.

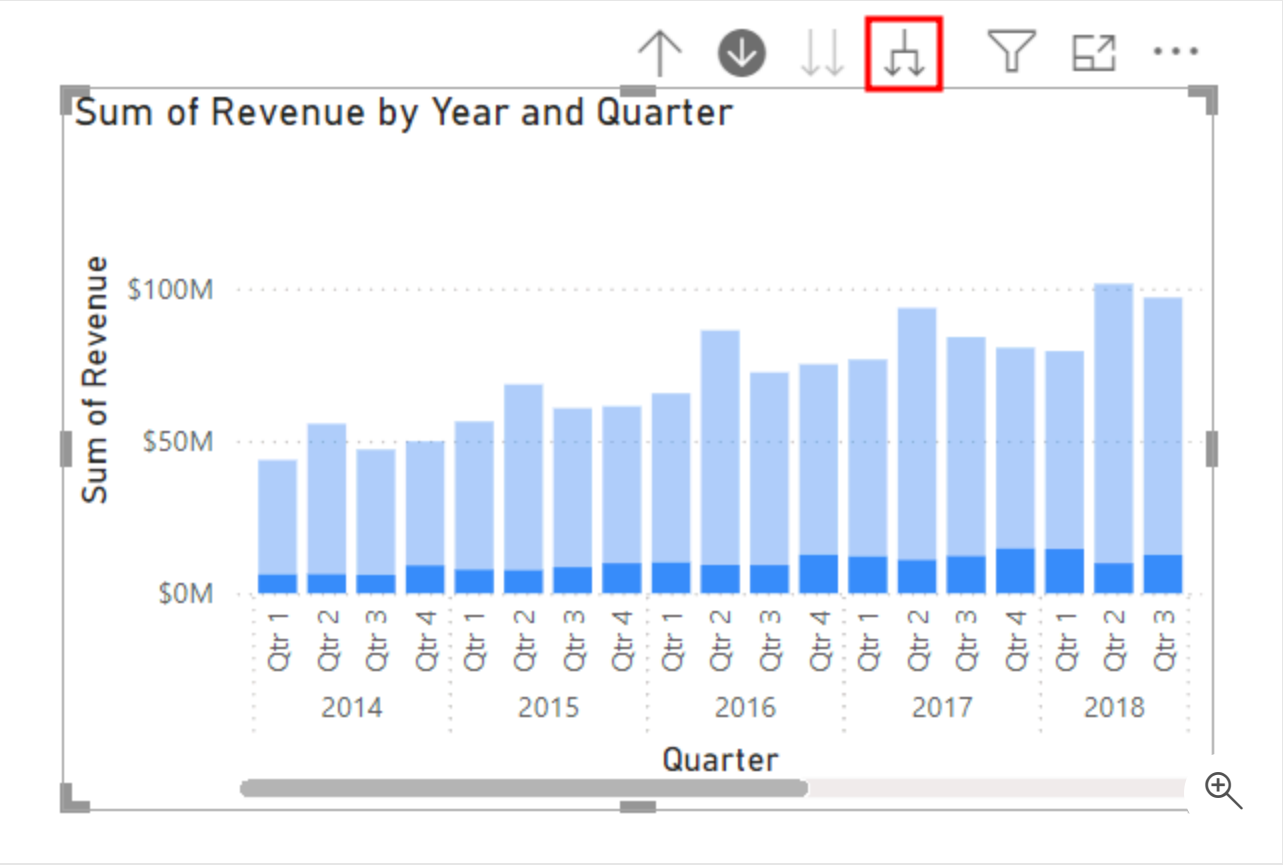
15. Select the **double down-arrow** icon at the top of the **Sum of Revenue by Year and Quarter** visual. This action drills down to the next level of the hierarchy, which is the **month** level.



16. Select the **up-arrow** icon at the top of the **Sum of Revenue by Month** visual to drill back up to the **Quarter** level again.

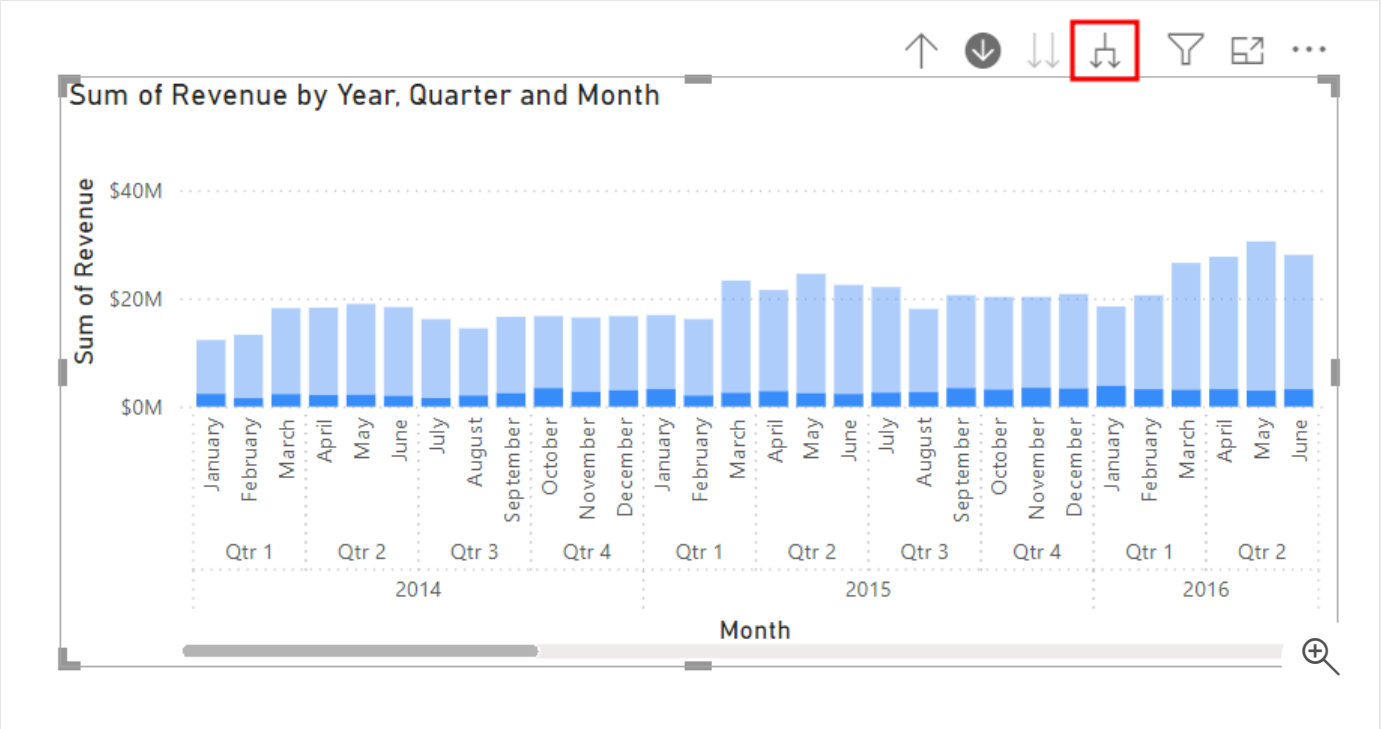
17. Select the **drill up** icon a second time to go all the way back up to the **Year** level.

18. Select the **split arrow** icon at the top of the **Sum of Revenue by Year** visual. This action expands down to the next level of the hierarchy, which is quarters for all the years; not just 2021.



19. Resize the visual as needed. You notice the fourth-quarter sales are always high, but in 2021 there's a larger sales spike in the fourth quarter than usual.

20. Expand down one more time to the month level to investigate. Select the **split arrow** icon for the **Sum of Revenue by Year and Quarter** visual again. This action drills down to the next level of the hierarchy and shows revenue for months for all the years.



Section 3: Use slicers

Now you want to add a slicer to filter the data by the manufacturers.

