Microsoft Power Platform

Power BI Dashboard in a Day Lab 4

Maintained by: Microsoft Corporation

Contents

Introduction

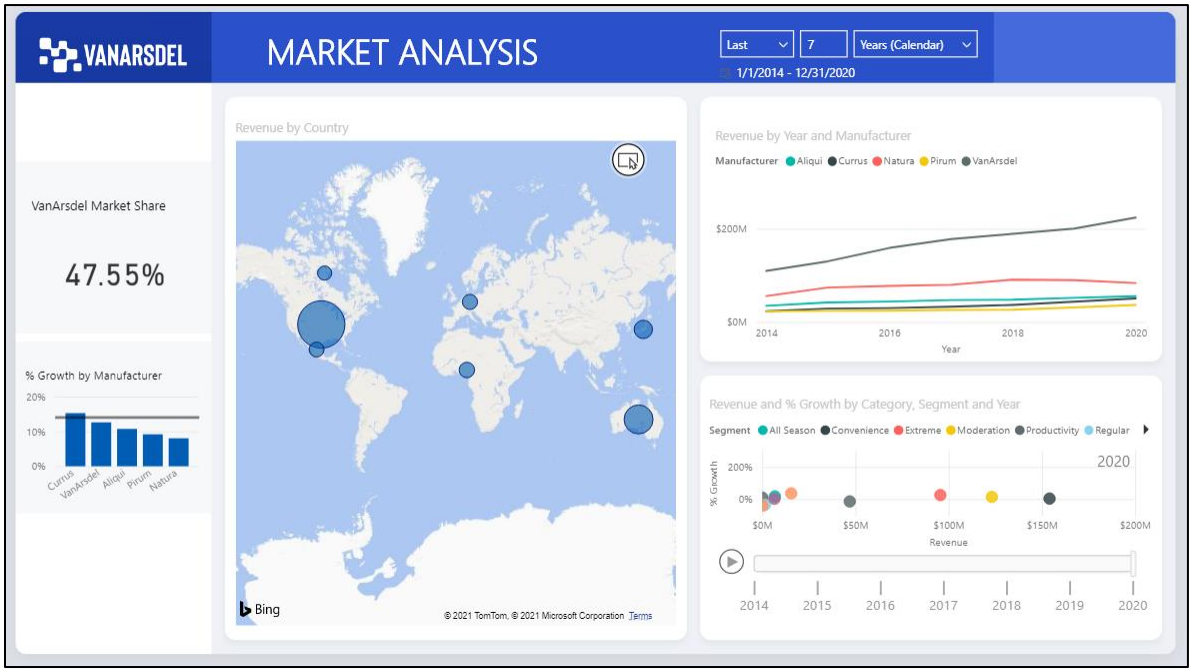
This document is lab four out of five total labs.

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.

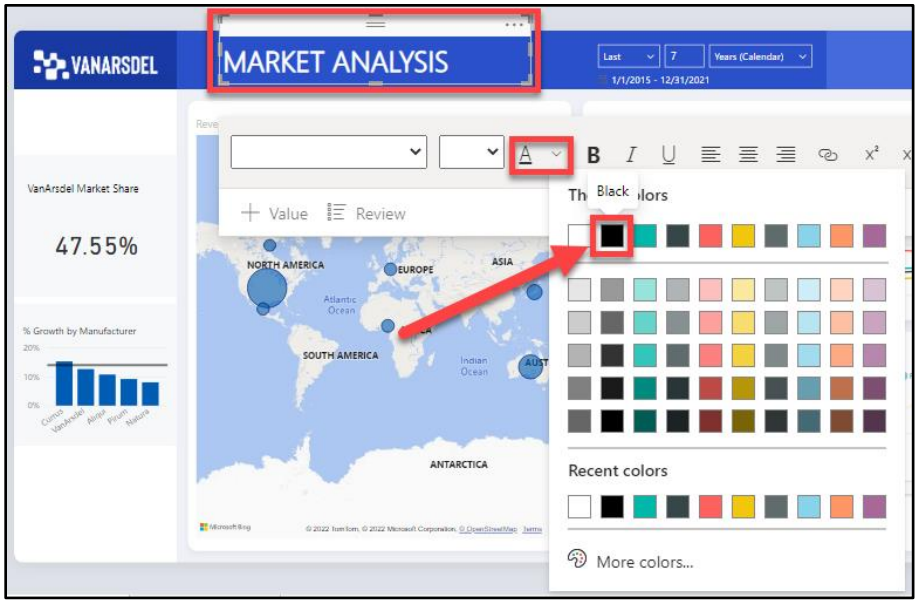
Power BI Desktop – Creating a mobile view



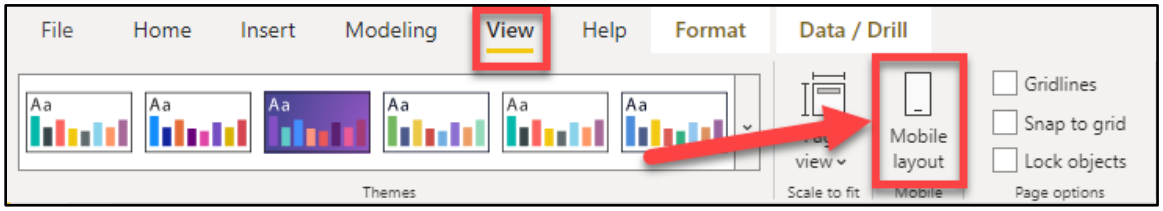
1. Navigate to the **DIAD** folder and then to the **Reports** folder (/DIAD/Reports) folder.
2. Open the **DIAD Final Report.pbix** file.

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**.

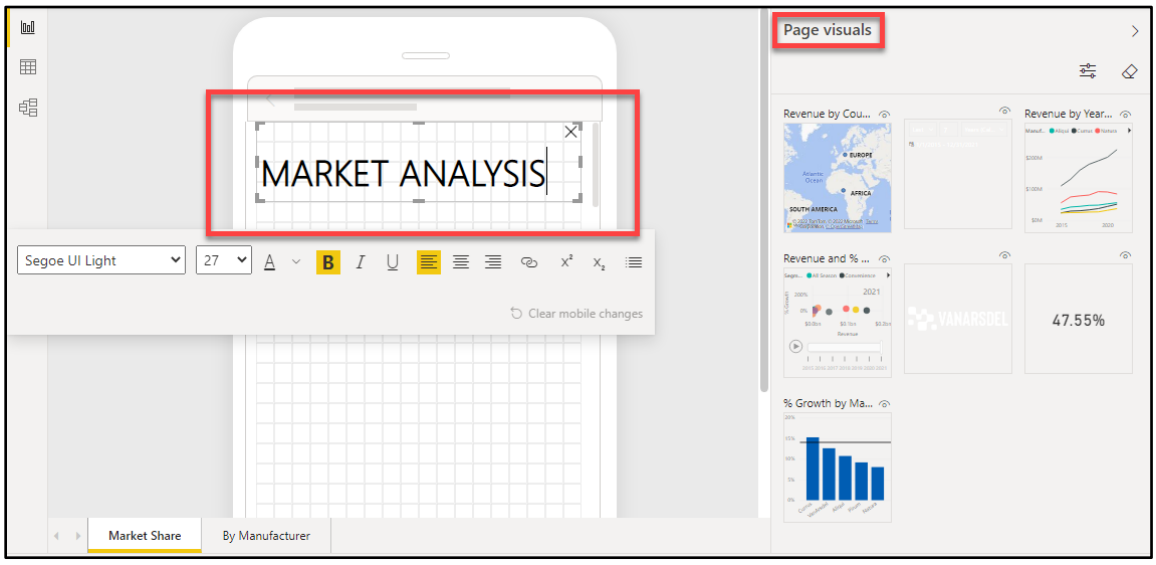


4. Select the **View** tab from the ribbon and then select **Mobile layout**.

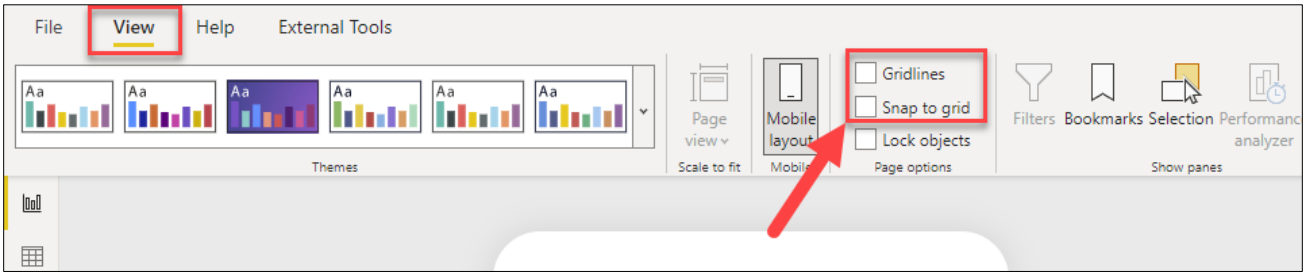


Note: A small pop-up window may open introducing you to the **mobile-only formatting**. Select **Got it** to continue and close out the pop-up window.

