

Power BI

Dashboard in a Day

Lab 4

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Introduction

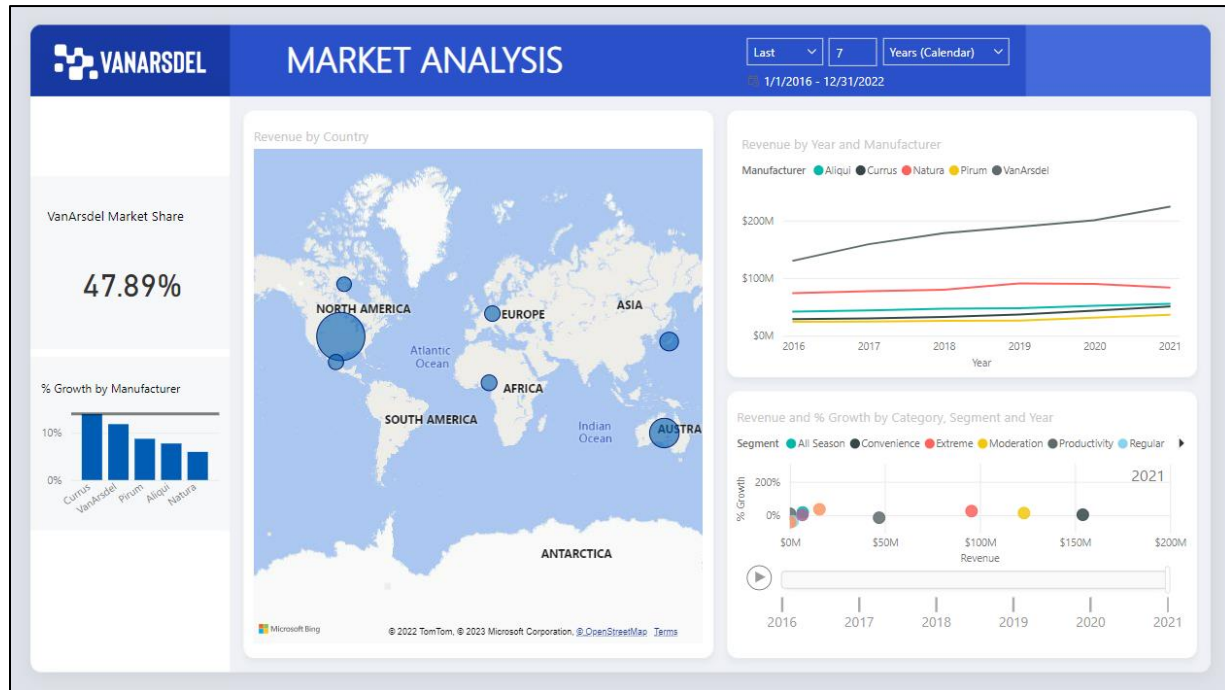
This document is lab four out of five total labs.

Please start this lab with the provided **DIAD Final Report.pbix** file located in the **Reports** folder.

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

NOTE: This lab uses real, anonymized data provided by ObviEnce, LLC. Visit their site to learn about their services: www.obvience.com. This data is the property of ObviEnce, LLC and has been shared to demonstrate Power BI functionality with industry sample data. Any use of this data must include this attribution to ObviEnce, LLC.

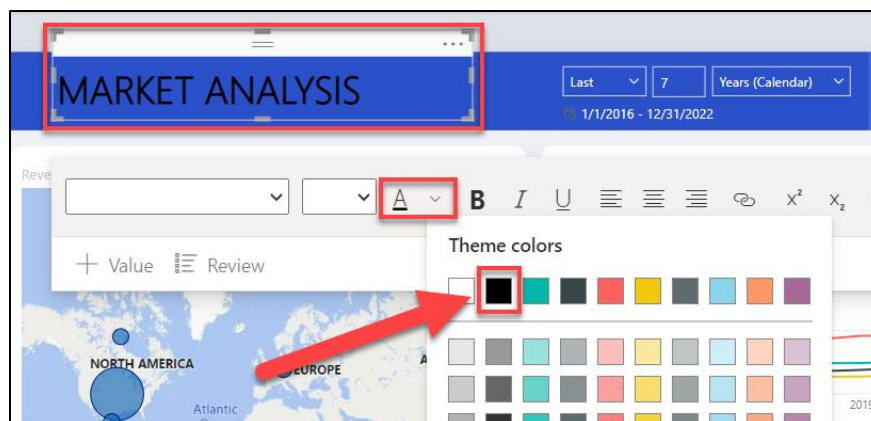
Power BI Desktop – Creating a mobile view



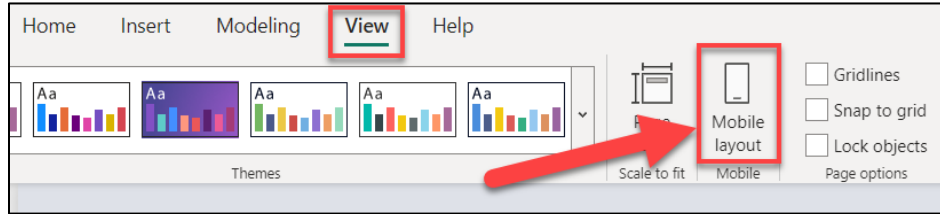
1. Navigate to the **DIAD** folder and then to the **Reports** folder (DIAD/Attendee/Reports) folder.
2. Open the **DIAD Final Report.pbix** file.

This file uses the same dataset that you used for the lab. We have added more visuals and performed additional formatting in the report. Feel free to explore the report.

3. Highlight the **Market Analysis** title and change the text color to **black**.

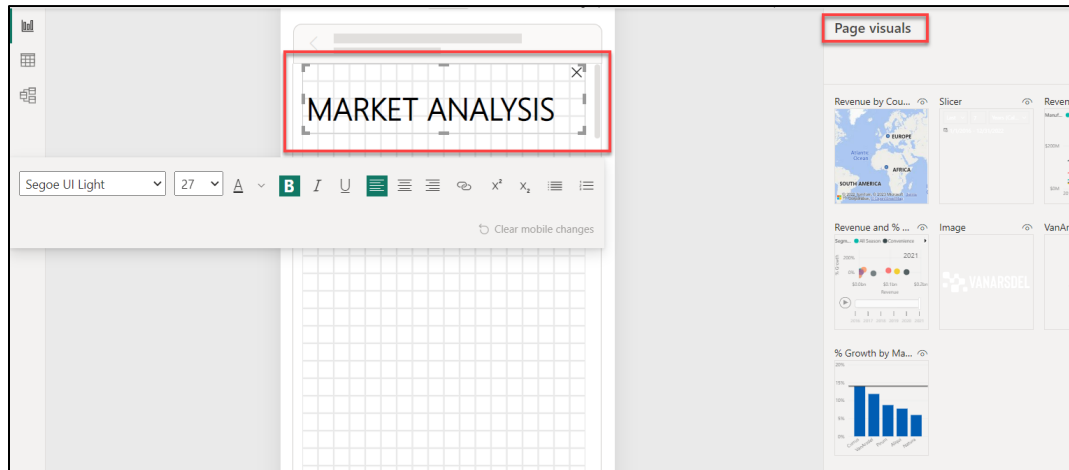


4. Select the **View** tab from the ribbon and then select **Mobile layout**.

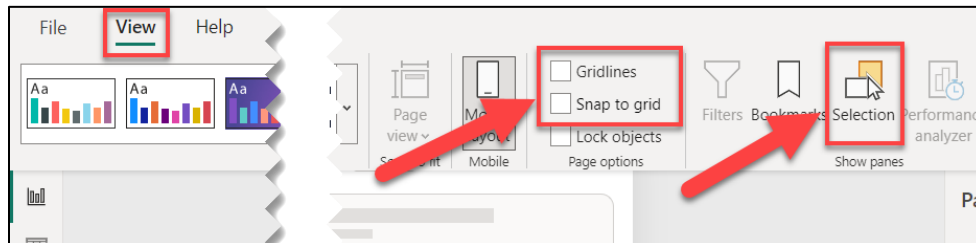


Note: A small pop-up window may open introducing you to the mobile-only formatting. Select *Got it* to continue and close out the pop-up window.

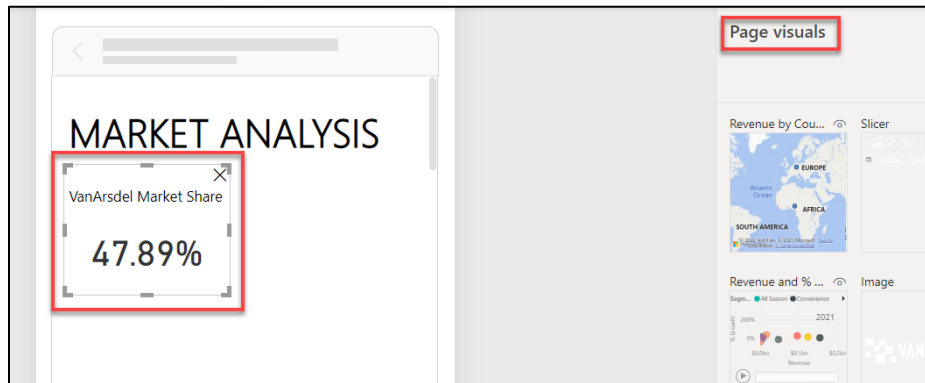
5. From the **Page visuals** pane, drag the **Market Analysis** title to the top of the phone layout. **Resize** and **move** the title to look similar to the one in the figure below. If there are any other visuals on the mobile layout remove them.



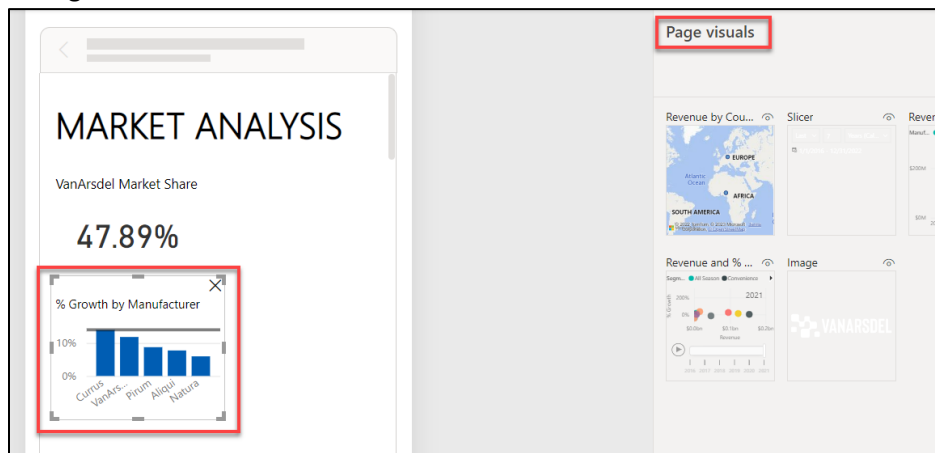
6. Select the **View** tab, then uncheck the checkboxes next to **Gridlines** and **Snap to Grid** to turn them *off*. Also, ensure that the **Selection** pane is turned *off*.