1. Make sure there are no filtered or highlighted values.

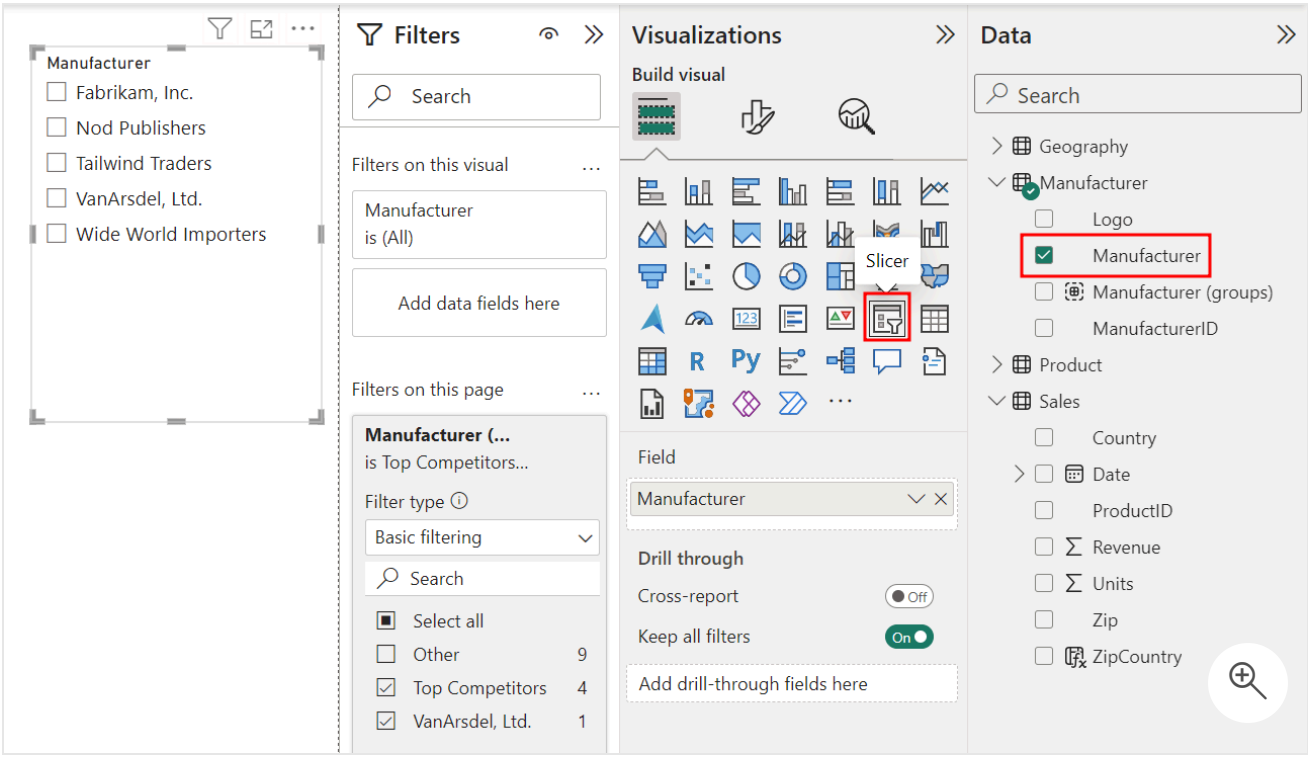
2. Check that you have no values selected in your report visuals.

3. If you have values selected, select the blank space of the Sum of Revenue by Country visual. This action clears any selected values.

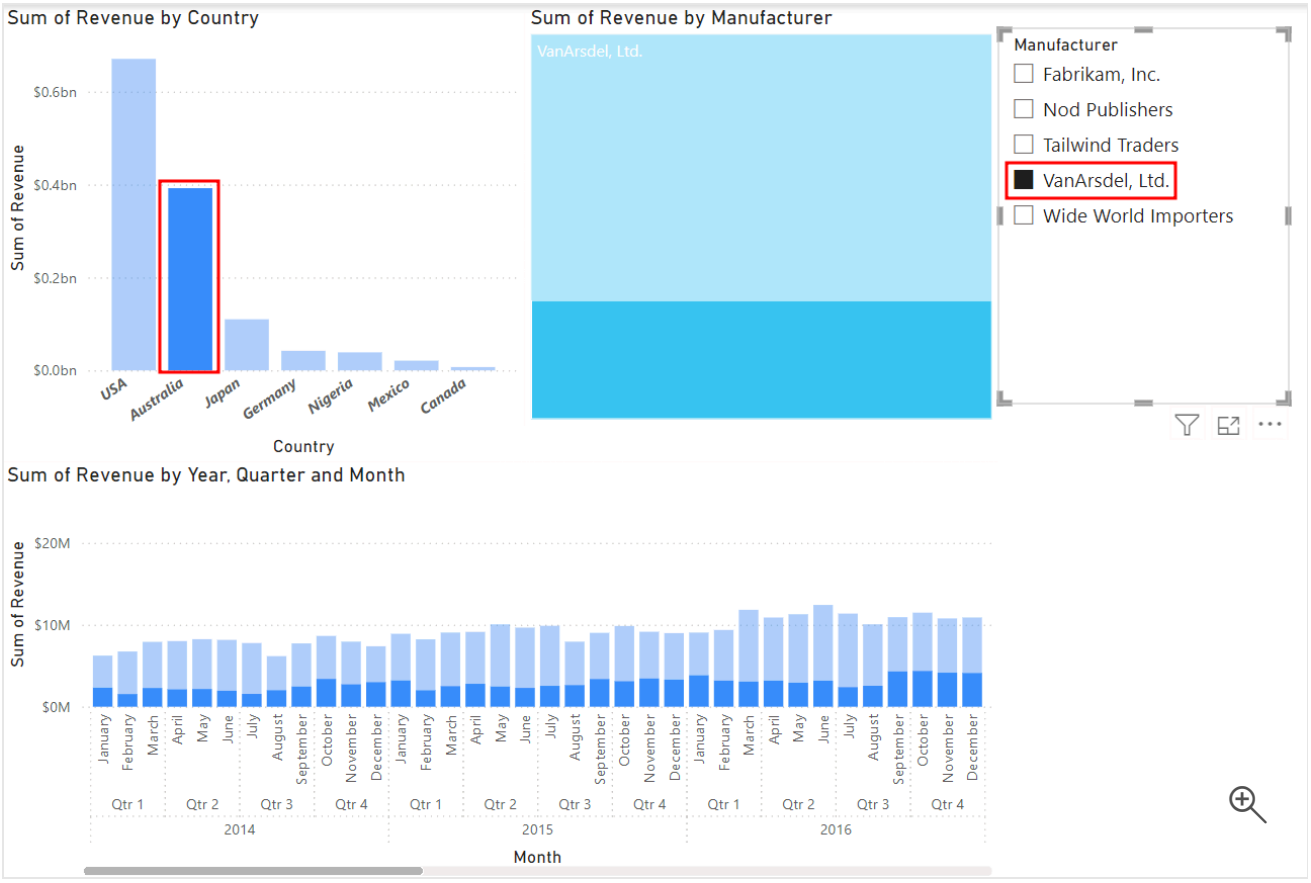
4. Select the white space in the canvas.

5. From the **Data** pane, select the checkbox next to the **Manufacturer** field in the **Manufacturer** table.

6. From the **Visualizations** pane, select the **Slicer** visual.



7. Select **VanArsdel, Ltd.** from the list of Manufacturers. You see all the visuals are filtered based on your selection. Also, select **Australia** in the **Sum of Revenue by Country** visual.