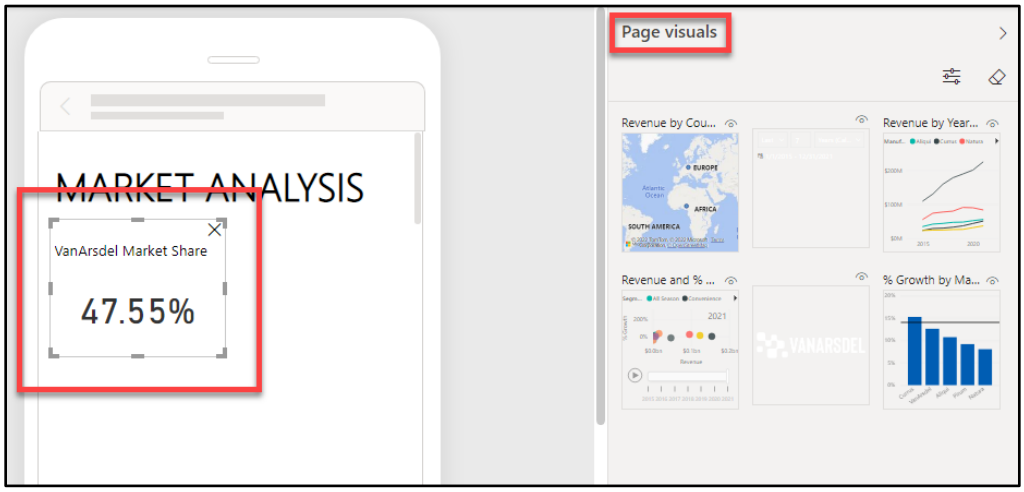
5. From the **Page visuals** pane, drag the **Market Analysis** title to the top of the phone layout. **Resize** and **move** the title to look similar to the one in the figure below.



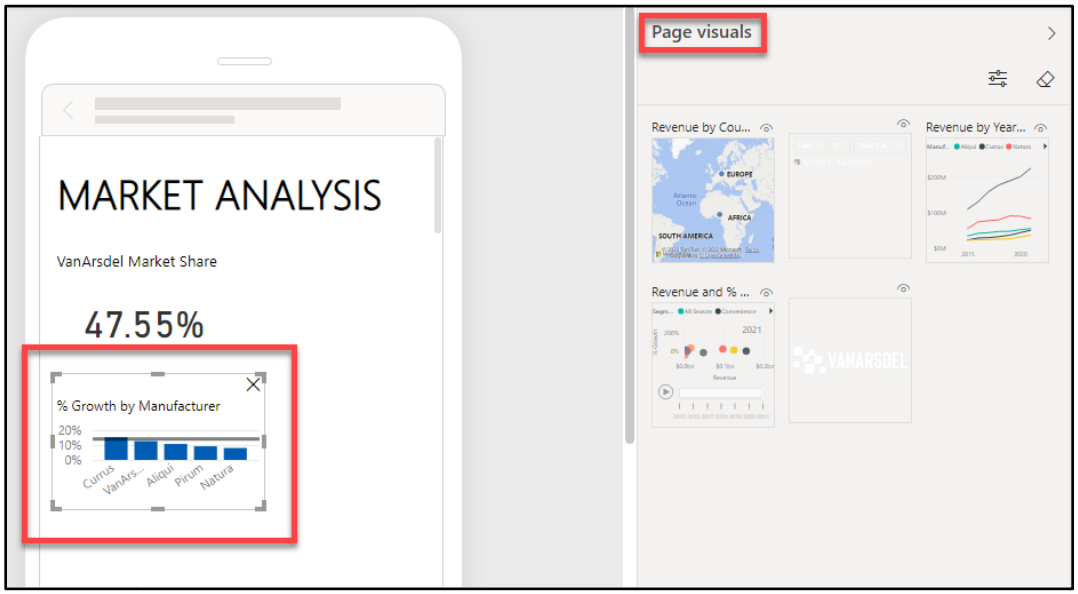
6. Select the **View** tab and turn off **Gridlines** and **Snap to Grid** and turn off the **Selection** pane.



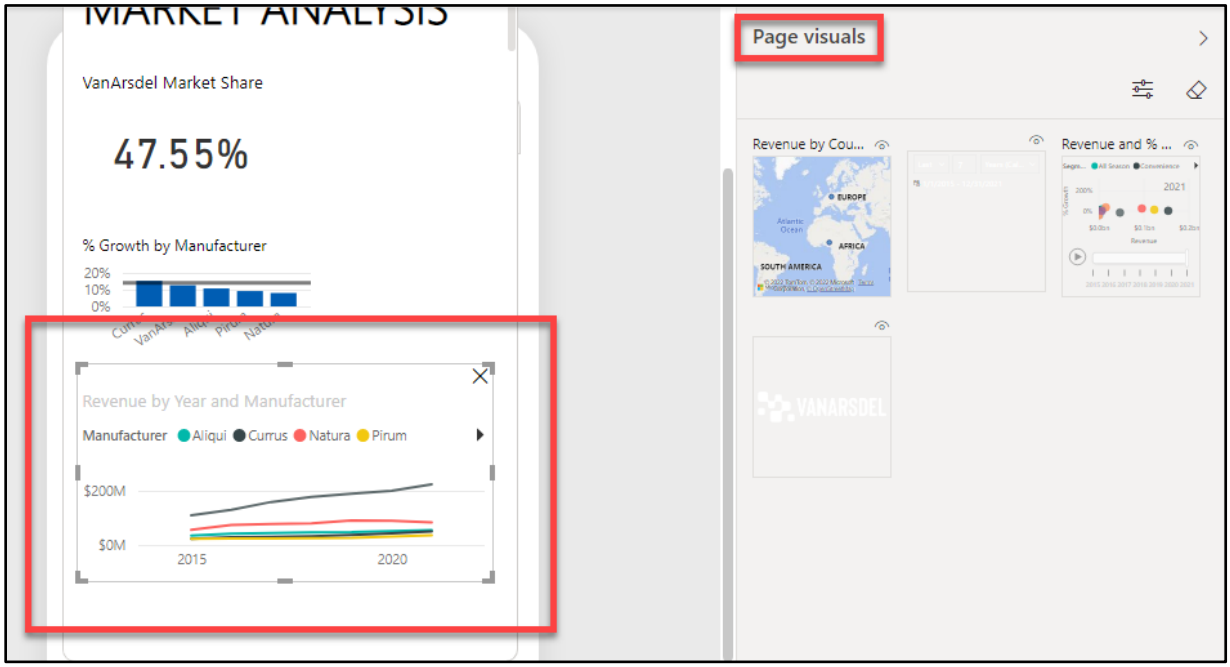
7. Drag the **VanArsdel Market Share** card from the **Page visuals** pane to below the Market Analysis title on the mobile layout. Then, **resize** the **Market Share** card to look similar to the one shown in the figure below.



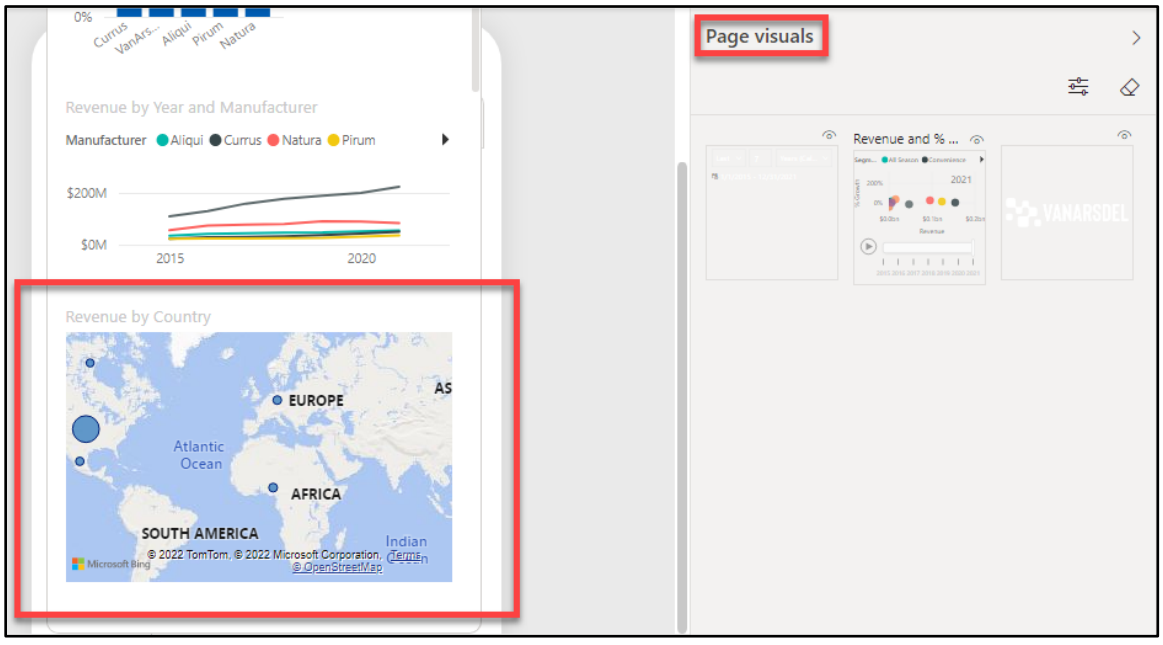
8. Drag the **% Growth by Manufacturer** chart from the **Page visuals** pane to be placed below the VanArsdel Market Share card on the mobile layout. **Resize** the chart to look similar to the one shown in the figure below.