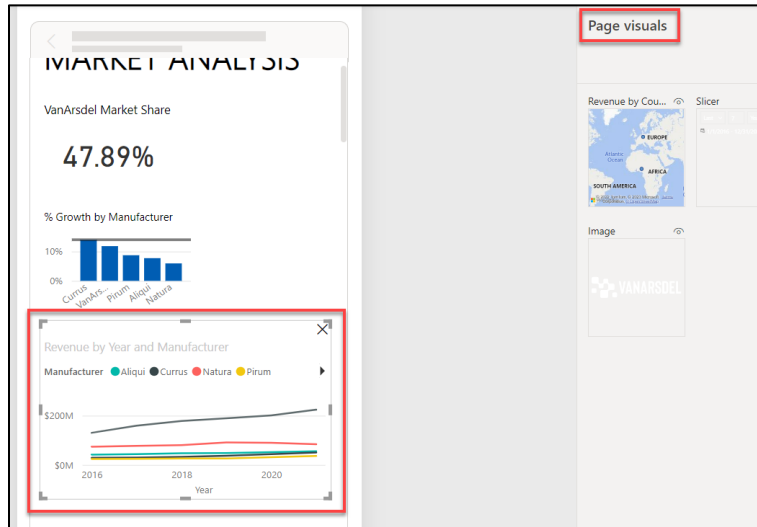
7. Drag the **VanArsdel Market Share** card from the **Page visuals** pane to *below* the **Market Analysis** title on the mobile layout. Then, **resize** the **Market Share** card to look similar to the one shown in the figure below.



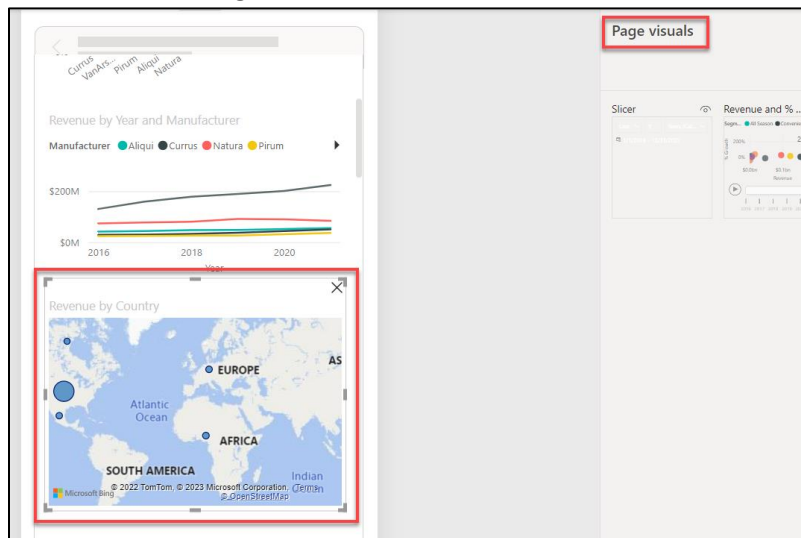
8. Drag the **% Growth by Manufacturer** column chart from the **Page visuals** pane to be placed *below* the **VanArsdel Market Share** card on the mobile layout. **Resize** the chart to look similar to the one shown in the figure below.



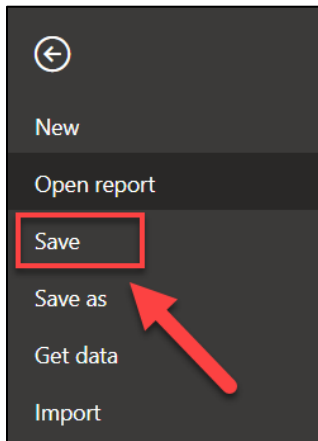
9. Drag the **Revenue by Year and Manufacturer** line chart from the **Page visuals** pane to *below* the **% Growth by Manufacturer** column chart on the mobile layout. **Resize** the **Revenue by Year and Manufacturer** line chart to stretch across the phone layout to look similar to the one shown in the figure below.



10. Drag the **Revenue by Country** map from the **Page visuals** pane to *below* the **Revenue by Year and Manufacturer** line chart on the mobile layout. **Resize** the **Revenue by Country** map to look similar to the one shown in the figure below.



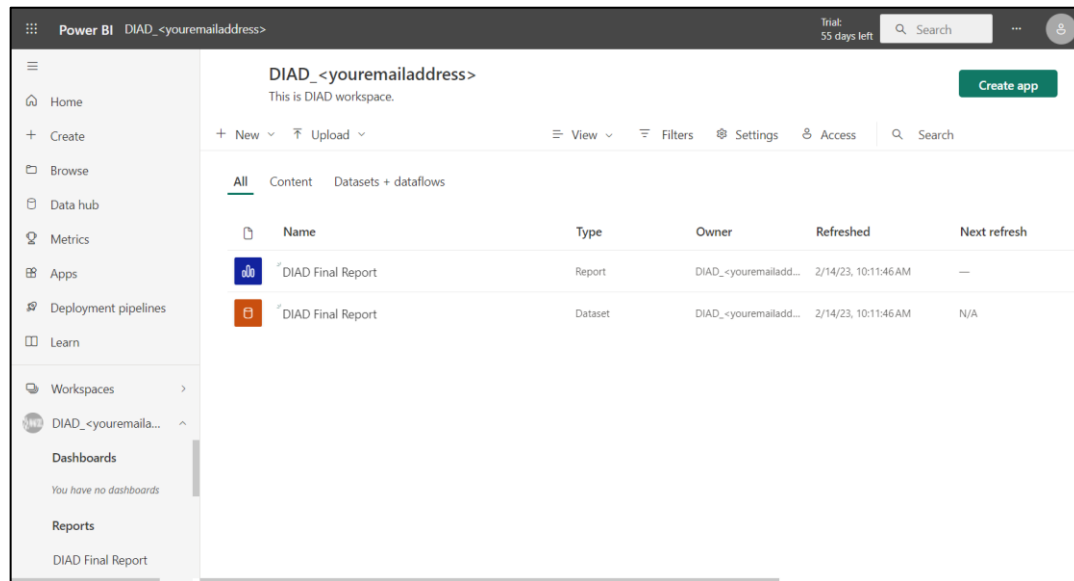
11. Select the **File** tab from the ribbon. From the menu of options, select **Save** so that you workbook saves.



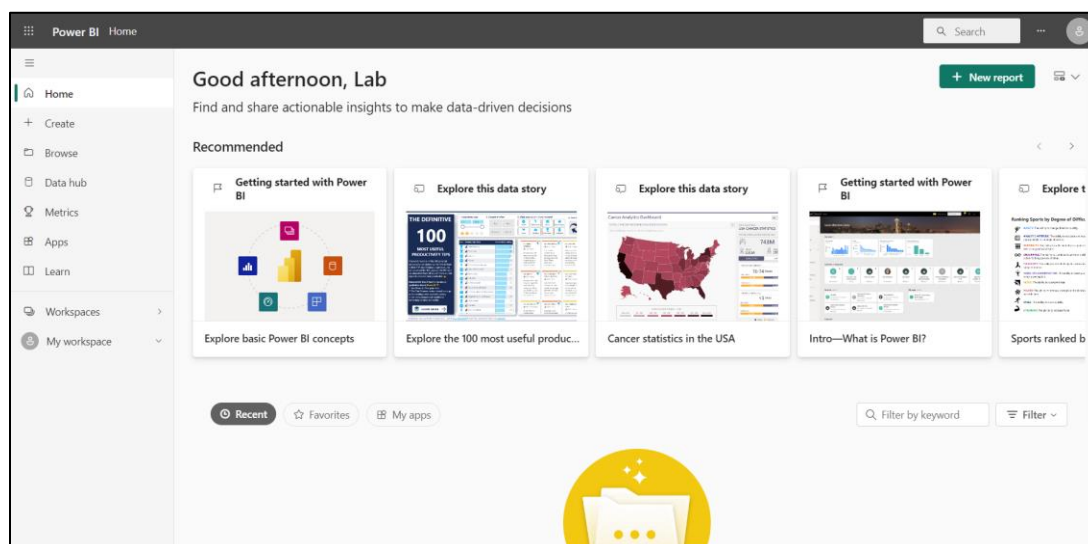
Power BI Service

You will now leverage a report authored using Power BI Desktop to create a dashboard for the VanArsdel data analysis team and CMO. A Power BI Desktop file with additional reports and visuals is provided. Please use this file for the next section of the lab.

Power BI Service – Publishing Report

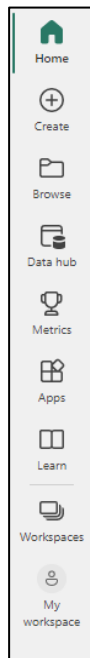


12. If you have not signed up for a Power BI account, go to <http://aka.ms/pbidiadtraining> and sign up for Power BI with a business email address.
13. If you have not already opened the **app.powerbi.com** page, please open a browser and navigate to <http://app.powerbi.com>.
14. Sign-in to Power BI using your user account. Once logged in, you will be taken to the **Home** screen.



Note: If you have previously signed into Power BI, then your **Home** screen will list your **Favorites**, as well as recent reports and dashboards.

15. Notice the navigation pane on the left. Let's review the items here:



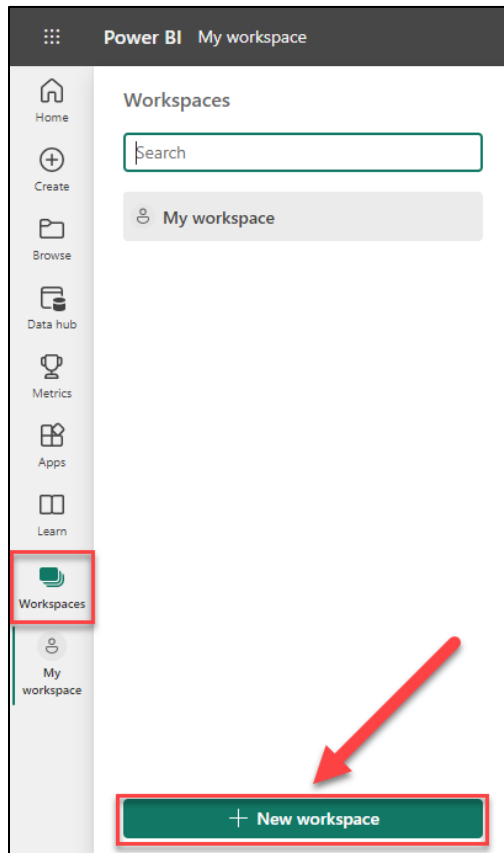
The following options are listed in the navigation pane:

- **Home:** This is a one-stop-shop for all your content. It lists your favorite and recent content such as reports, dashboards, and apps. It also shows the most recent content that was shared with you.
- **Create:** Allows you to add data manually or use an already existing dataset.
- **Browse:** Allows you to browse all of your recently viewed Power BI collateral.
- **Data hub:** Allows you to easily navigate to all dataset that you have either created or that have been shared with you.
- **Metrics:** Allows you to curate metrics and track them against key business objectives, in a single pane.
- **Apps:** Lists all the Power BI apps you have installed.
- **Learn:** Allows the user to have access to started content, samples, and links to videos.
- **Workspaces:** Lists all the workspaces you are assigned. By default, you are assigned to *My Workspace*.
- **My workspace:** Your personal repository for Power BI collateral that can only be viewed by you.