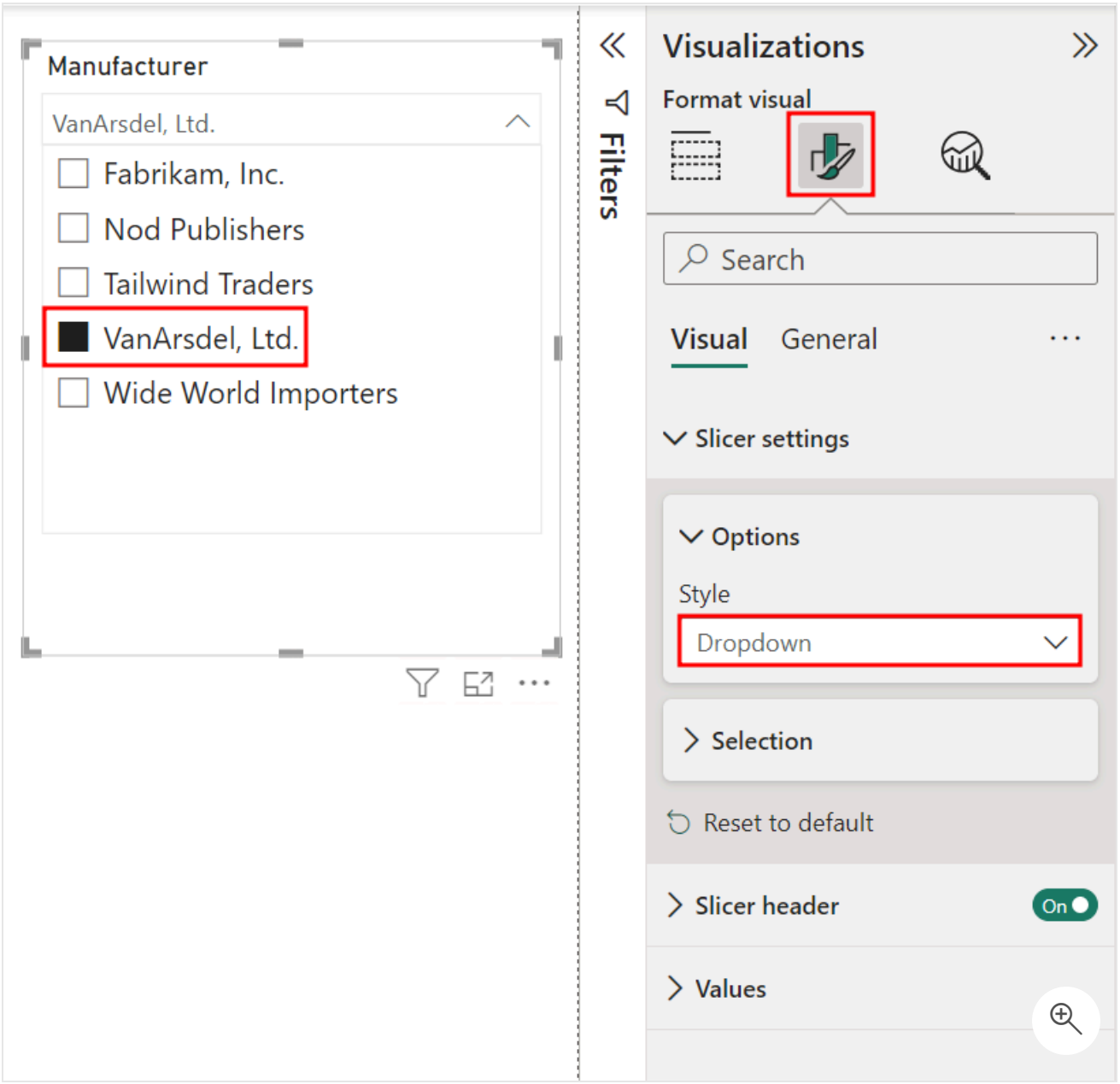


8. With the **Slicer** visual still selected, go to the **Format** visual tab of the **Visualizations** pane.

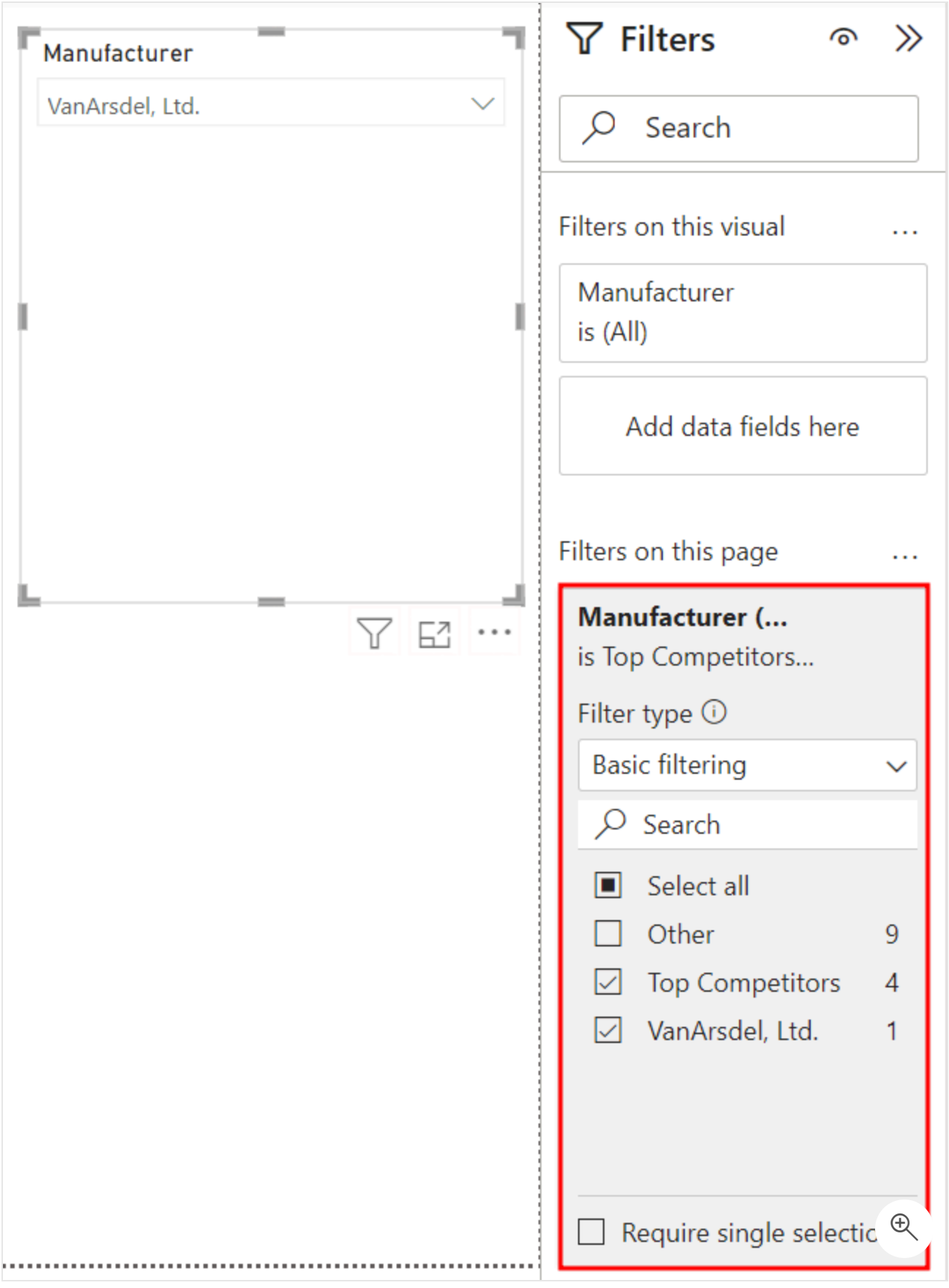
9. Expand the **Slicer settings** menu. Then, expand the **Options** menu in the **Slicer settings**.

10. From the **Options** drop-down under **Style**, select **Dropdown**.

11. Then, in the **Slicer** visual, select **VanArsdel, Ltd.** from the **Manufacturer** dropdown.



12. Make sure you still have **Top Competitors** and **VanArsdel, Ltd.** selected in the **Manufacturer (groups)** filter in the **Filters** pane.