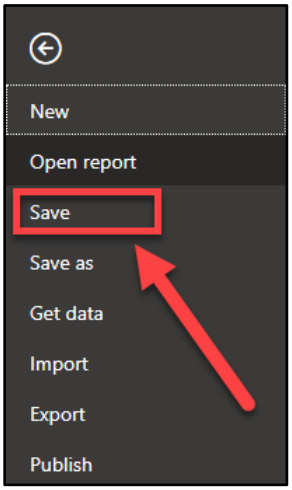
9. Drag the **Revenue by Year and Manufacturer** line chart from the **Page visuals** pane to below the % Growth by Manufacturer card on the mobile layout. **Resize** the Revenue by Year and Manufacturer line chart to stretch across the phone layout to look similar to the one shown in the figure below.



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.



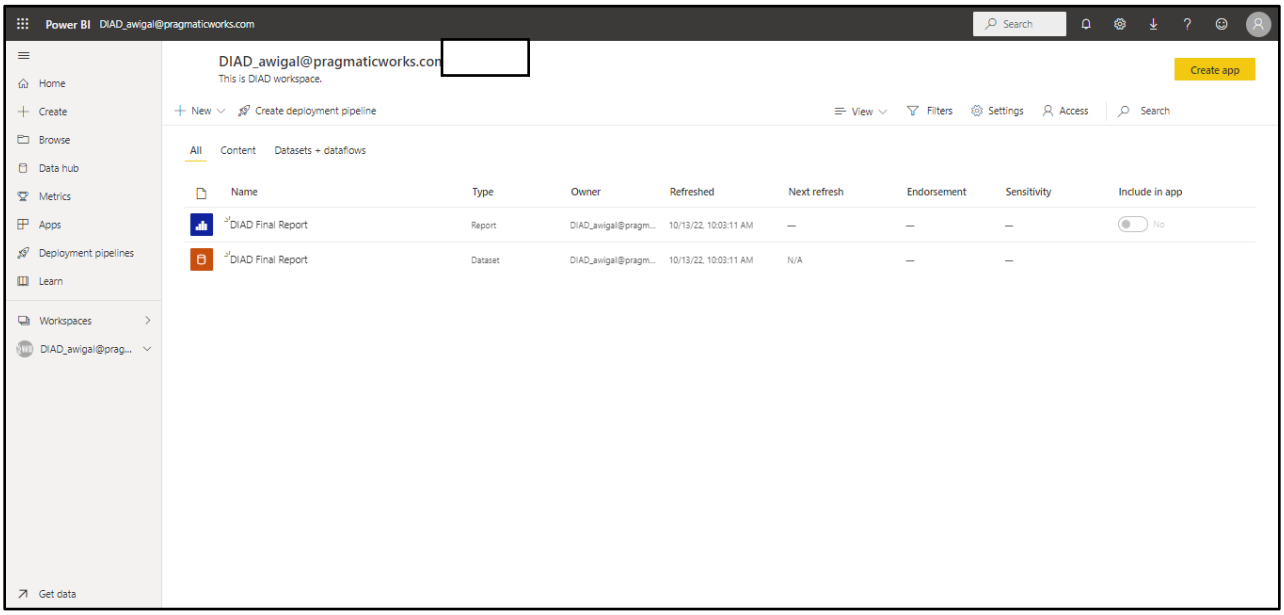
11. Select the **File** tab from the ribbon. From the menu of options, select **Save** so that you workbook saved.



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.

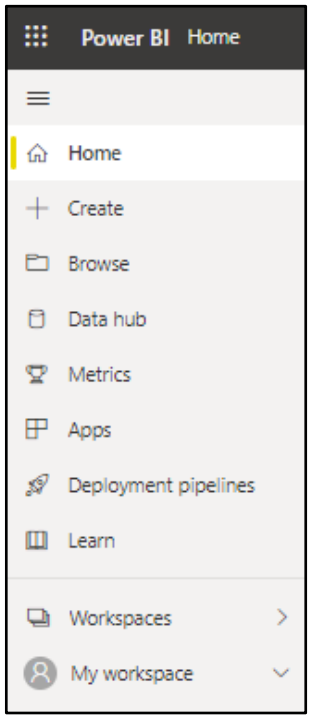
Power BI Service – Publishing Report



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. If the navigation pane to the left is collapsed, select the  (menu) icon below Power BI in the top left corner of the screen to expand the navigation pane.

The following options are listed in the navigation pane:

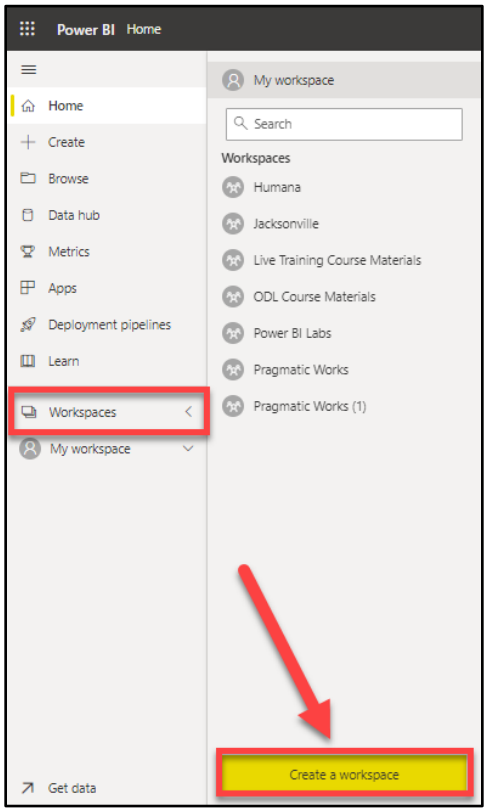
- **Home**: This is a one-stop-shop for all your content. It lists your favorite and recent content such as reports, dashboards, and apps. It also shows the most recent content that was shared with you.
- **Create**: Allows you to add data manually or use an already existing dataset.
- **Browse**: Allows 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.
- **Deployment pipelines**: Allows the user to manage workspace content with deployment stages.
- **Workspaces**: Lists all the workspaces you are assigned. By default, you are assigned to **My Workspace**.

- **My workspace**: You personal repository for Power BI collateral that can only be viewed by you.

Select the down arrow next to **My Workspace**. Notice the Dashboards, Reports, Workbooks, and Datasets sections. Let's import a Power BI Desktop file and create dashboards.

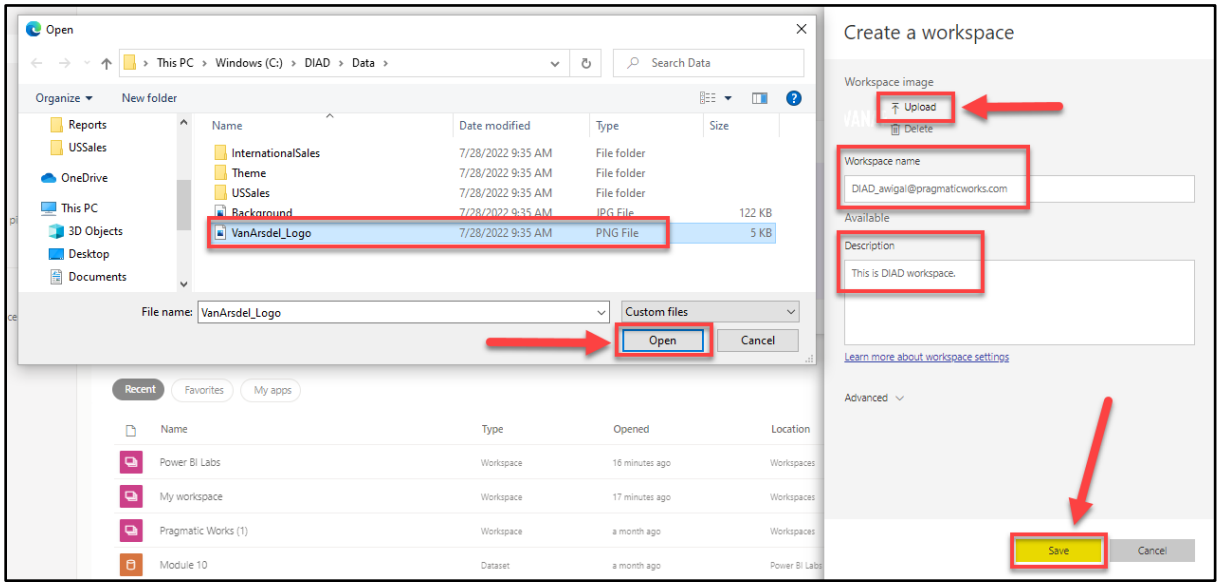
My Workspace is your personal workspace. We need to create a workspace where we can collaborate with team members and distribute content to end-users. To do this we'll create a new workspace.