Select **My Workspace**. Notice the workspace is waiting for you to add content like Dashboards, Reports, Workbooks, and Datasets sections. Let's import a Power BI Desktop file and create dashboards.

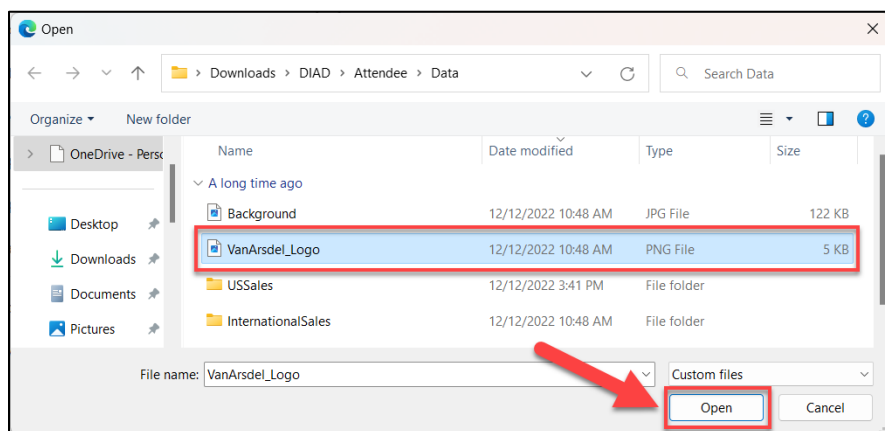
My Workspace is your personal workspace. We need to create a workspace where we can collaborate with team members and distribute content to end-users. To do this we'll create a new workspace.

16. In the pane to the left, select **Workspaces** and then choose **+ New workspace**. The **Create a workspace** dialog box opens.

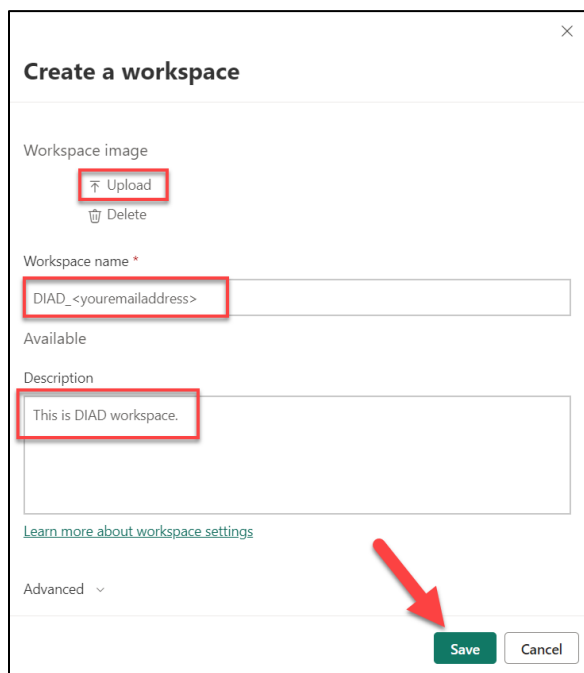


Note: Creating a workspace is a **Pro feature**. If you do not have a Pro license, please choose the trial option.

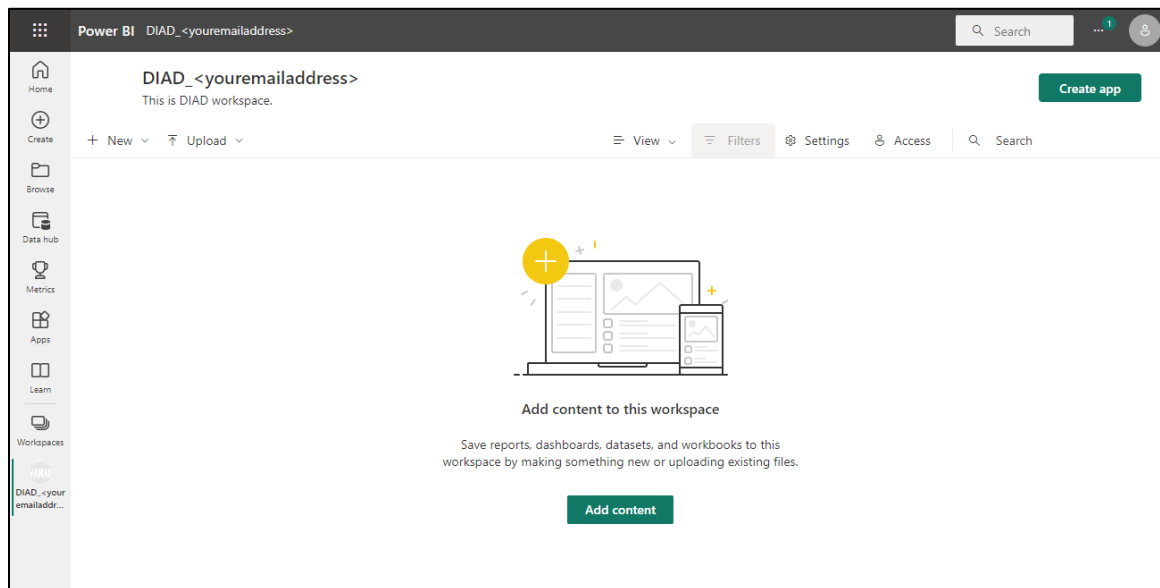
17. In the **Create a workspace** dialog box, select **Upload** to upload a Workspace image.
18. A file browser dialog box opens. Browse to the **DIAD** folder and then the **Data** folder (**DIAD/Data**). Select the **VanArsdel_Logo.png** file and then select **Open**.



19. In the **Name your workspace** text box, type **DIAD_<youremailaddress>**.
20. In the **Description** text box, type **This is DIAD workspace**.
21. Select **Save** to create the workspace.



Note: You are entering your email address as part of the workspace name to keep it unique.



Notice that you have navigated from My Workspace to the workspace just created. You are in the **Welcome** screen with options to discover or create content.

Add content has options to connect to Files, Databases, and Dataflows.

There are two options to publish the Power BI Desktop report we created:

- **Upload** option within the Workspace.
- **Publish** from Power BI Desktop.

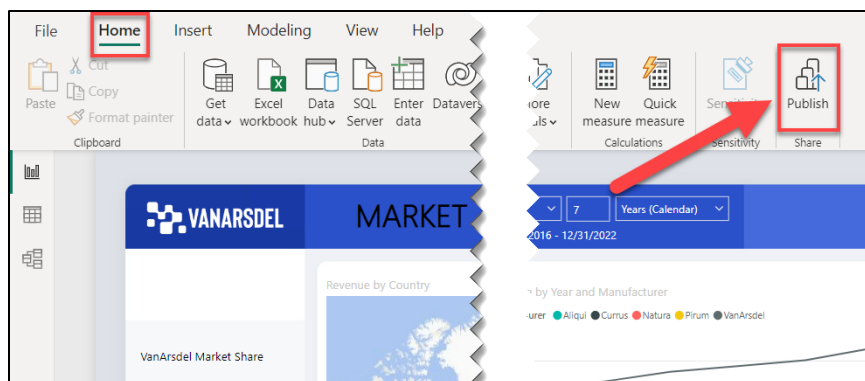
We are going to use the **Publish** from Power BI Desktop option.

Let's publish the report to Power BI Service and then we will come back to the browser.

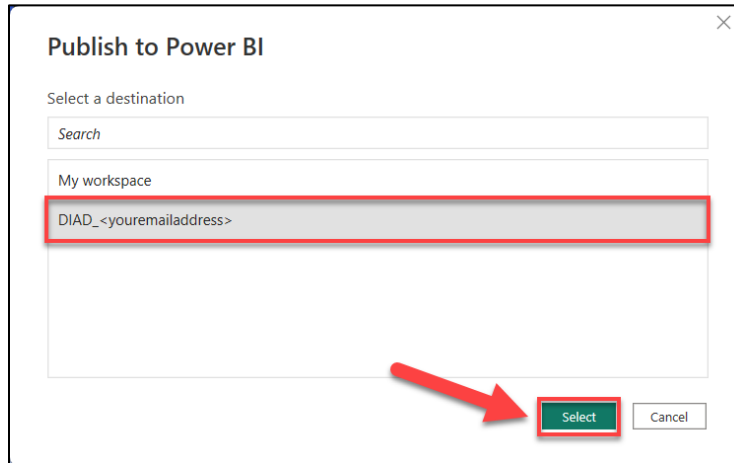
22. Navigate back to the **DIAD Final Report** in the Power BI Desktop that you saved earlier.

23. Ensure **Mobile View** is **off**.

24. From the **Home** tab, select **Publish**.

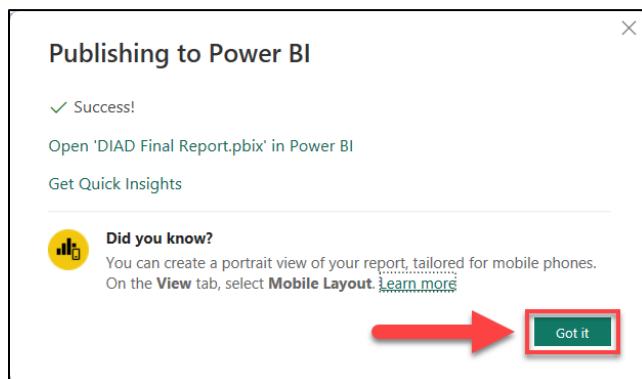


25. If you have not already logged into Power BI, a **Sign in** dialog box opens. Please sign in.
26. Once you are signed in, the **Publish to Power BI** dialog box opens. Select **DIAD_<youremailaddress>** in the dialog box.
27. Choose the **Select** button in the bottom right corner.