Manufacturer
VanArsdel, Ltd.
Filters
Search
Filters on this visual
Manufacturer
is (All)
Add data fields here
Filters on this page
Manufacturer (...
is Top Competitors...
Filter type
Basic filtering
Search
Select all
Other 9
Top Competitors 4
VanArsdel, Ltd. 1
Require single selectio

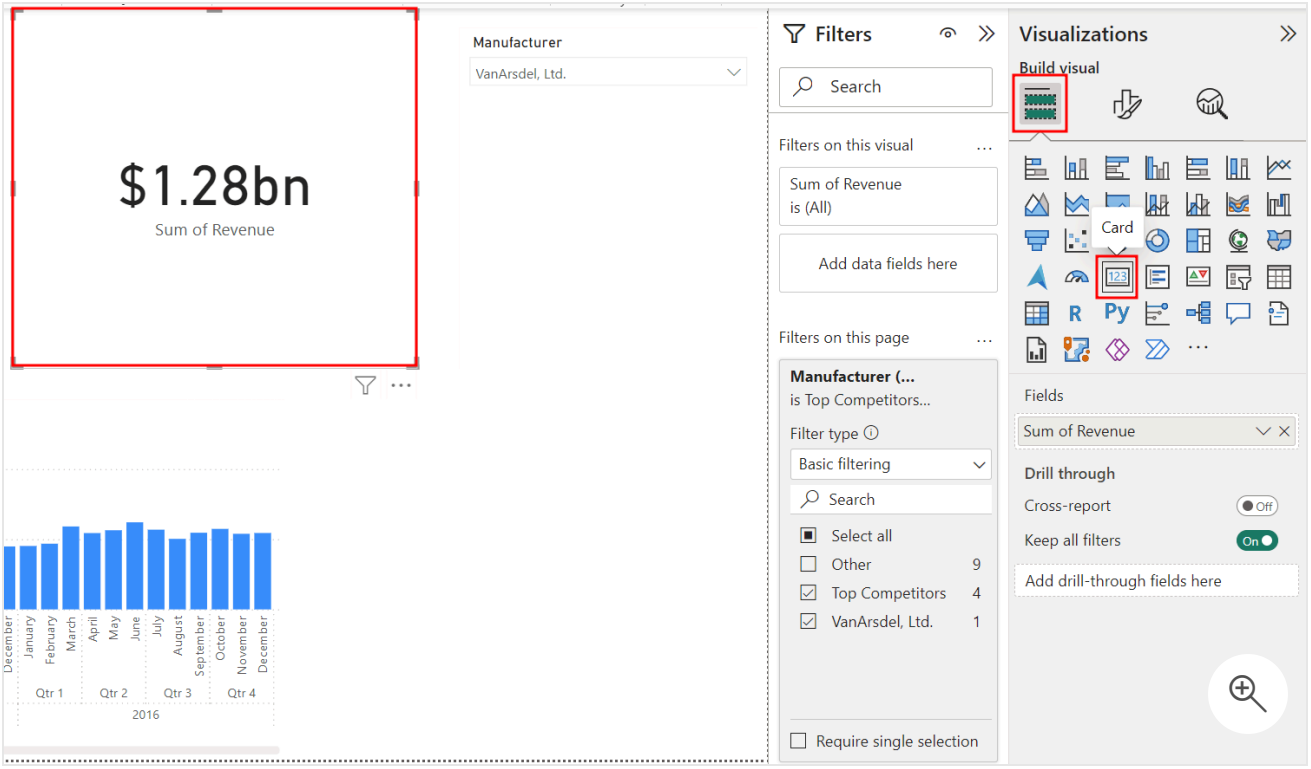
Note

There is a box for **Filters on all pages** in the **Filters** pane. If you have more than one report page, this is how you sync a filter for the whole file.

13. Now you can use the **Manufacturer** slicer to analyze one manufacturer at a time. First, deselect the **Australia** column in the **Sum of Revenue by Country** visual to remove the filter by country.

14. Next, select the **Sum of Revenue by Manufacturer** (Treemap) visual.

15. From the **Visualizations** pane, select the **Card** visual. The card visual gives us the **Sum of Revenue** as we filter and cross-filter the visuals.



You see all key dimensions are in tables with related attributes, except for the date. For example, **Product** attributes are in the **Product** table. **Manufacturer** attributes are in the **Manufacturer** table. In the next unit, you'll create a **Date** table.

Next unit: Create a date table

Continue >

100 XP

Create a date table

20 minutes

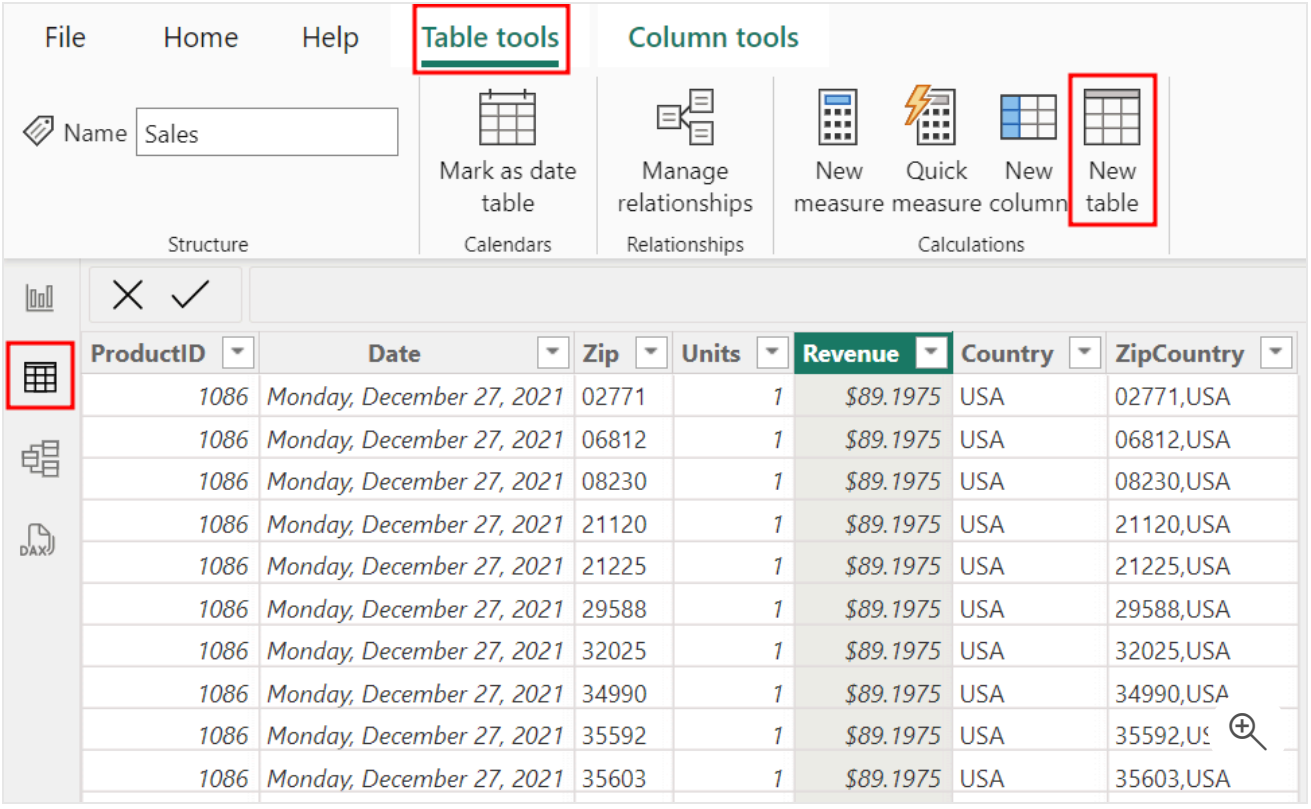
Make sure you still use the report you created titled **MyFirstPowerBIModel** from the previous units. You use it to create a Date table.