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

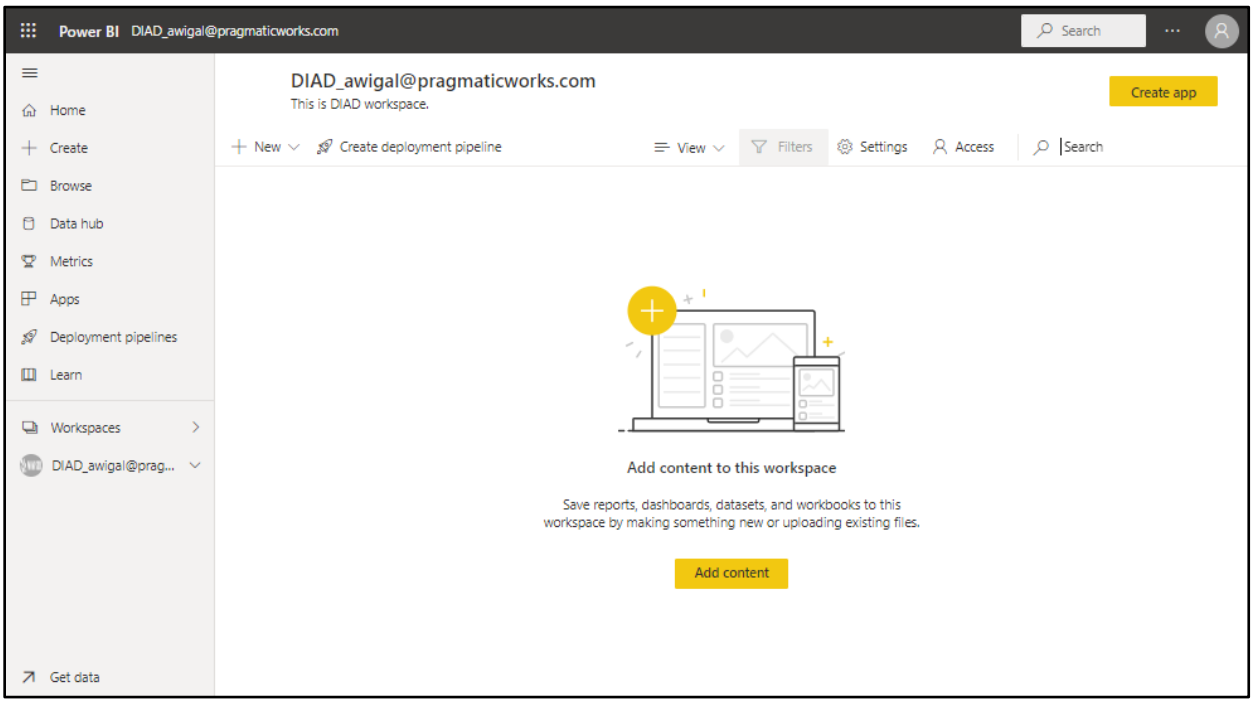


Note: Creating workspace is a **Pro feature**. If you do not have a Pro license, please choose the trial option.

17. In the **Create a workspace** dialog box, select **Upload**.
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 area, type **DIAD_<youremailaddress>**.
20. In the **Description** text area, 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:

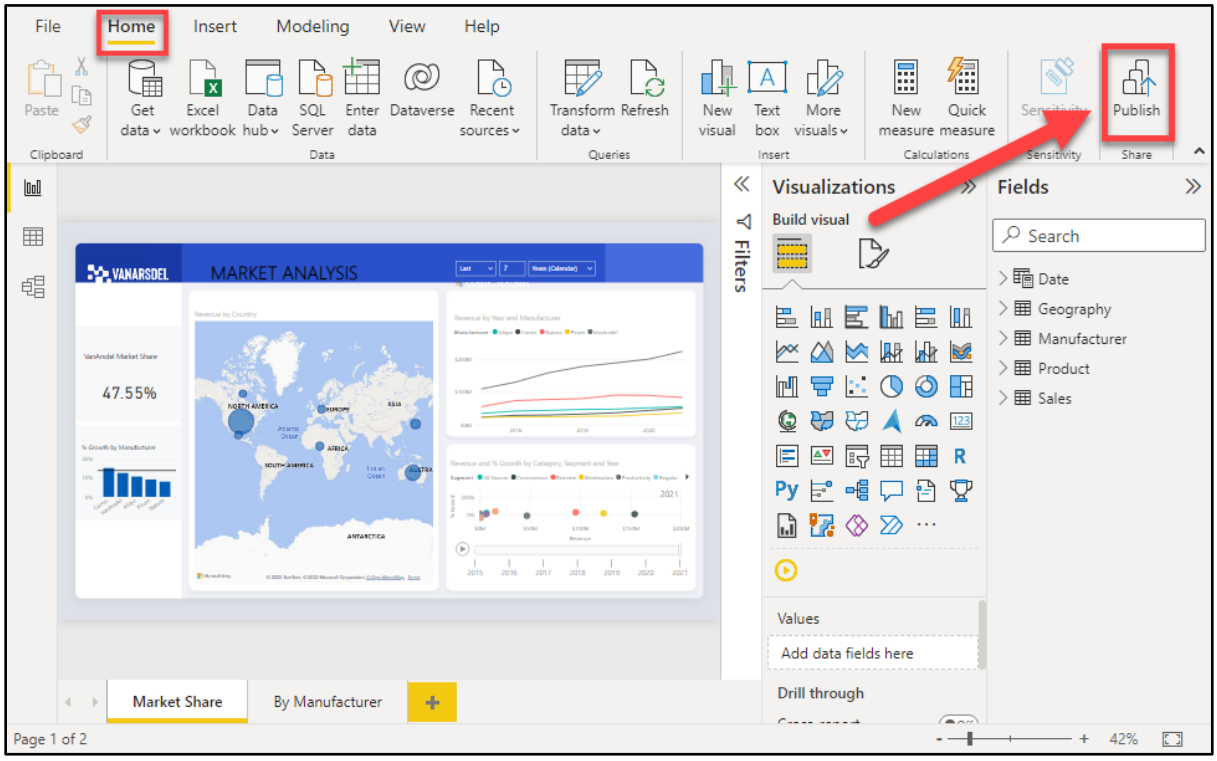
- **Get** option under Files.

- **Publish** from Power BI Desktop.

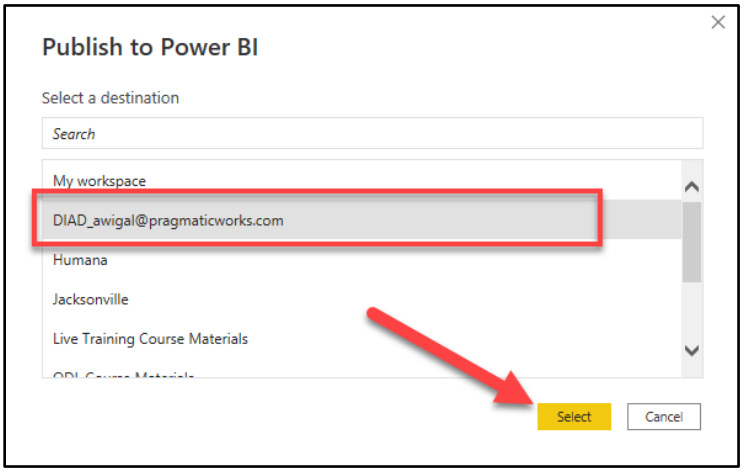
We are going to use the **Publish** from Power BI Desktop option.

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.**

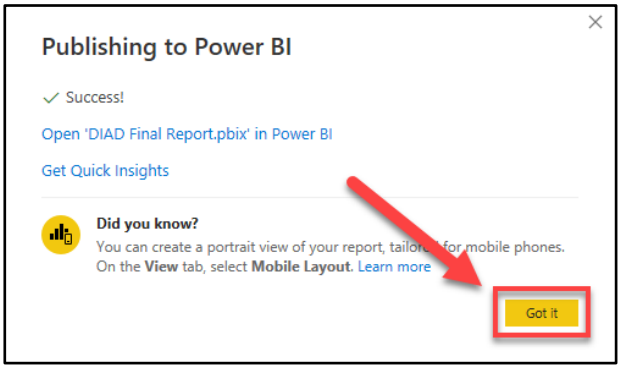


25. If you have not already logged into Power BI, a **Sign in** dialog box opens. Please sign in.
26. Once you are signed in, the **Publish to Power BI** dialog box opens. Select **DIAD_<youremailaddress>** in the dialog box.
27. Choose the **Select** button in the bottom right corner.



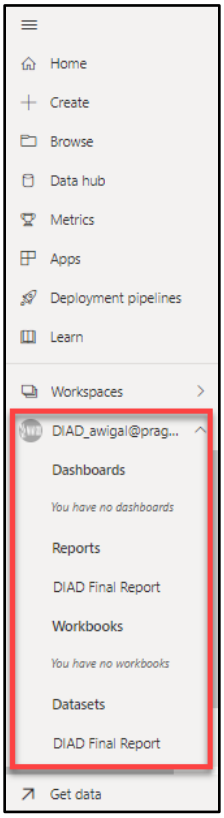
The **Publishing to Power BI** dialog box opens. Once the process is complete, a success message displays.

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, in the navigation pane, notice that under the **DIAD_<youremailaddress>** workspace that was created earlier., you see **Reports** has the **DIAD Final Report**, and **Datasets** has the **DIAD Final Report**.