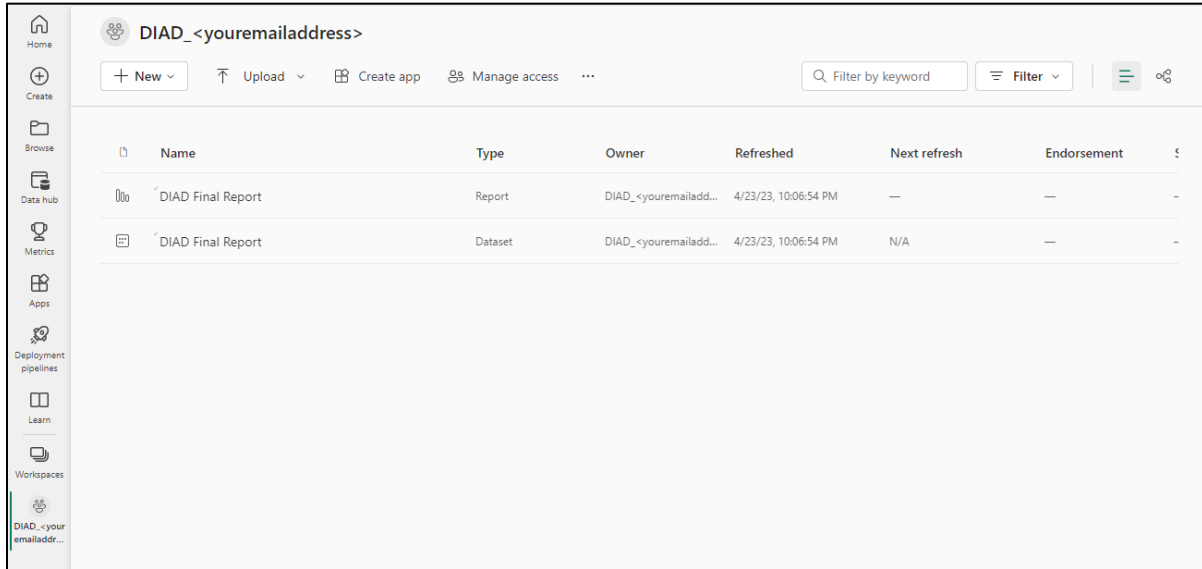
The **Publishing to Power BI** dialog box opens. Once the process is complete, a success message displays.

28. Select **Got it** to close the dialog box.



Now that we have published the report to the Power BI service, let's **navigate back to the browser** and start exploring.

29. Once you are in the browser, navigate to the DIAD_<youremailaddress> workspace, notice that the **DIAD Final Report** dataset and report appear.



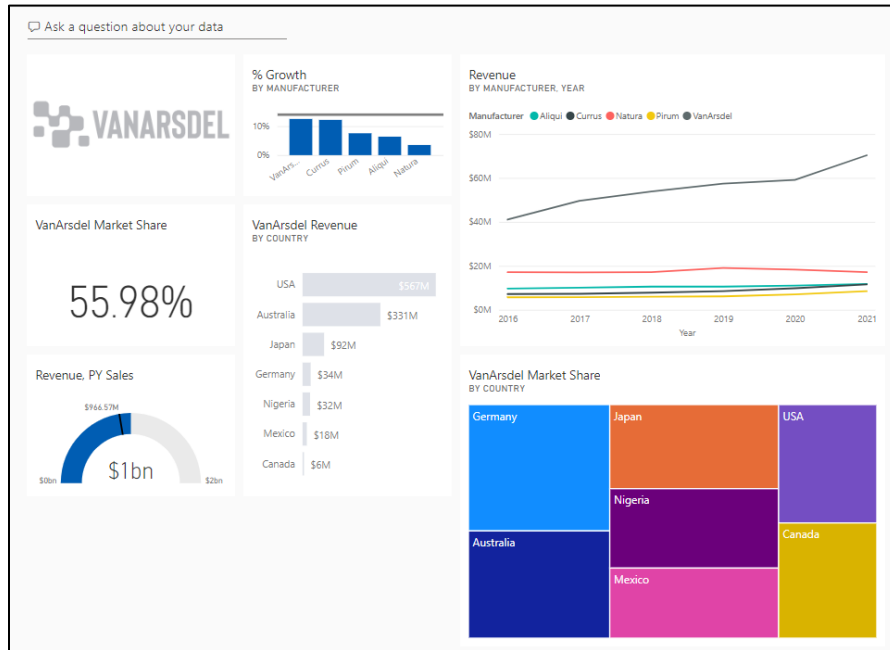
The screenshot displays the Microsoft Power BI workspace interface for 'DIAD_<youremailaddress>'. The left sidebar contains navigation icons for Home, Create, Browse, Data hub, Metrics, Apps, Deployment pipelines, Learn, and Workspaces. The main area shows a table with the following data:

Name	Type	Owner	Refreshed	Next refresh	Endorsement
DIAD Final Report	Report	DIAD_<youremailadd...>	4/23/23, 10:06:54 PM	—	—
DIAD Final Report	Dataset	DIAD_<youremailadd...>	4/23/23, 10:06:54 PM	N/A	—

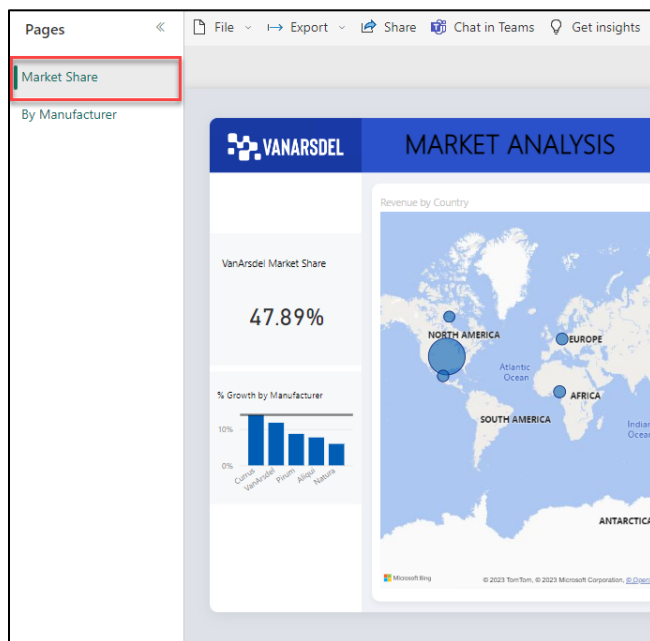
Power BI – Building a Dashboard

In this section, we will create a dashboard that combines data from the **Market Share** report.

By the end of this section, we will have created a dashboard that looks like the figure below.



30. From the newly created workspace select the report called **DIAD Final Report**. You will then be taken to the **Market Share** page of the DIAD Final Report.

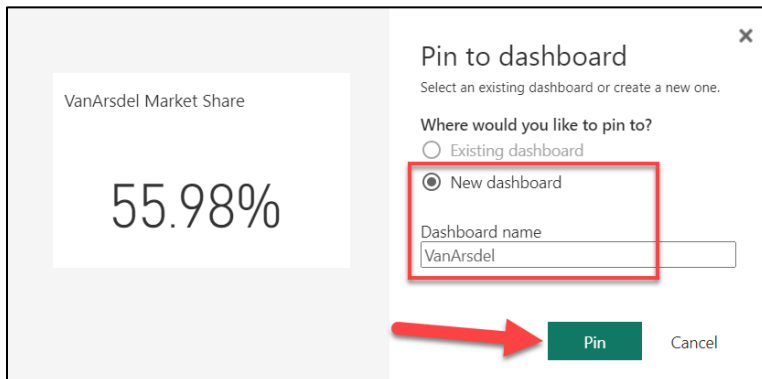


31. Within the **map visual**, enable drill-down by **hovering** over the visual and selecting the down-arrow(s) from the visual header.
32. Once you have selected the arrows, choose **Australia** to drill-down to the **State** level.



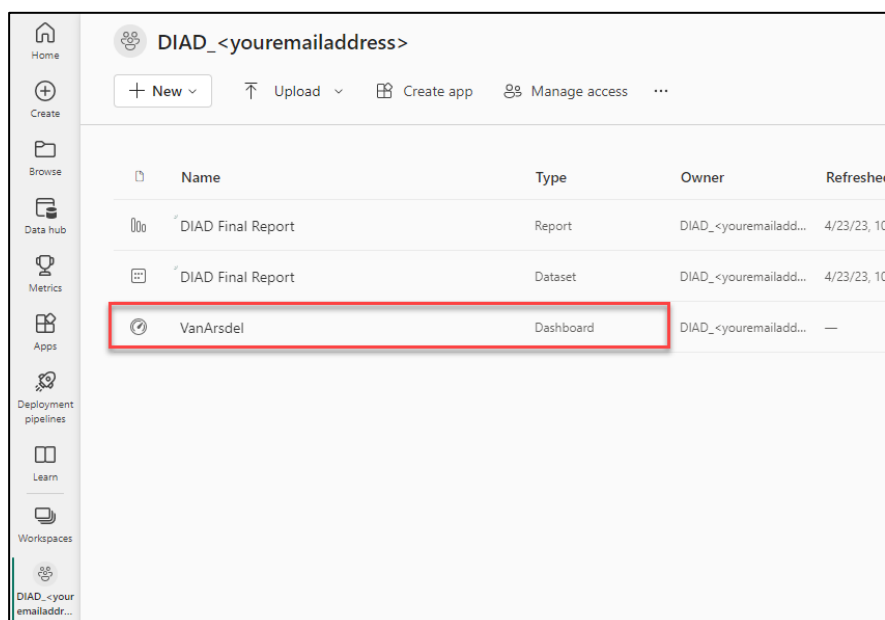
Now let's pin visuals to the dashboard.

33. Hover over the **VanArsdel Market Share** card visual.
34. Select the **pin** icon within the header of the visual. The **Pin to dashboard** dialog box opens.
35. We do not have a dashboard yet. Let's create one. With **New dashboard** selected, enter **VanArsdel** in the **Dashboard name** text box.
36. Then, select **Pin**.

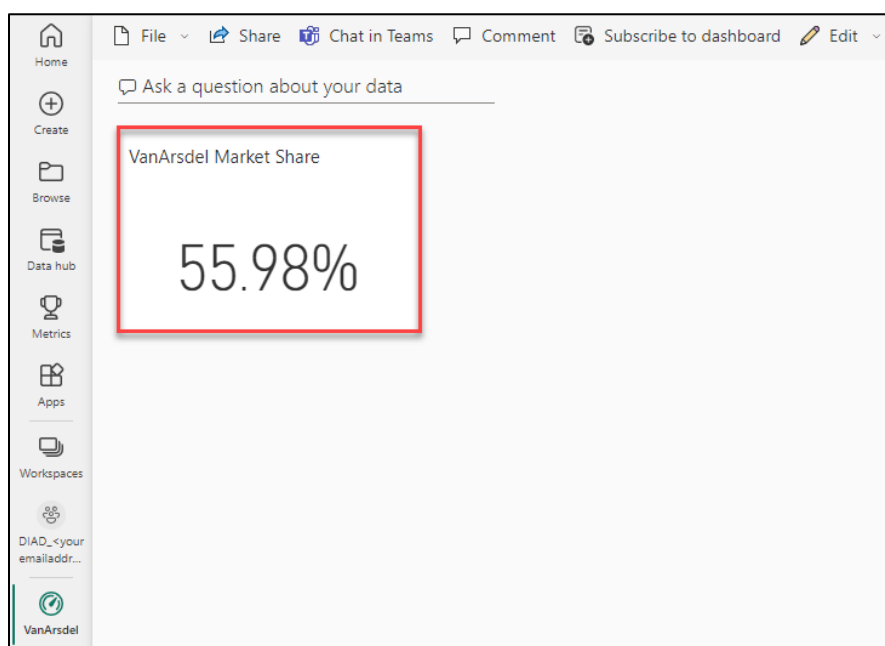


Notice that alert messages are displayed stating the dashboard is ready to view.