Create a date table

1. Go to the **Table** view by selecting the **Table** icon in the navigation menu to the left of Power BI Desktop.

2. From the ribbon at the top of the screen, select the **Table Tools** tab.

3. Then, choose **New Table** from the menu at the top of the screen.



ProductID	Date	Zip	Units	Revenue	Country	ZipCountry
1086	Monday, December 27, 2021	02771	1	$89.1975	USA	02771,USA
1086	Monday, December 27, 2021	06812	1	$89.1975	USA	06812,USA
1086	Monday, December 27, 2021	08230	1	$89.1975	USA	08230,USA
1086	Monday, December 27, 2021	21120	1	$89.1975	USA	21120,USA
1086	Monday, December 27, 2021	21225	1	$89.1975	USA	21225,USA
1086	Monday, December 27, 2021	29588	1	$89.1975	USA	29588,USA
1086	Monday, December 27, 2021	32025	1	$89.1975	USA	32025,USA
1086	Monday, December 27, 2021	34990	1	$89.1975	USA	34990,USA
1086	Monday, December 27, 2021	35592	1	$89.1975	USA	35592,US
1086	Monday, December 27, 2021	35603	1	$89.1975	USA	35603,USA

You see a new table called "Table" is created in the **Data** pane to the right of the Power BI Desktop and the formula bar opens at the top of your screen.

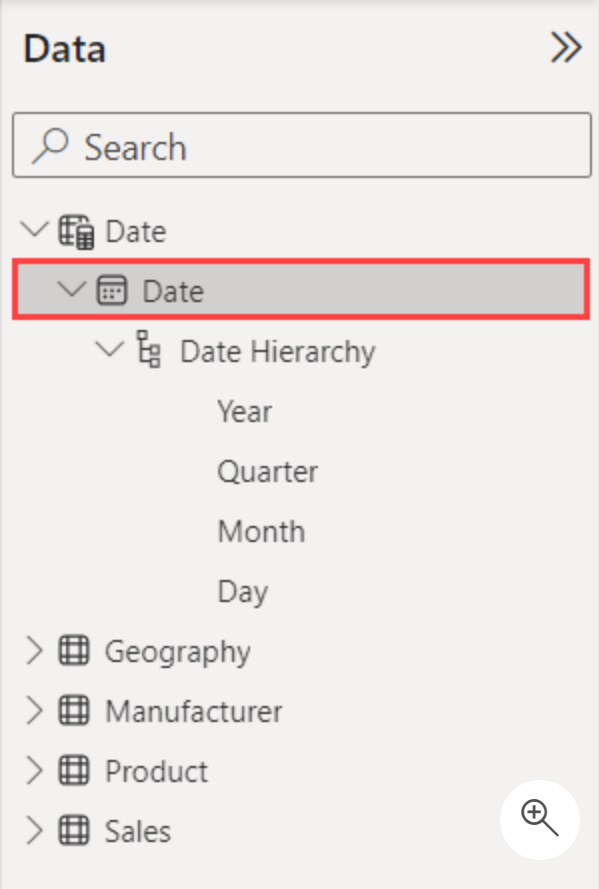
4. Enter the following formula in the formula bar, then hit **Enter** on your keyboard:

```
Date = CALENDAR(DATE(2014,1,1), DATE(2022,12,31))
```

You're using two DAX functions: the **CALENDAR** function, which accepts the start and end data, and the **DATE** function, which takes the year, month, and date fields.

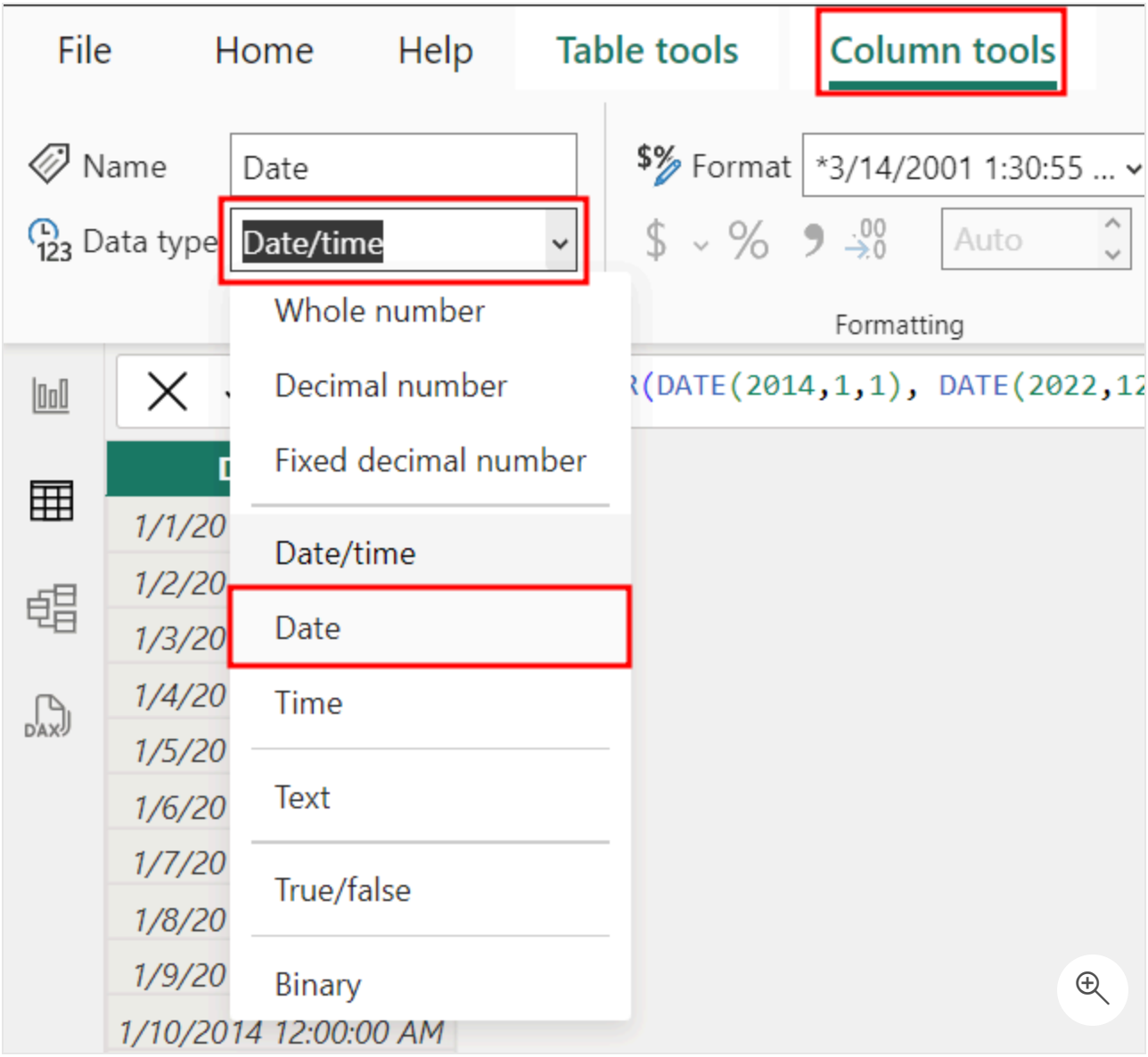
For this scenario, you need to create dates from 2014 to 2021 (since we have data for those years). We can also add more fields, like **Year**, **Month**, **Week**, etc., to the table by using other DAX functions.