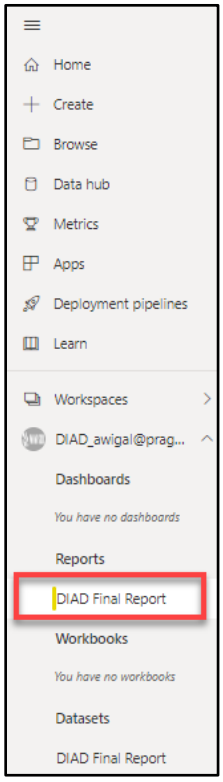


Power BI – Building a Dashboard

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.

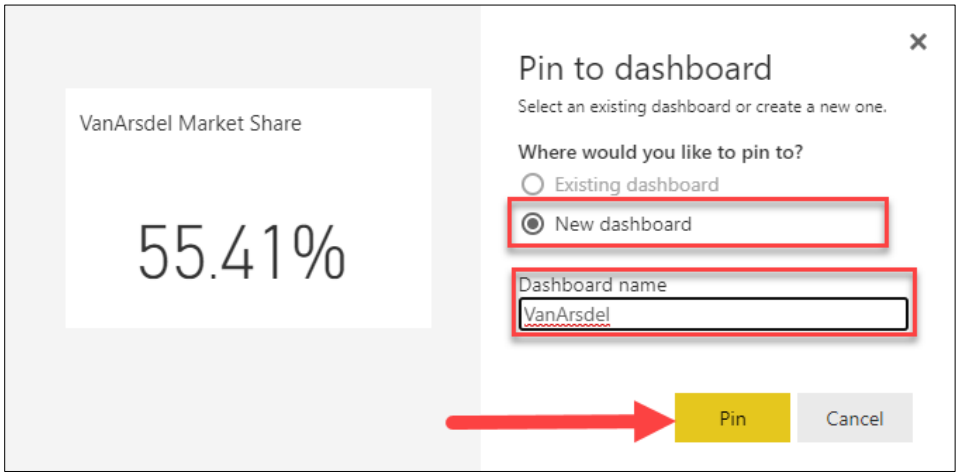
30. From the **menu** pane to the left, expand the newly created **DIAD** workspace that you added from the last section that includes your email in the name. Under the **Reports** section, select the **DIAD Final Report**. You will then be taken to the **Market Share** page of the DIAD Final Report.



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

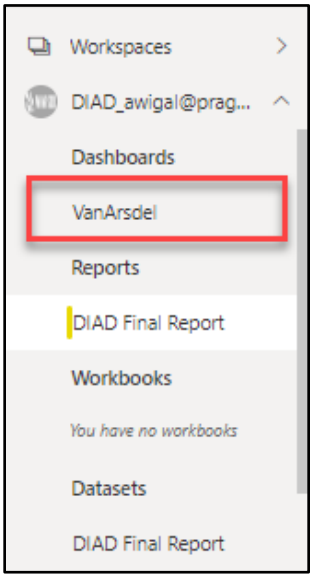
Now let's pin visuals to the dashboard.

33. Hover over the **VanArsdel Market Share** card visual.
34. Select the **pin** icon in the top right corner 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**.



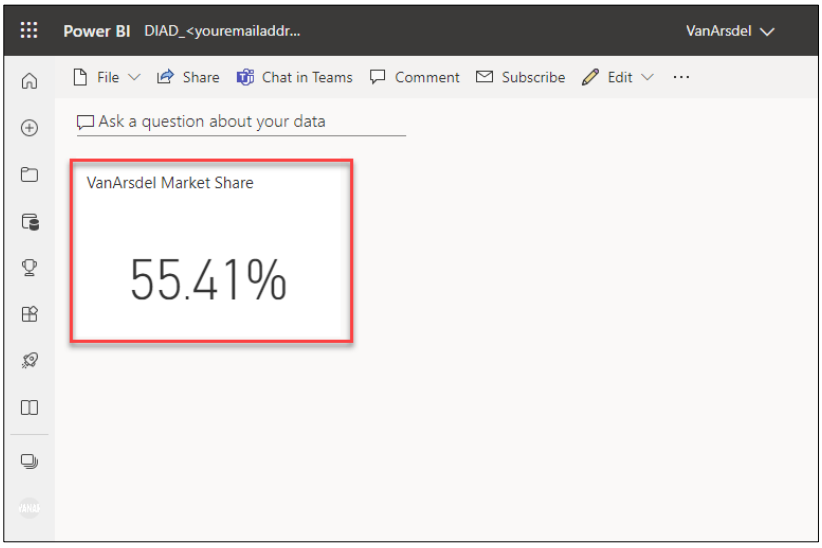
Notice that alert messages are displayed stating the dashboard is ready to view.

Notice in the left pane, the **VanArsdel** dashboard is created under **Dashboards**.



37. From the left pane, under the **Dashboards** section, select **VanArsdel**.

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

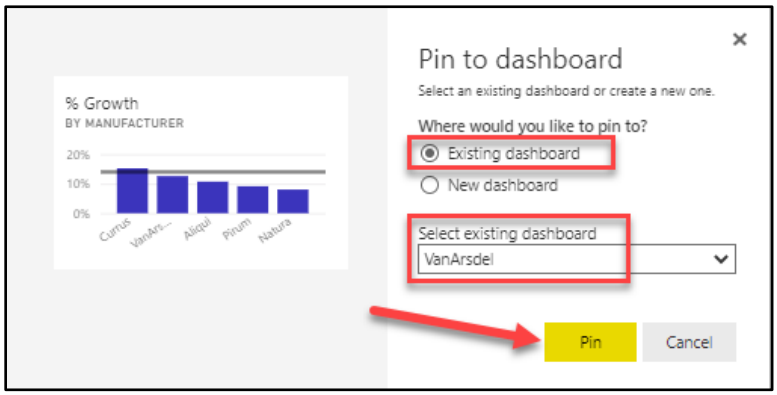


38. Select the **VanArsdel Market Share** tile. Notice that you are navigated back to the DIAD Final Report.

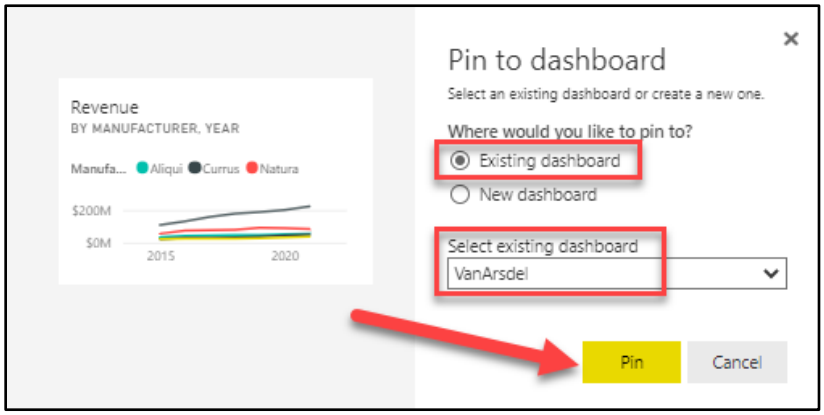
Note: Dashboard Tiles are not interactive like report visuals we've learned about so far. You also cannot pin things like Slicers to a dashboard since the main purpose of the Slicer is to be interactive.

39. Hover over the **% Growth by Manufacturer** visual.
40. Select the **pin** icon on the top right corner of the visual. The **Pin to dashboard** dialog box opens.
41. Make sure that **Existing dashboard** and **VanArsdel** are selected.

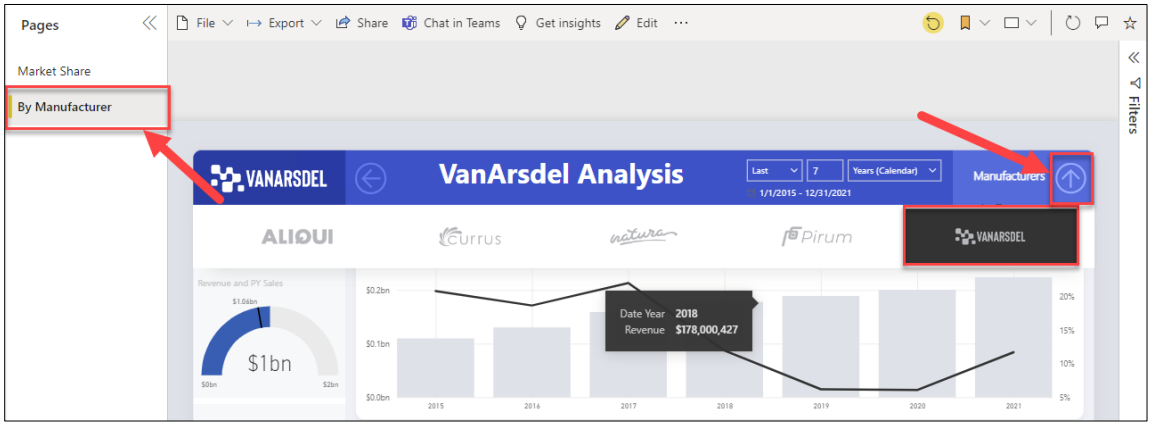
42. Select **Pin**.