37. Navigate back to your workspace and select the **VanArsdel** Dashboard.



Notice the **VanArsdel Market Share** tile is pinned to the dashboard.



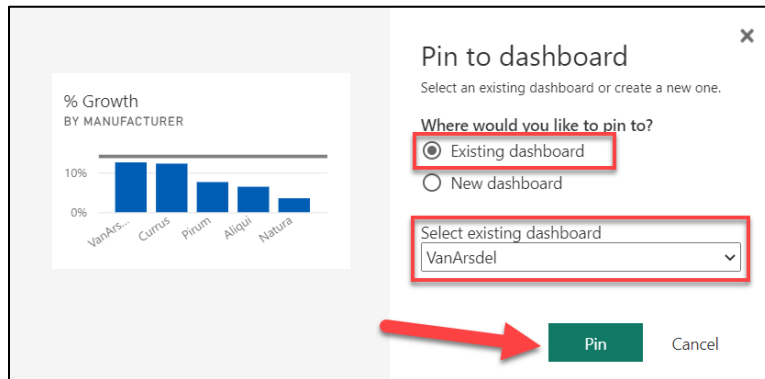
38. Select the **VanArsdel Market Share** tile. Notice that you are navigated to the **DIAD Final Report**.

Note: Dashboard Tiles are not interactive like report visuals we've learned about so far. You also cannot pin things like Slicers to a dashboard since the main purpose of the Slicer is to be interactive.

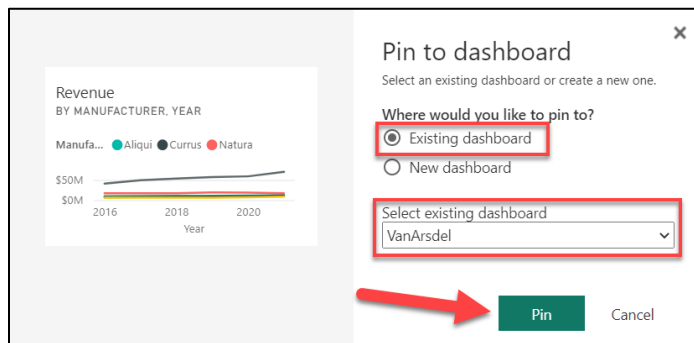
39. Within the navigation pane to the left of the screen, select the **DIAD Final Report** again to find more items to pin to your dashboard.

40. Hover over the **% Growth by Manufacturer** column chart visual.

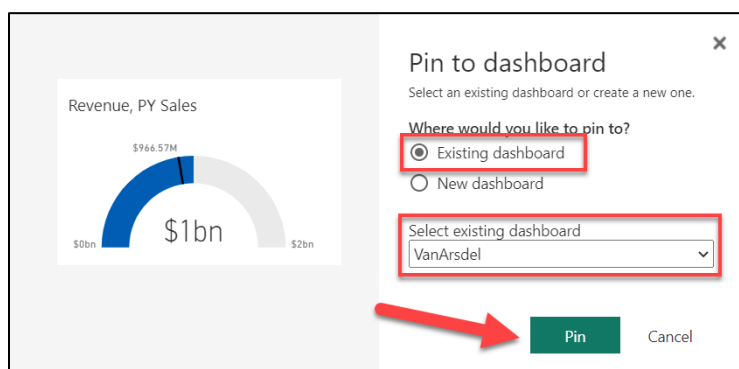
41. Select the **pin** icon within the header of the visual. The **Pin to dashboard** dialog box opens.
42. Make sure that **Existing dashboard** and **VanArsdel** are selected.
43. Select **Pin**.



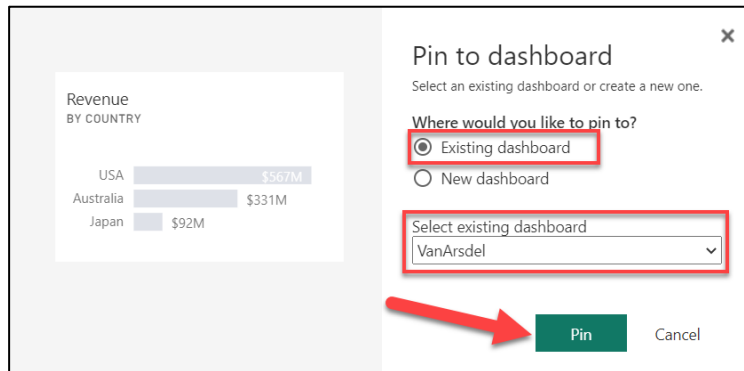
44. Close out the alert notification boxes in the top right corner of the screen.
45. Hover over the **Revenue by Year and Manufacturer** visual.
46. Select the **pin** icon from the header of the visual. The **Pin to dashboard** dialog box opens.
47. Ensure that **Existing dashboard** and **VanArsdel** are selected.
48. Select **Pin**.



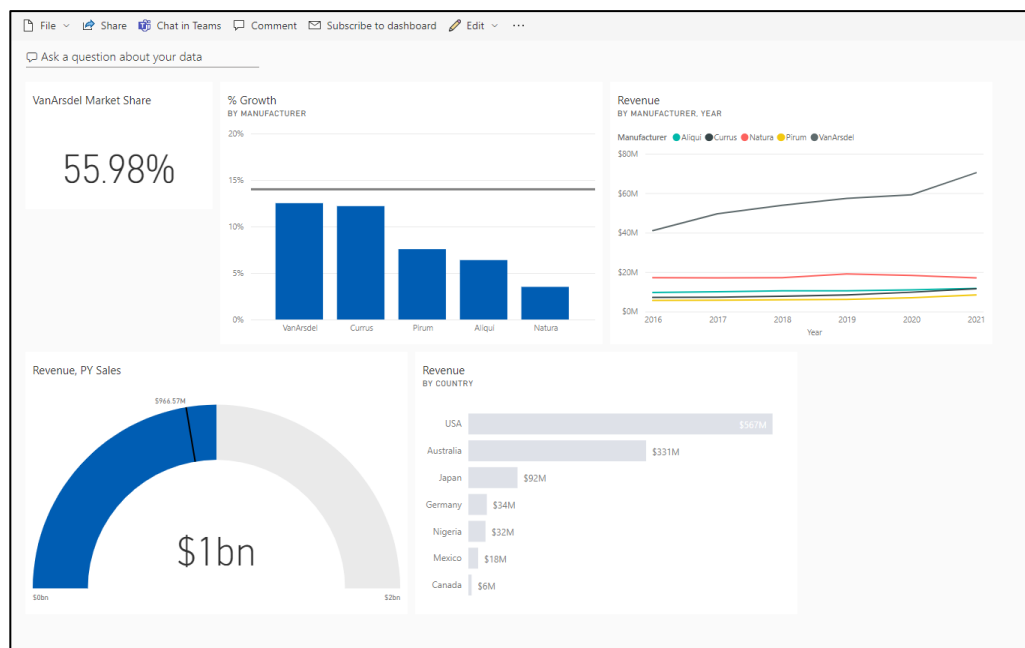
49. Close out the alert notification boxes in the top right corner of the screen.
50. Navigate to the **By Manufacturer** page using the **Pages** menu/pane to the left of the screen.
51. Using the same steps as we have previously, **pin** the **Revenue and PY Sales** gauge visual to the **VanArsdel** dashboard.



52. Pin the **Revenue by Country** bar chart visual to the **VanArsdel** dashboard.
53. Close out the alert notification boxes in the top right.



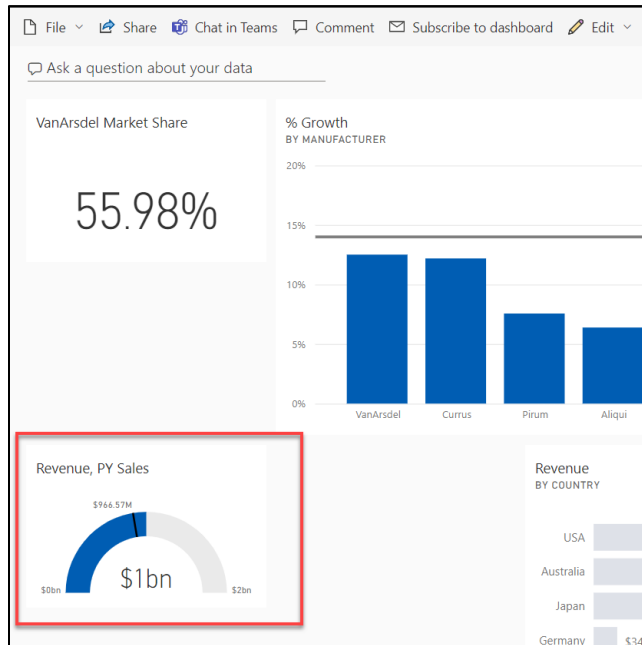
54. Navigate back to the workspace entitled **DIAD_<youremailaddress>**, and then choose **VanArsdel** Dashboard again. Notice that all the visuals are pinned as tiles to the dashboard.



You will see the visuals on the dashboard like in the figure above. Each visual on the dashboard is called a **tile**. The tiles represent the data chosen and are kept up to date as the data in the data model updates. Tiles are not interactive.

Let's organize the dashboard.

55. Resize and move the **gauge** tile as shown in the figure below. To resize the visual, select the bottom right-hand corner and drag to the desired size.

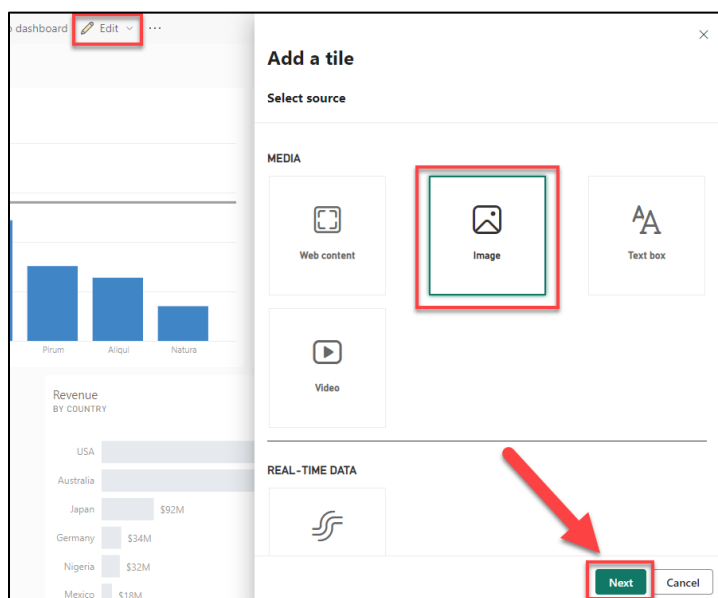


Tiles can be of various sizes (1x1 to 5x5).. As you are dragging, note the gray shadow which indicates the size of the tile when you stop dragging.