5. In the **Data** pane, select the **Date** field in the **Date** table.



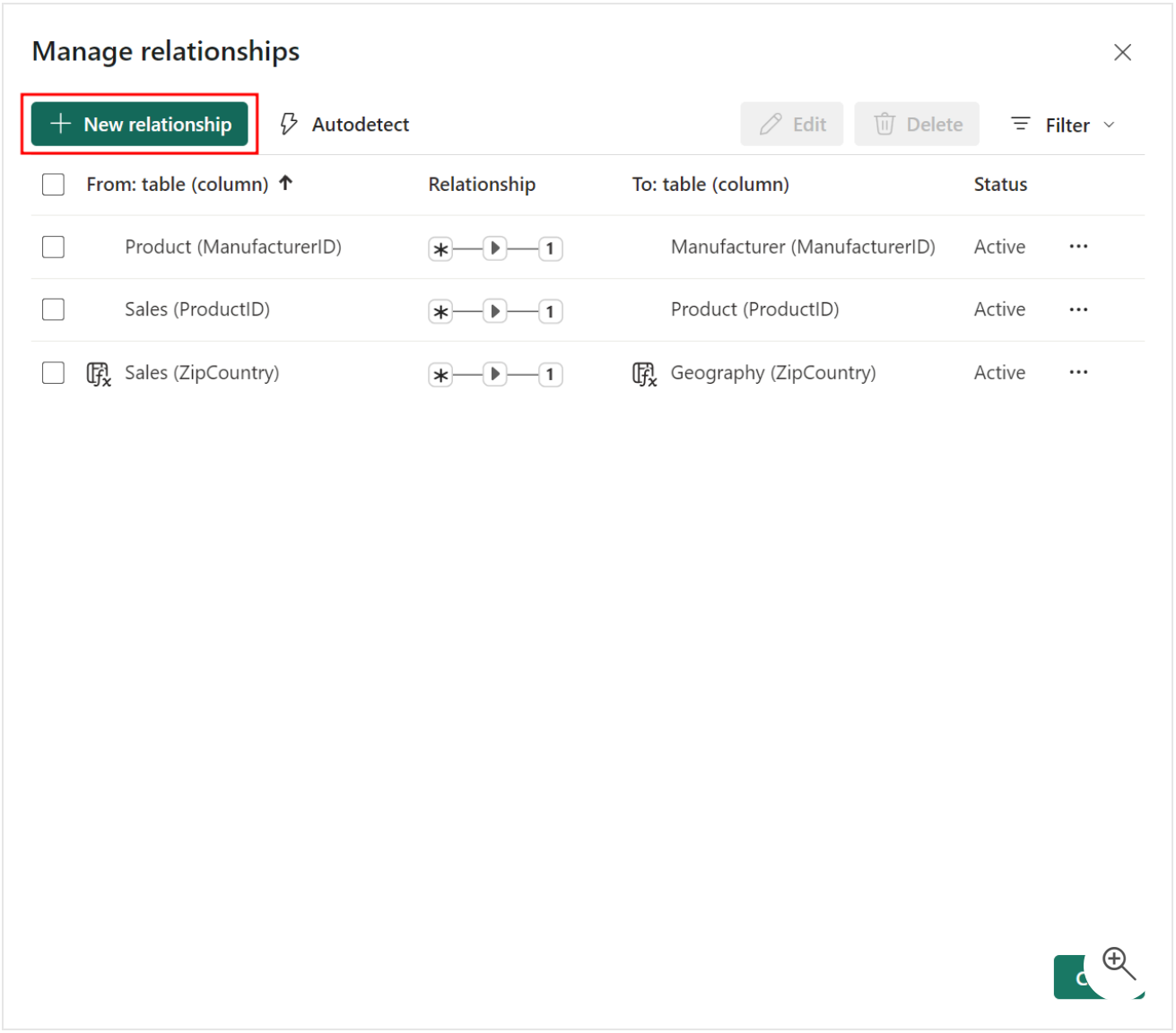
6. The Date field is in the **Date/Time** data type, but you need it to be the **Date** data type. To change it, select the **Column Tools** tab from the ribbon.

7. Then, choose the **Data type** drop-down and select **Date**.



8. Now, you need to create a relationship between the **Date** and **Sales** tables. From the ribbon, select the **Column Tools** tab, and then choose **Manage Relationships**.