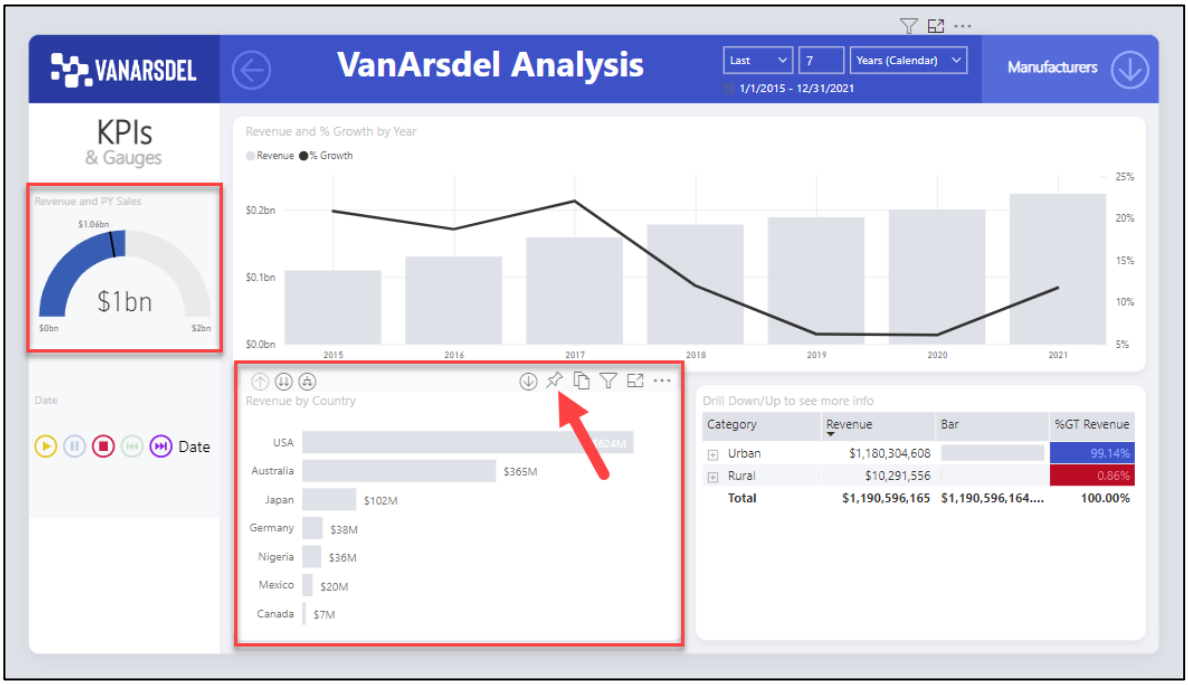
43. Close out the alert notification boxes in the top right.
44. Hover over the **Revenue by Year and Manufacturer** visual.
45. Select the **pin** icon on the top right corner of the visual. The **Pin to dashboard** dialog box opens.
46. Ensure that **Existing dashboard** and **VanArsdel** are selected.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



48. Close out the alert notification boxes in the top right.
49. Navigate to the **By Manufacturer** page to the left of the screen.
50. From the top right corner of the By Manufacturer report page, select the **down arrow**. Notice that the **manufacturer** slicer displays.
51. Select **VanArsdel** in the slicer if it's not already selected. This will filter the visuals.
52. From the top right corner, select the **up arrow**. Notice that the **manufacturer** slicer collapses.

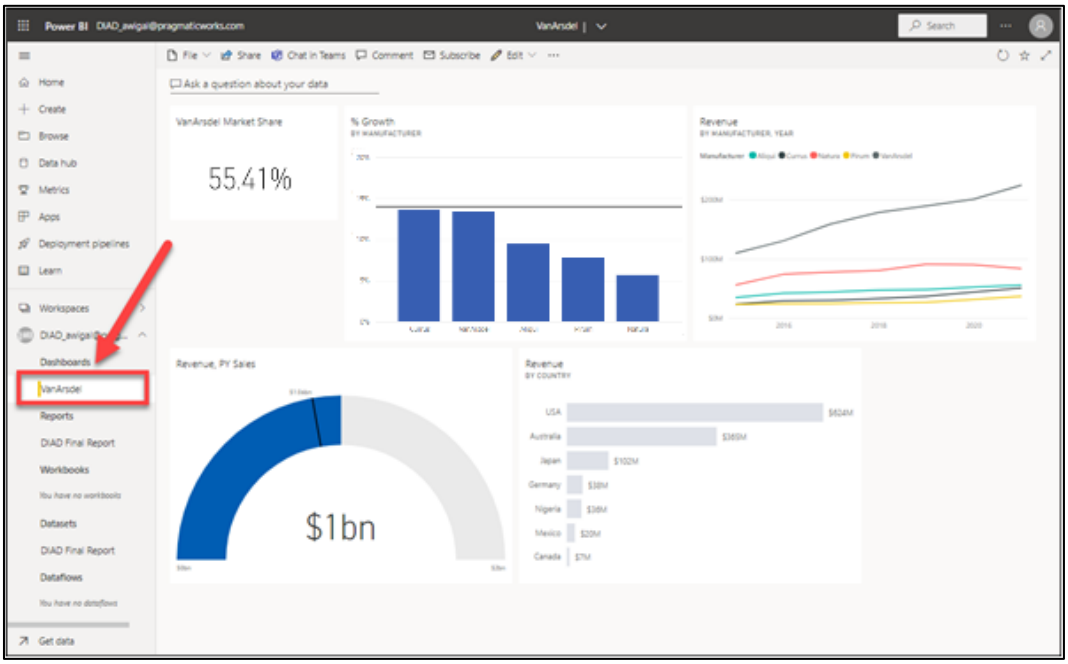


53. Using the same steps as we have previously, **pin** the **Revenue and PY Sales** gauge visual to the **VanArsdel** dashboard.
54. **Pin** the **Revenue by Country** chart visual to the **VanArsdel** dashboard.
55. Close out the alert notification boxes in the top right.



Note: The **VanArsdel** filter is applied to the tile that is pinned to the dashboard.

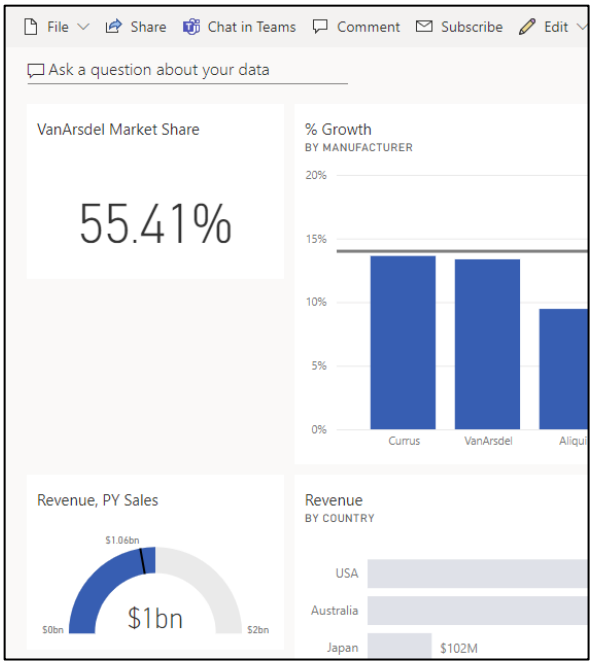
56. From the left pane, select the three lines in the upper left-hand corner to expand the menu. Select **Dashboards**, and then choose **VanArsdel**. Notice that all the visuals are pinned as tiles to the dashboard.



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.

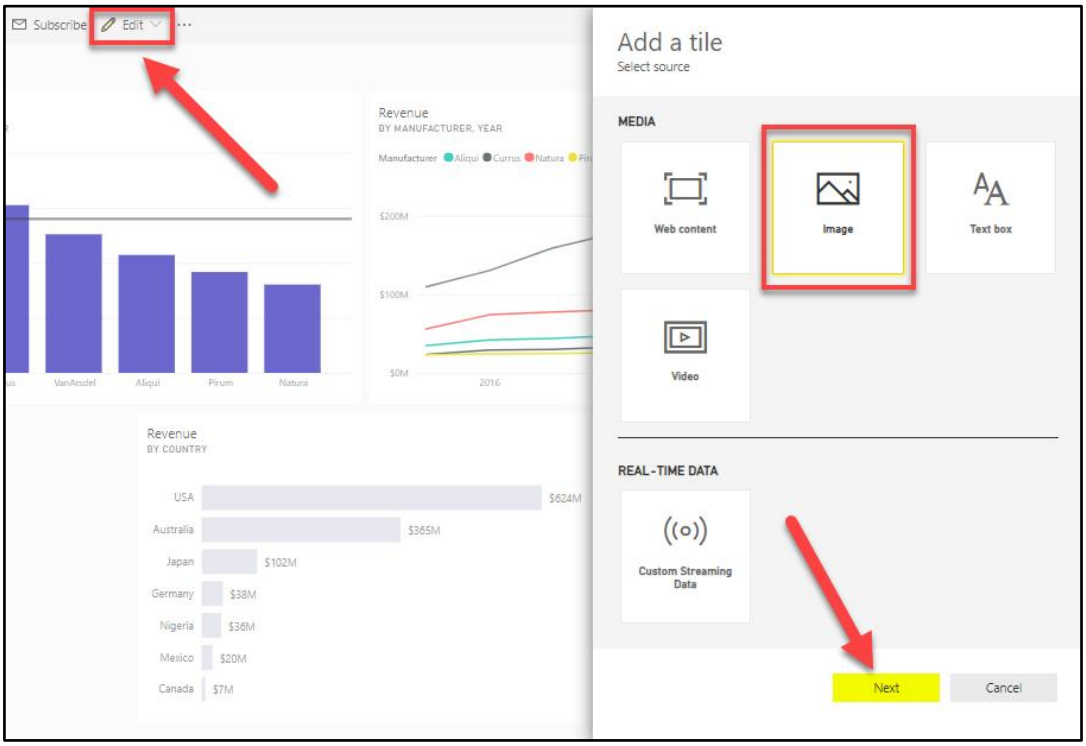
Let's organize the dashboard.