56. Select the **Edit** dropdown from the ribbon at the top of the screen and choose **Add tile**. The **Add tile** dialog box opens.

57. Select **Image** as the source.

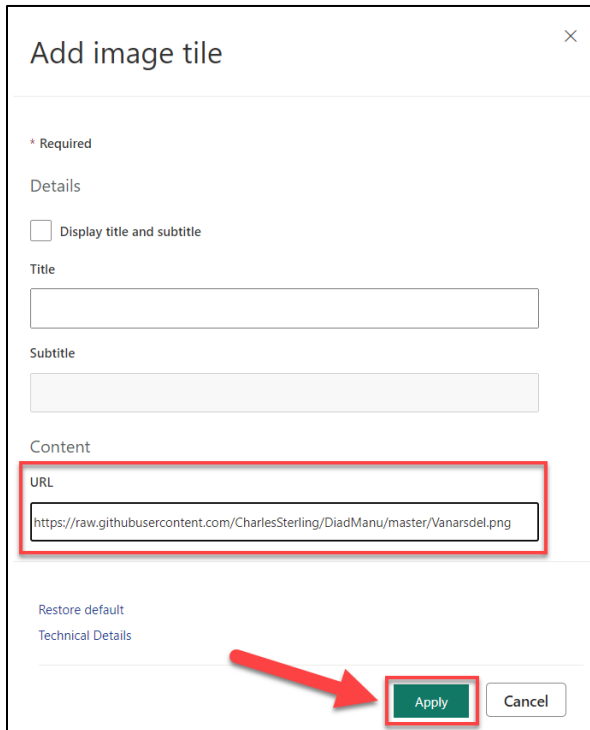
58. Choose **Next**.



59. In the **URL** text box of the **Add image tile** dialog, type the following URL:
<https://raw.githubusercontent.com/CharlesSterling/DiadManu/master/Vanarsdel.png>

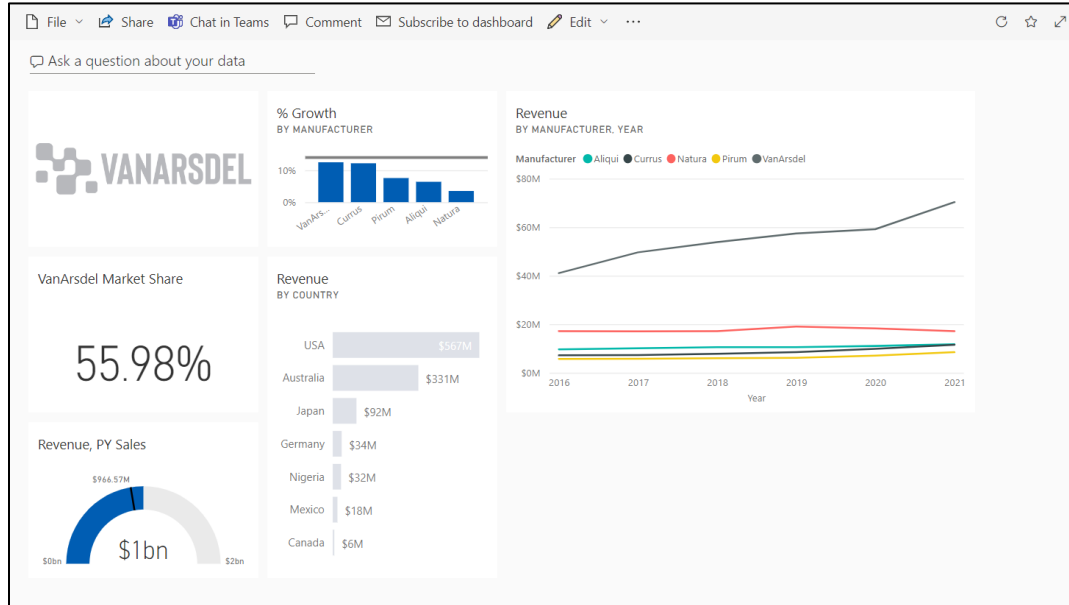
Note: *The URL is case sensitive.*

60. Then, select **Apply** at the bottom of the dialog.



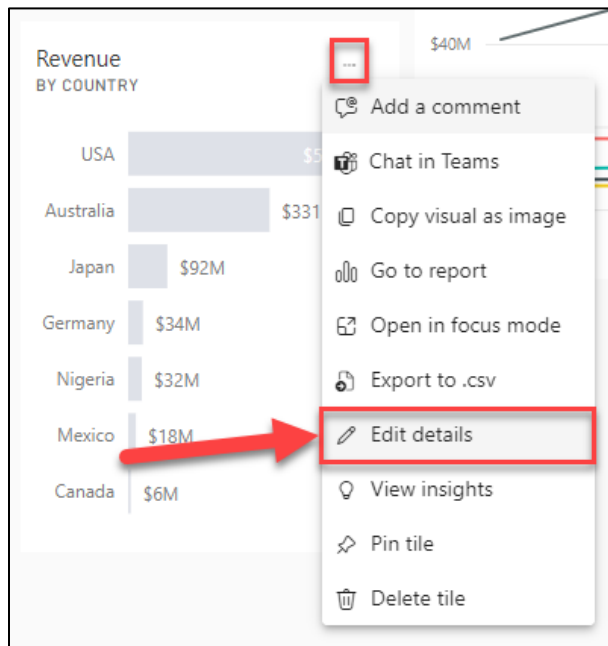
Notice that a new tile with the **VanArsdel** logo is added to the dashboard.

61. **Resize** and **rearrange** the tiles as shown in the figure below.



The **Revenue by Country** tile shows data for Revenue by Country for VanArsdel. Let's **rename** it.

62. Hover over the **Revenue by Country** tile.
63. Select the **ellipse** in the top right corner of the tile.
64. Select **Edit Details**. The **Tile Details** dialog box opens.
65. Change the **Title** to **VanArsdel Revenue**.
66. Select **Apply**.



The screenshot shows the 'Tile details' dialog box with the following fields and options:

- Title:** VanArsdel Revenue (highlighted with a red box)
- Subtitle:** by Country
- Functionality:**
 - ☒ Display title and subtitle
 - ☐ Display last refresh time
 - ☐ Set custom link
- Link type:** Restore default, Technical Details
- Buttons:** Apply (highlighted with a red box and a red arrow), Cancel

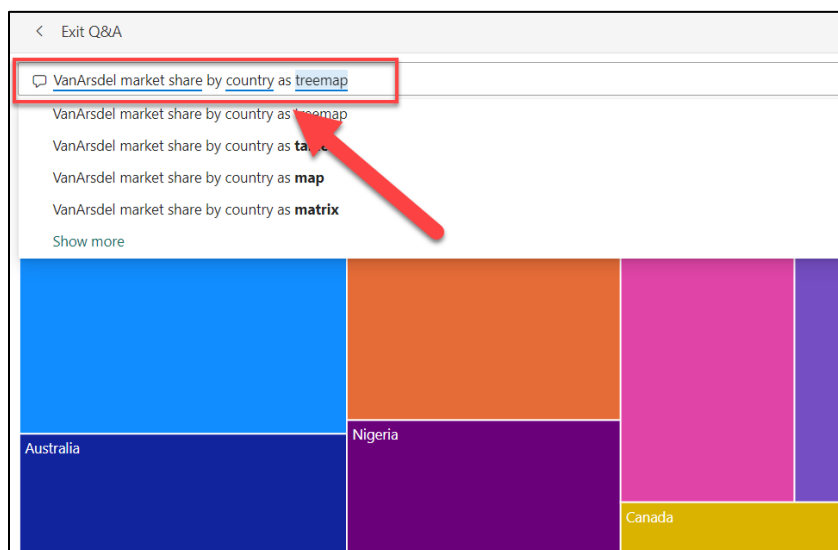
Now let's create a visual that represents **Market Share by country**.

Notice on the top of the visual, there is an option to **Ask a question about your data**. This is like **Ask a question** in the desktop.

67. Select the **Ask a question about your data** text box at the top of the page. You will then be taken to a **Q&A** page; start typing **VanArsdel market share** in the text box at the top of the page. Notice that a card visual is created.

68. Continue typing **VanArsdel market share by country**. Notice that a bar chart is created.

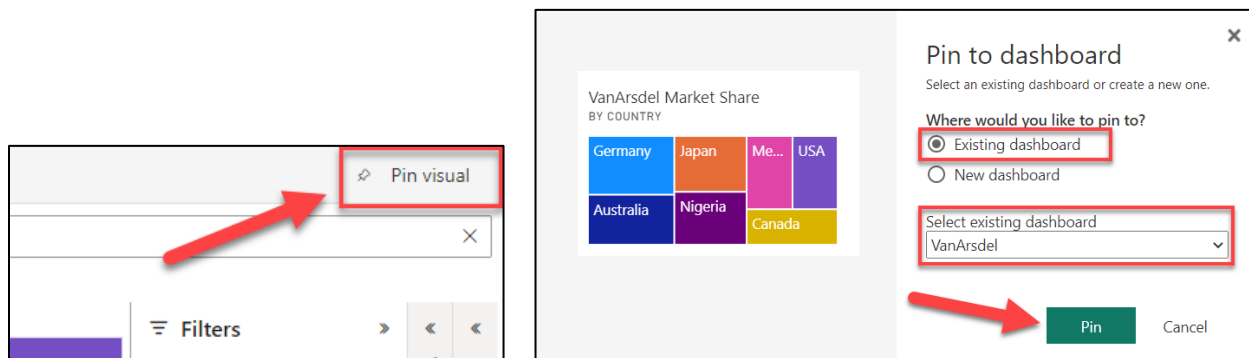
69. Continue typing **VanArsdel market share by country as treemap**. Notice that a treemap visual is created.



Note: Remember that we renamed our tables. One of the reasons we did this was to make them user friendly for Q&A.

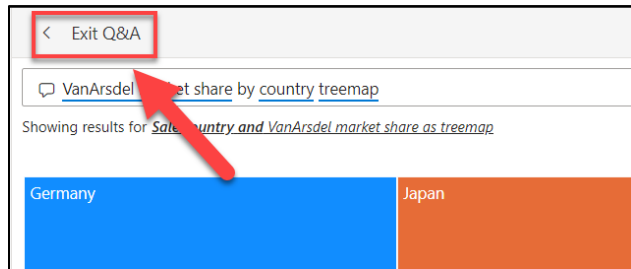
70. In the top right corner of the screen, select **Pin Visual**.

71. The **Pin to dashboard** dialog box opens. Ensure that **Existing dashboard** is selected, then select **Pin** to pin the visual to the **VanArsdel** dashboard.