9. The **Manage Relationships** dialog box opens. Select the **+ New relationship** button.

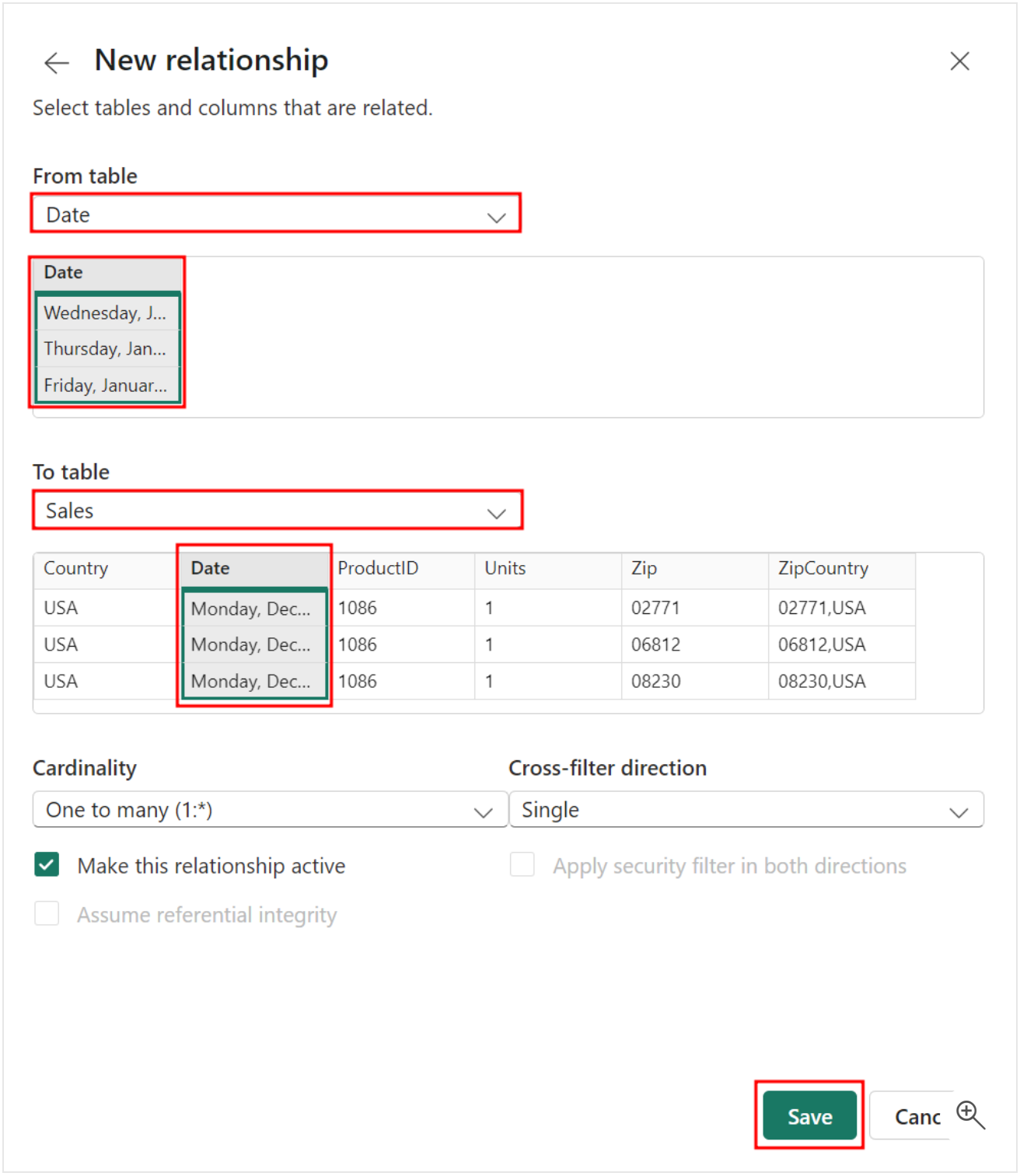


10. Then, the **New Relationship** dialog box opens. Select **Date** from the top dropdown menu.

11. Select **Sales** from the second dropdown menu.

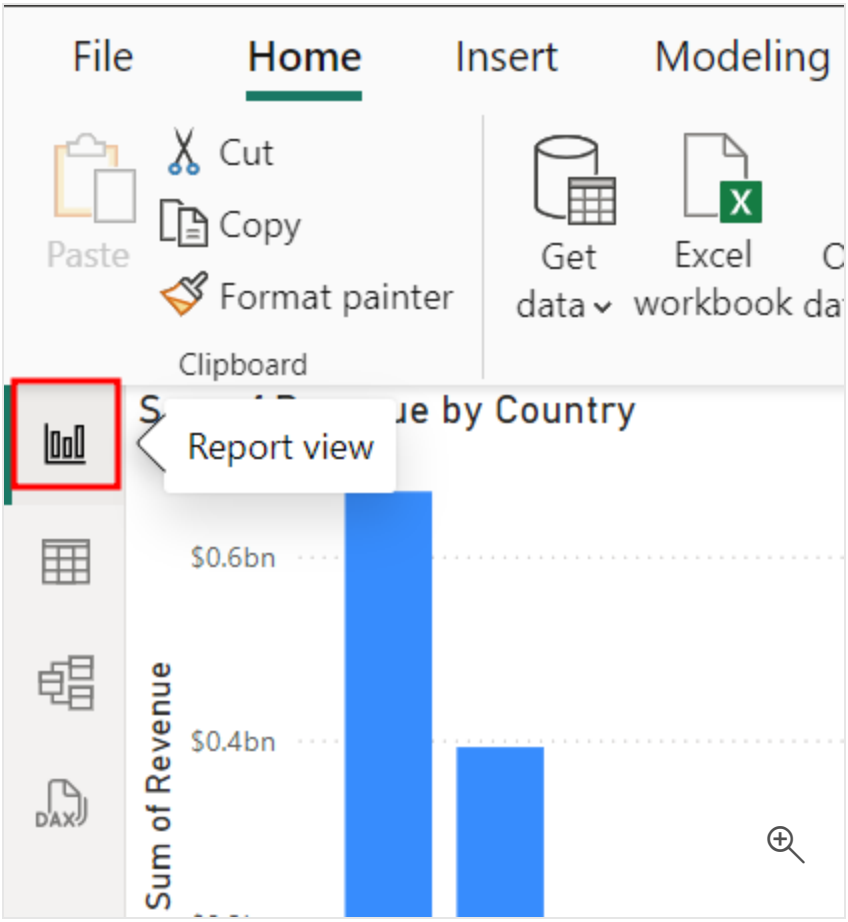
12. Highlight the **Date** field in both tables by multi-selecting.

13. Then, select **Save** to close the **New relationship** dialog box.



14. Select the **Close** button to close the **Manage relationships** dialog box.

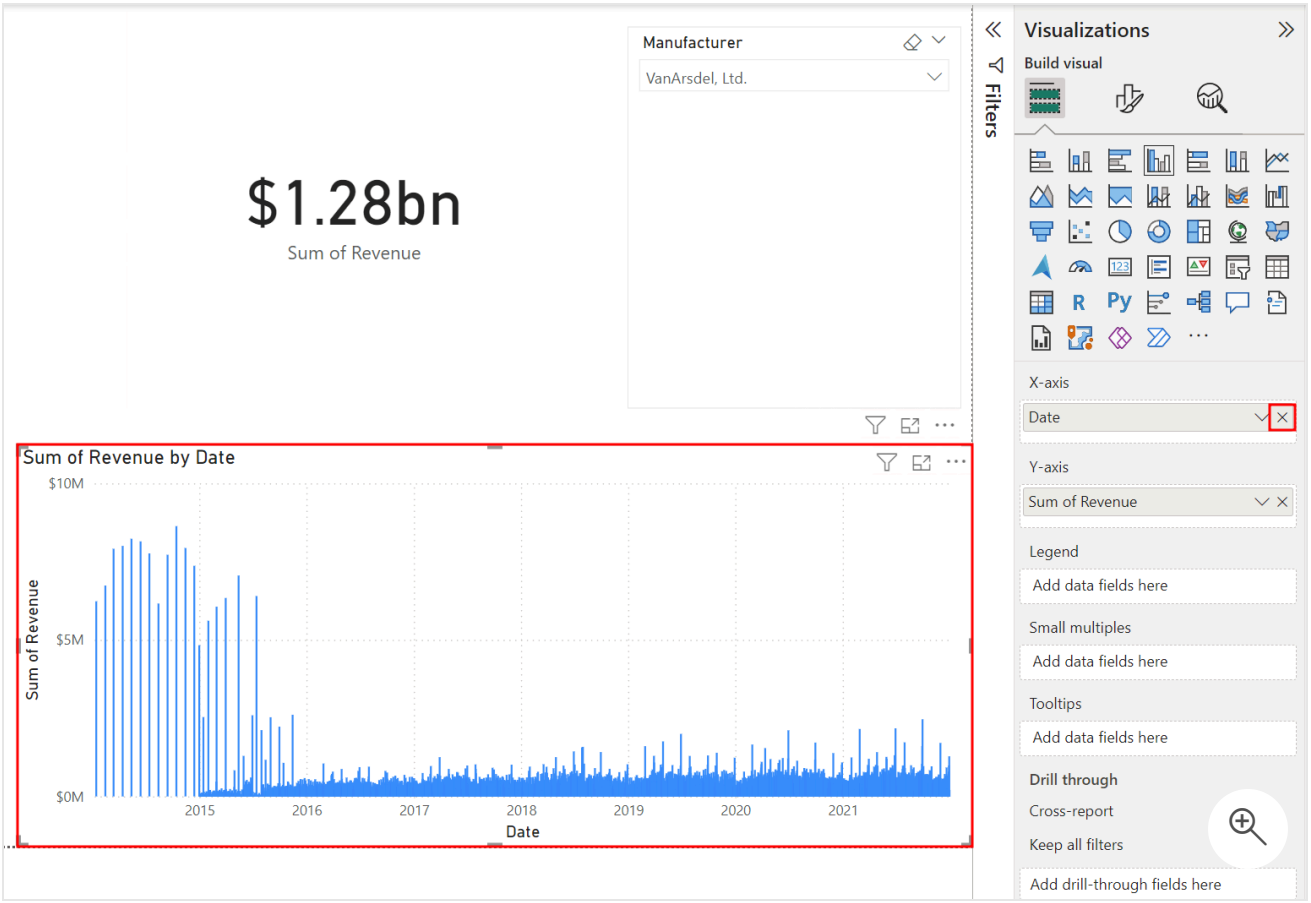
15. Now, select the **Report view** icon in the left navigation menu to go to the **Report view**.



The Sum of Revenue by Date chart looks different now. Continue on to fix it.