57. 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.

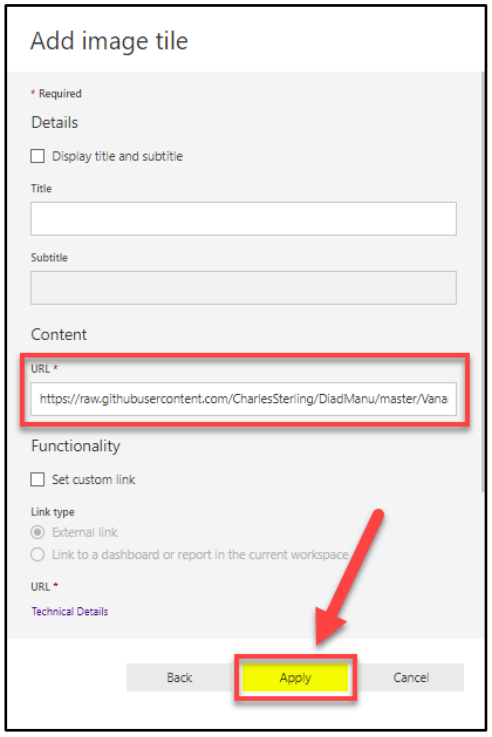
58. Select the **Edit** dropdown and choose **Add tile**. The **Add tile** dialog box opens.
59. Select **Image** as the source.
60. Choose **Next**.



61. 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.

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

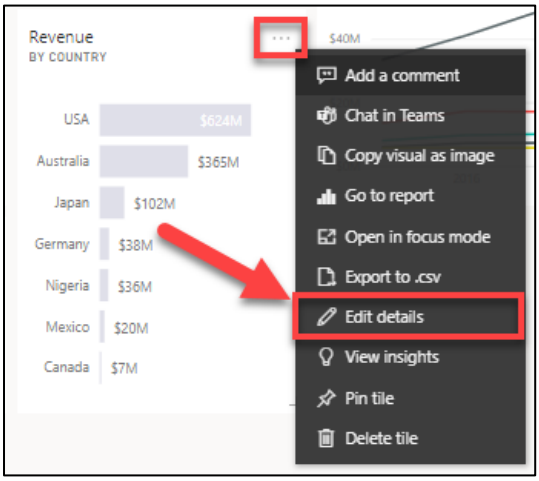


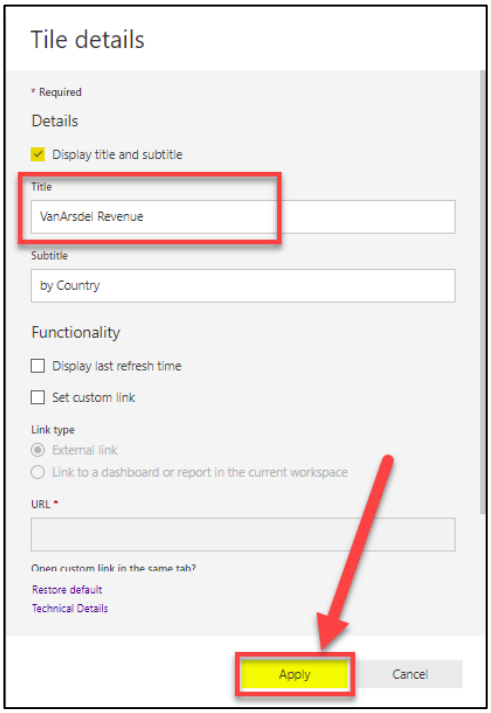
Notice that a new tile with the **VanArsdel** logo is added to the dashboard.

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

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

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

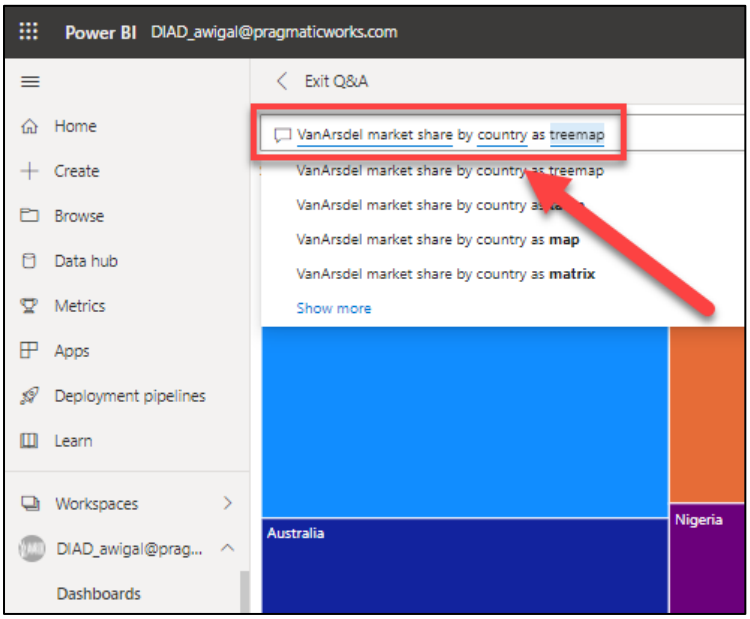




Now let's create a visual that represents **Market Share by country**.

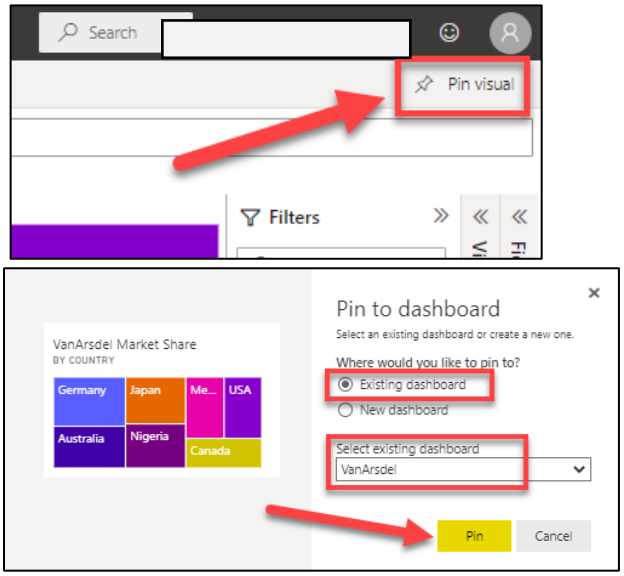
Notice on the top of the visual, there is an option to **Ask a question about your data**. This is like **Ask a question in the desktop**.

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

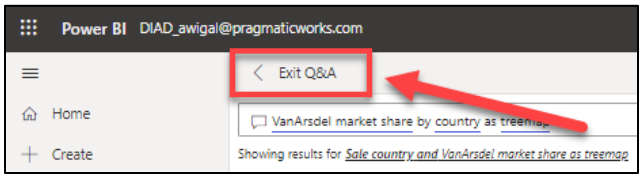


Note: Remember that we renamed our tables. One of the reasons we did this was to make them user friendly for Q&A.

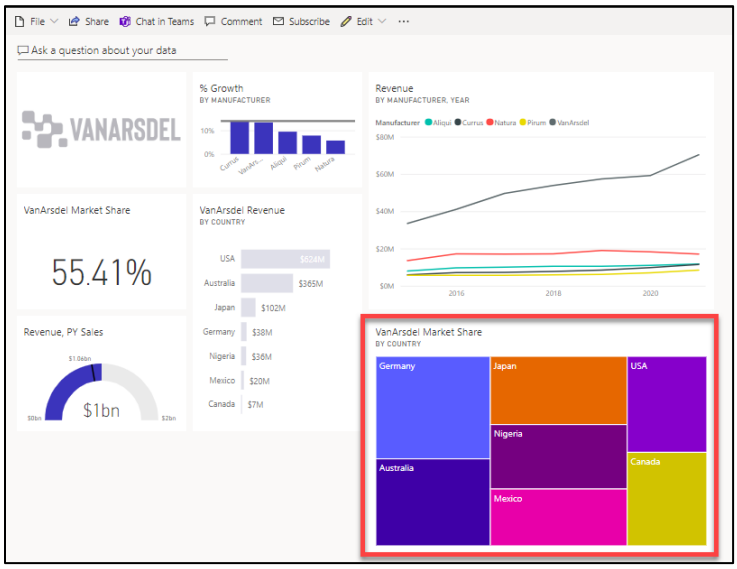
72. In the top right corner of the screen, select **Pin Visual**.
73. The **Pin to dashboard** dialog box opens. Ensure that **Existing dashboard** is selected, then select **Pin** to pin the visual to the **VanArsdel** dashboard.