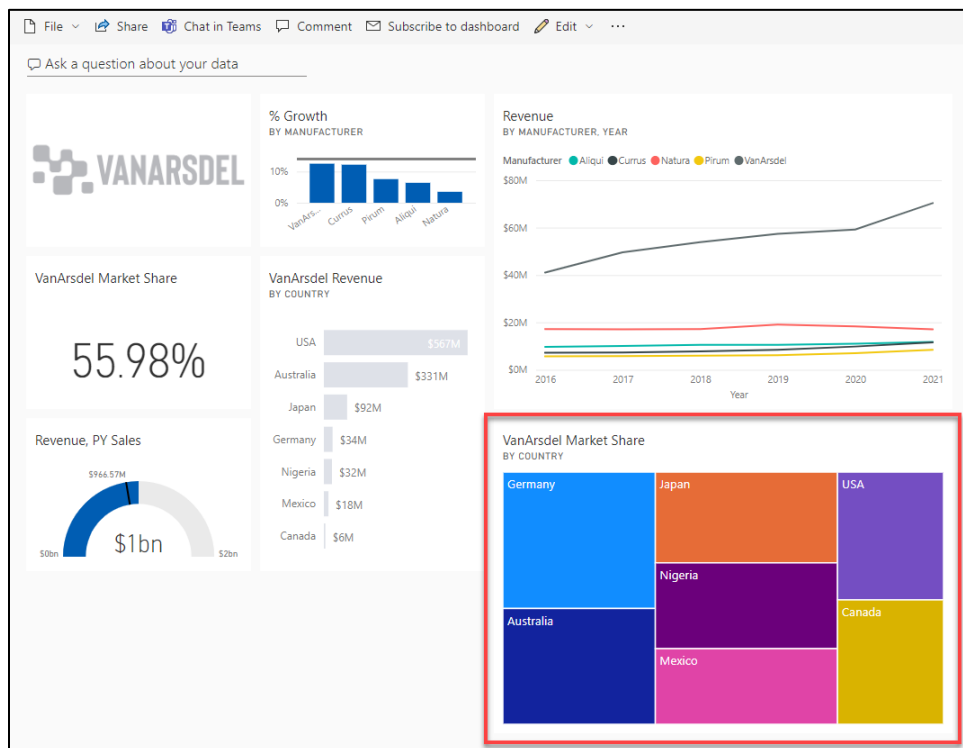


72. Close the alert dialog boxes.

73. Select **Exit Q&A** in the top left corner of the page to navigate back to the dashboard.



Notice that the treemap visual is added as tile to the dashboard. Selecting the treemap visual will navigate you back to the Q&A section.



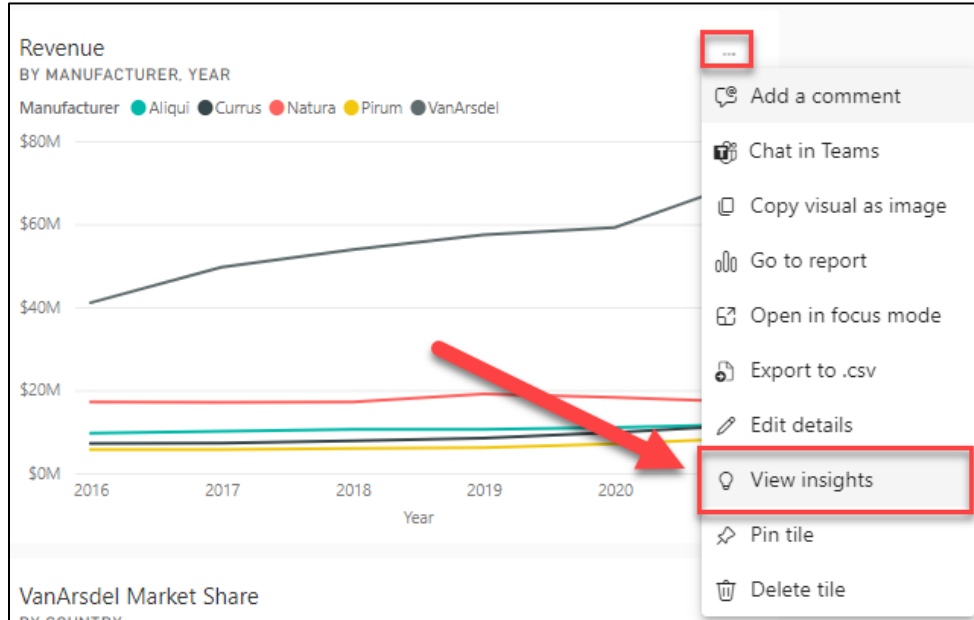
Power BI quickly searches different subsets of your dataset while applying a set of sophisticated algorithms to discover potentially interesting insights. You can run insights against a dataset or a dashboard tile.

Let's generate **insights** on a dashboard tile. When we run insights on a dashboard tile, instead of searching for insights against an entire dataset, the search is narrowed to the data used to create a single dashboard tile. This is often referred to as **scoped insights**.

74. Hover over the **Revenue by Manufacturer** line chart on the dashboard.

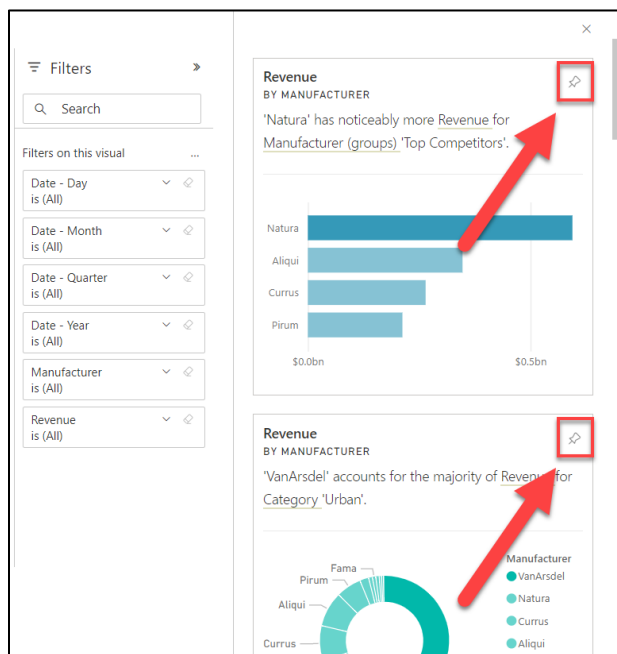
75. Select the **ellipse** on the top right corner of the line chart.

76. Choose **View Insights**.

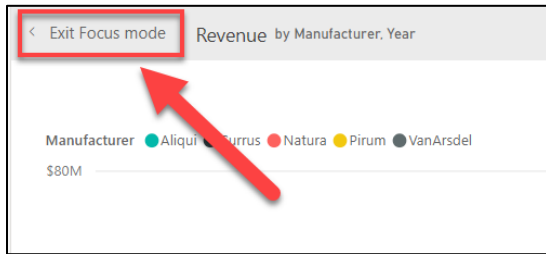


You will be navigated to **Focus mode** for the line chart.

77. Scroll on the Insights pane to the right of the screen to review the various insights Power BI can generate. Notice that there is an option to pin insight visuals to the dashboard.

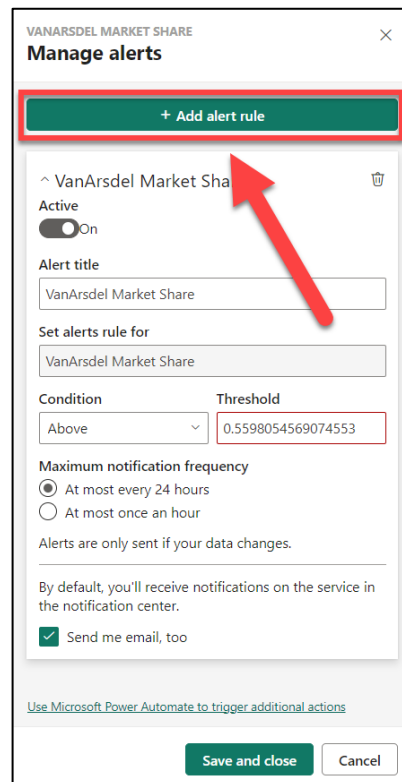
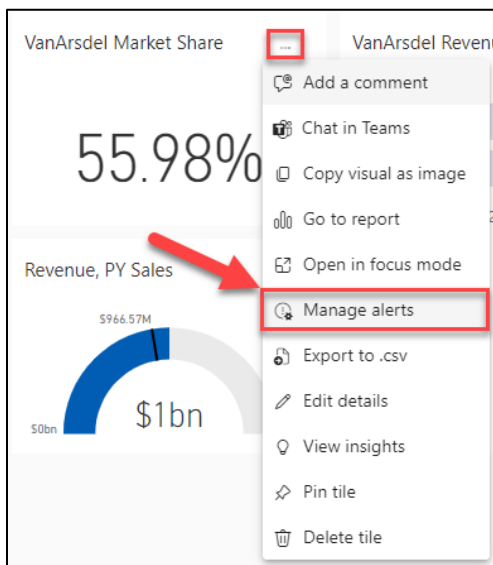


78. Select **Exit Focus mode** in the top left corner of the page to navigate back to the dashboard.



We want to be notified when **VanArsdel's Market Share** goes **above** or **below** a threshold. We can set up **alerts** to achieve this.

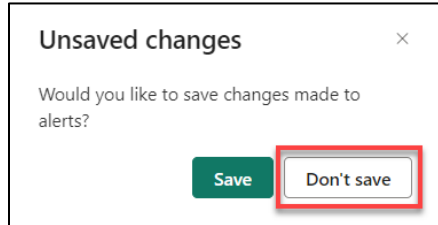
79. Hover over the **VanArsdel Market Share** card tile.
80. Select on the **ellipse** in the top right corner of the tile.
81. Choose **Manage alerts**. The **Manage alerts** dialog box opens.
82. Select **Add alert rule**.



Notice that you can add **Above** or **Below** threshold. You can also set the notification frequency. This is just an introduction to managing alerts. Complete functionality is not covered in this lab.

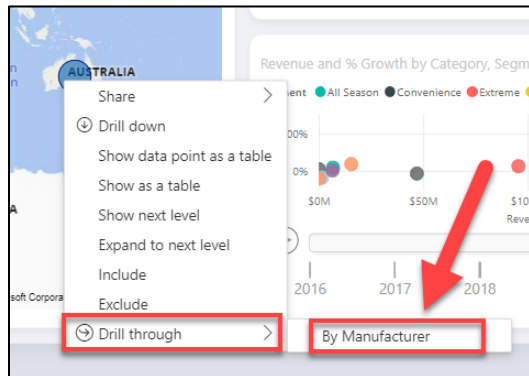
83. Select **Cancel** to close the dialog box.

84. From the **Unsaved changes** alert dialog box, select **Don't Save**.



85. Select the **VanArsdel Market Share** card visual tile to navigate to the report.

86. Within the **Revenue by Country and State** map visual, ensure it is at the **Country** level (you may need to drill up from the State level to the Country level). Right-click on the **Australia** bubble within the map, then choose **Drill through**, and then select **By Manufacturer**.