16. Select the **Sum of Revenue by Date** visual.

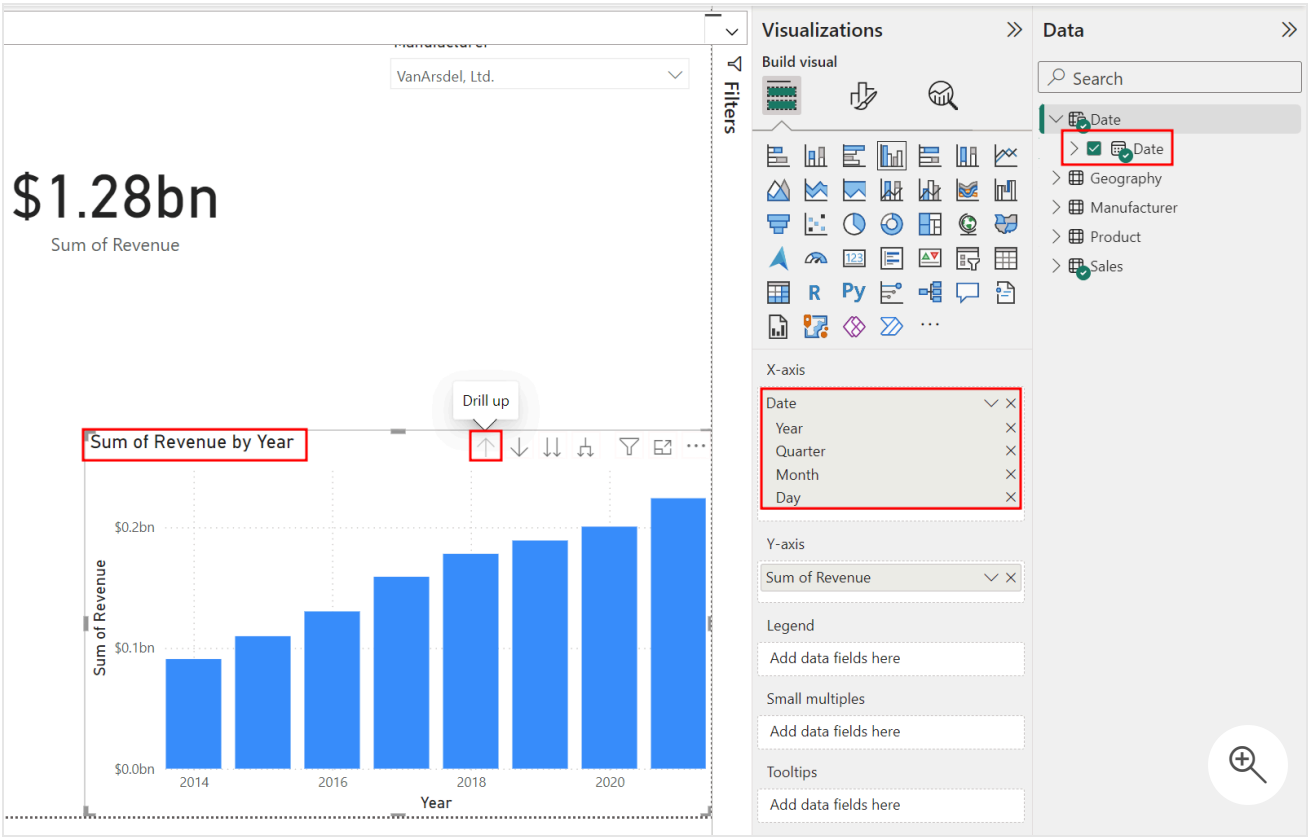
17. From the **X-axis** section in the **Visualizations** pane, select the **X** to remove the **Date** field.



18. From the **Data** pane, expand the **Date** table.

19. Now, drag and drop the **Date** field from the **Date** table to the **X-axis** section in the **Visualizations** pane.

20. Select the **Drill up** button above the visual until the visual is on the **Year** level.

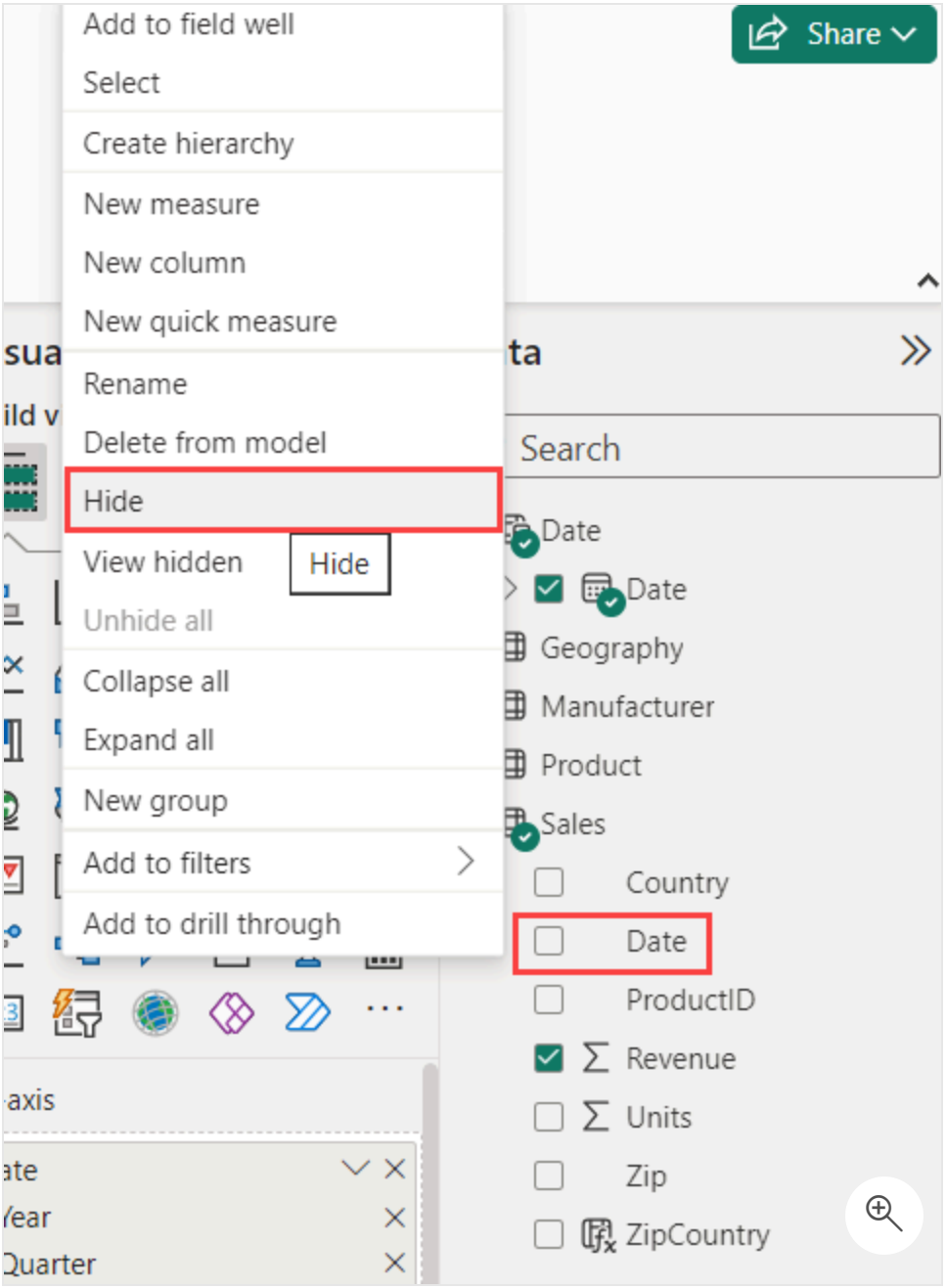


Now, the new **Date** field behavior is like it was previously.

Since there are now two **Date** fields, you might be confused which one to use. To remove confusion, hide the **Date** field in the **Sales** table.

21. From the **Data** pane, hover over and select the **ellipses (...)** to the right of the **Date** field in the **Sales** table.

22. Then, select **Hide** from the options menu.



23. Use the preceding steps to hide **Country**, **ProductID**, **Zip**, and **ZipCountry** in the Sales table as well. The only fields that should now be in the **Sales** table are **Revenue** and **Units**.

24. Next, hide **ZipCountry** from the **Geography** table.

25. Then, hide **ManufacturerID** from the **Manufacturer** table.

26. Hide **ProductID** and **ManufacturerID** from the **Product** table.

> **Tip**

It's best practice to hide fields that are not used in your report visuals. These fields are the basis of our relationships between each table so we should not delete them.

Next unit: Check your knowledge

Continue >

100 XP

Summary

2 minutes

In this scenario, you're a CMO creating a data model for the company, VanArsdel, Ltd. You also are tasked with exploring the data and creating visualizations to help present your findings.

In this module, you learned how to create a wide range of different charts, and used the highlight and cross-filter functions.

Learned concepts:

- The types of data relationships:
  - 1-to-many
  - 1-to-1
  - Many-to-many
- Creating chart visuals from the Visualization pane
- Adding data to a visual, the use of visual filters, and formatting options
- The data grouping procedure and use-cases
- When and how to use slicers
- Creation and use of a Date table
- Using Matrix visuals for data presentation

You build upon what you learned in this module to continue working as CMO for VanArsdel, Ltd. in Module 4.

References

- Work with modeling view in Power BI Desktop
- Create date tables in Power BI Desktop

- Create and manage relationships in Power BI Desktop
- Apply many to many relationships in Power BI Desktop

Module incomplete:

Go back to finish >