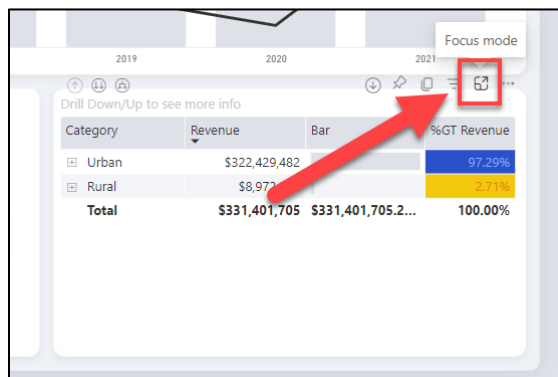
You will then navigate to the **By Manufacturer** page of the report with the **Australia** filter applied to the report page.

87. Hover over the **matrix** visual.

88. Select the **focus mode** icon on the top right corner of the visual.

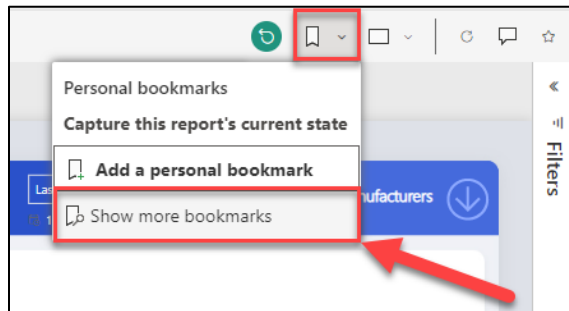
89. Select the **double-down arrow** to drill down.

90. Then, select the **Back to report** button in the top left hand corner of the page.



Segment	Revenue	Bar	%GT Revenue
Convenience	\$114,488,807		34.55%
Extreme	\$105,346,585		31.79%
Moderation	\$101,958,252		30.77%
Productivity	\$8,899,101		2.69%
Regular	\$635,837		0.19%
Select	\$73,123		0.02%
Total	\$331,401,705	\$331,401,705.2...	100.00%

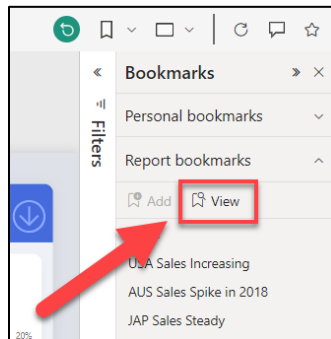
91. From the menu in the top right corner of the screen, select **Bookmarks** and then choose **Show more bookmarks**. The **Bookmark** pane opens on the right. There are two options: **Personal** bookmarks and **Report** bookmarks.



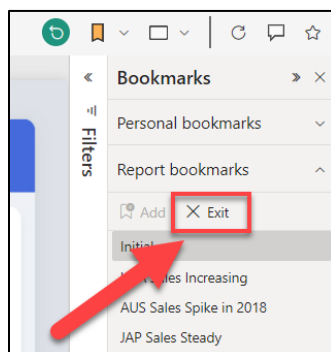
- **Personal bookmarks** on the report are ones which the consumer can create on their own.
- **Report bookmarks** are the bookmarks the report author created (we did this in Power BI Desktop).

92. Select **View** under the **Report** bookmarks section of the bookmarks pane.

Notice that you can view and navigate through the bookmarks using the arrow at the bottom of the screen. This behavior is like in Power BI Desktop.

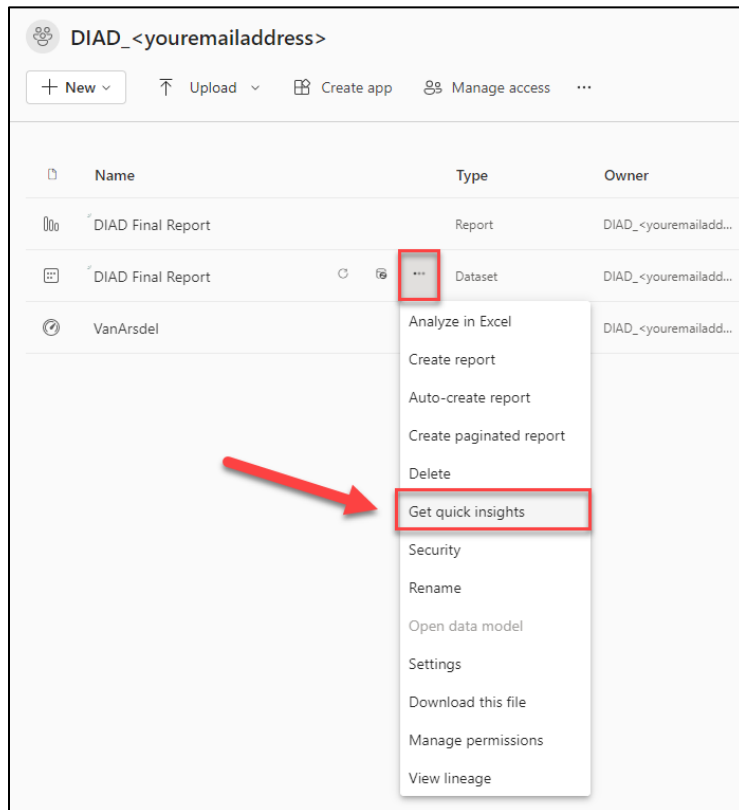


93. Select **Exit** under the **Report** bookmarks section of the pane to close it.



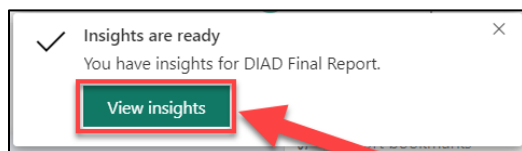
Power BI provides an option to get quick insights into the complete dataset.

94. Navigate back to the Workspace you created earlier in the lab using the menu to the left of the screen.
95. Once in the workspace find the Dataset called **DIAD Final Report** and select the **ellipse**.
96. From the menu, select **Get quick insights**.

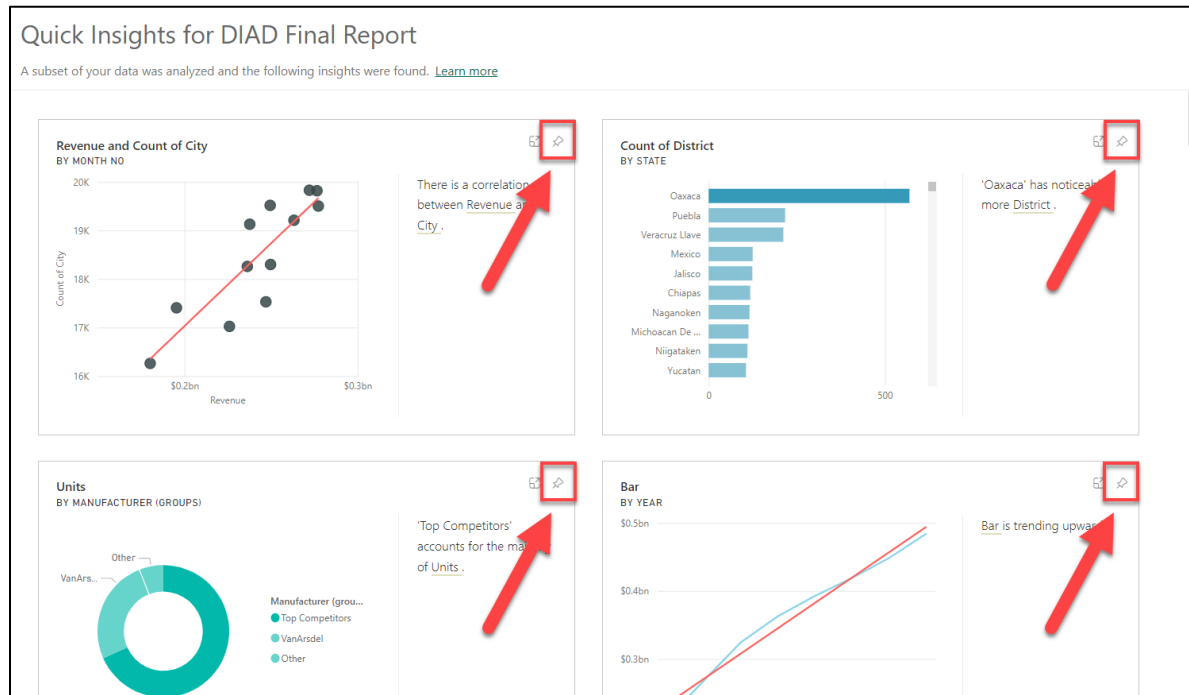


It might take a few minutes for the insights to be created. Once insights are ready, a message appears in the top right corner.

97. From the **Insights are ready** alert dialog box, select **View insights**.



A quick insights report is displayed based on the dataset. This provides insights into data you may have missed and helps to get a quick start on creating dashboards. Hovering over each report provides an option to **Pin it** to a dashboard.

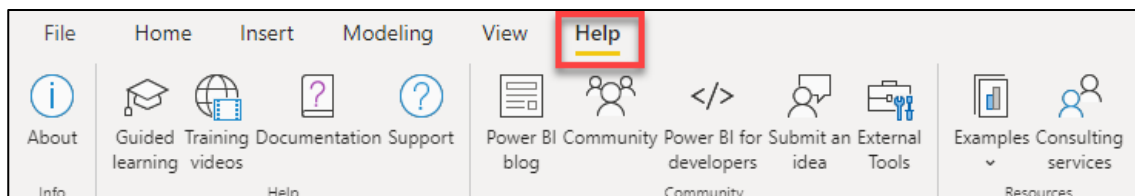


You've now completed Lab four!

Throughout this lab, you have learned how to apply conditional formatting, add a logo to the manufacturer filter, import a custom visual, and apply a custom theme to the report. You also learned how to add bookmarks to tell a story about the report.

References

Dashboard in a Day introduces you to some of the key functions available in Power BI. In the ribbon of the Power BI Desktop, the Help section has links to some great resources.



Here are a few more resources that will help you with your next steps with Power BI.

- Getting started: <http://powerbi.com>
- Power BI Desktop: <https://powerbi.microsoft.com/desktop>
- Power BI Mobile: <https://powerbi.microsoft.com/mobile>
- Community site <https://community.powerbi.com/>
- Power BI Getting started support page: <https://support.powerbi.com/knowledgebase/articles/430814-get-started-with-power-bi>
- Support site <https://support.powerbi.com/>
- Feature requests <https://ideas.powerbi.com/forums/265200-power-bi-ideas>
- New ideas for using Power BI https://aka.ms/PBI_Comm_Ideas
- Power BI Courses <http://aka.ms/pbi-create-reports>
- Power Platform <https://powerplatform.microsoft.com/en-us/instructor-led-training/>
- Power Apps [Business Apps | Microsoft Power Apps](#)
- Power Automate [Power Automate | Microsoft Power Platform](#)
- Dataverse [What is Microsoft Dataverse? - Power Apps | Microsoft Docs](#)

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