74. Close the alert dialog boxes.
75. Select **Exit Q&A** in the top left corner of the page to navigate back to the dashboard.



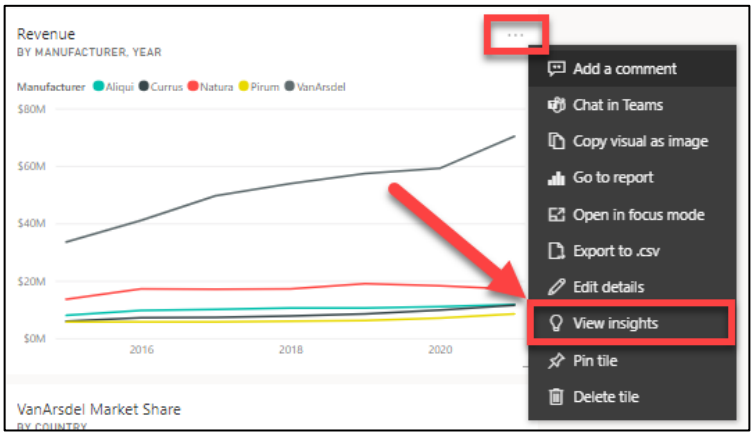
Notice that the treemap visual is added as tile to the dashboard. Selecting the treemap visual will navigate you back to the Q&A section.



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.

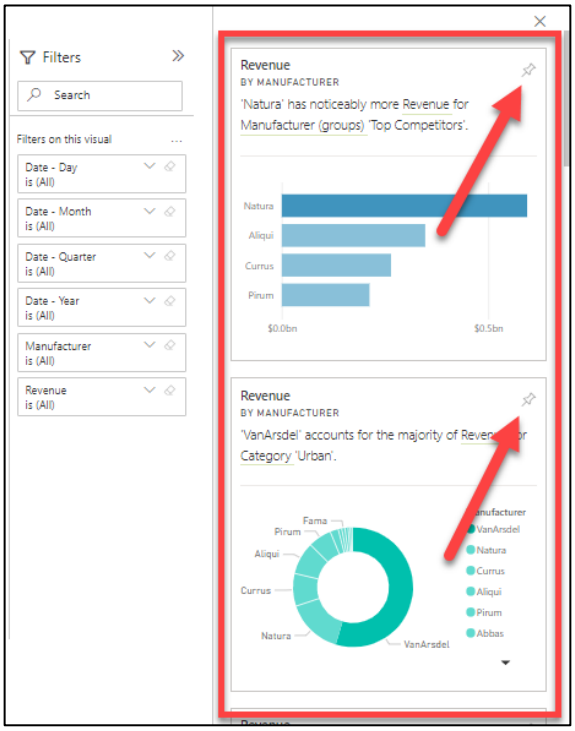
Let's generate **insights** on a dashboard tile. When we run insights on a dashboard tile, instead of searching for insights against an entire dataset, the search is narrowed to the data used to create a single dashboard tile. This is often referred to as scoped insights.

76. Hover over the **Revenue line chart** on the dashboard.
77. Select the **ellipse** on the top right corner of the line chart.
78. Choose **View Insights**.

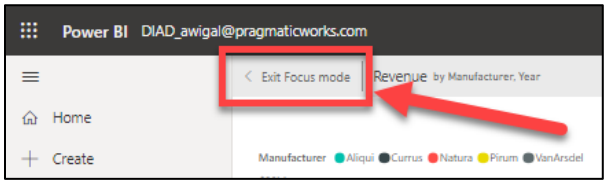


You will be navigated to **Focus mode** for the line chart.

79. Scroll on the Insights panel 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.

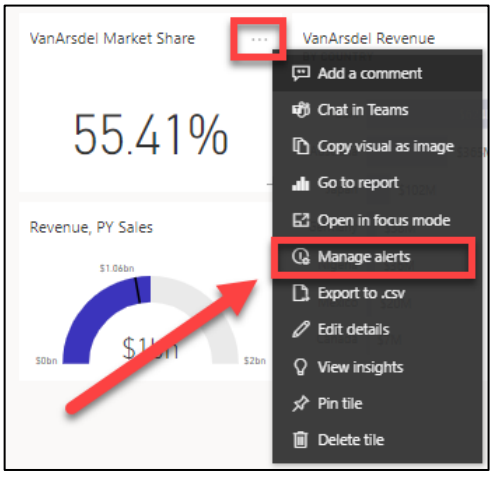


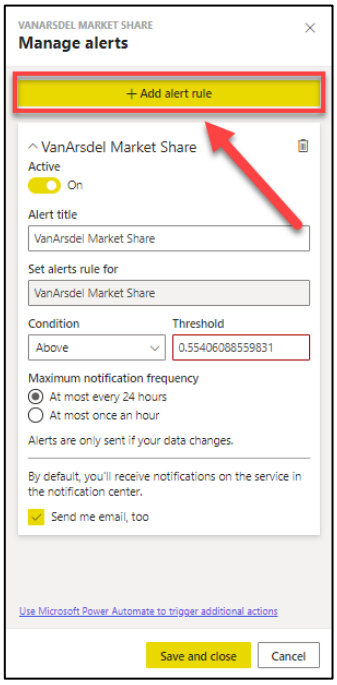
80. Select **Exit Focus mode** in the top left corner of the page to navigate back to the dashboard.



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

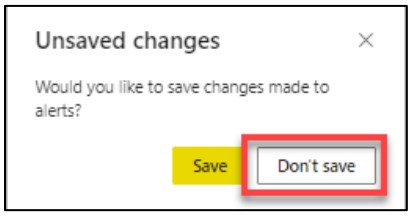
81. Hover over the **VanArsdel Market Share** card tile.
82. Select on the **ellipse** in the top right corner of the tile.
83. Choose **Manage alerts**. The **Manage alerts** dialog box opens.
84. Select **Add alert rule**.





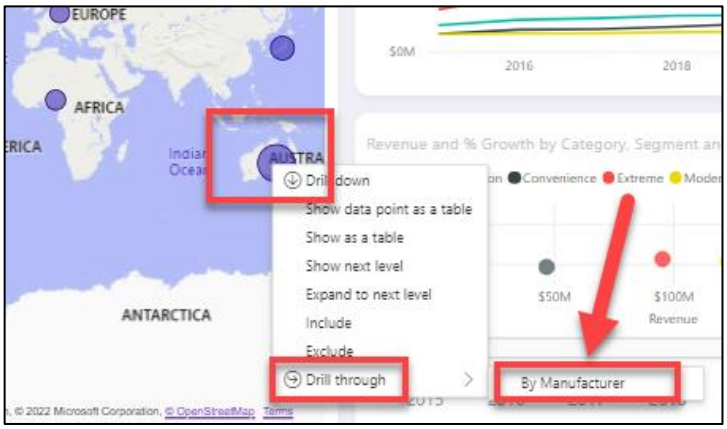
Notice that you can add **Above** or **Below threshold**. You can also set the notification frequency. This is just an introduction to managing alerts. Complete functionality is not covered in this lab.

85. Select **Cancel** to close the dialog box.
86. From the **Unsaved changes** alert dialog box, select **Don't Save**.



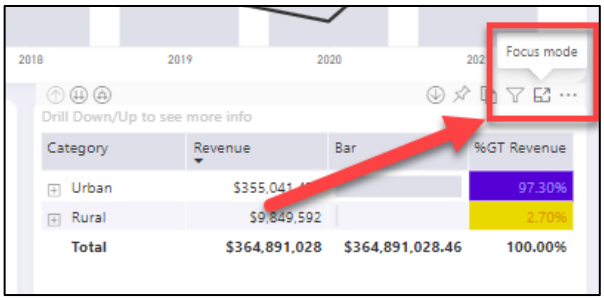
87. Select the **VanArsdel Market Share** card visual tile to navigate to the report.

88. Within the **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**.

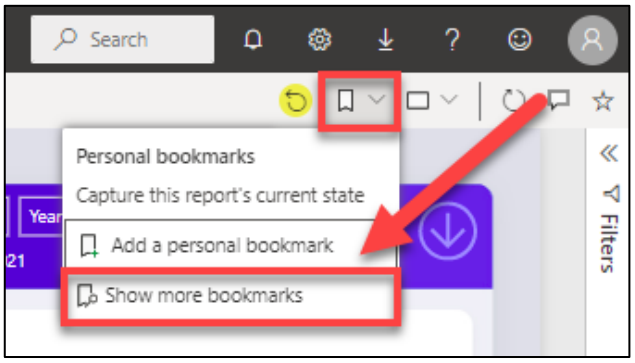


You will then navigate to the **By Manufacturer** page of the report with the **Australia** filter applied to the report page.

89. Hover over the **matrix** visual.
90. Select the **focus mode** icon on the top right corner of the visual.
91. Select the double-down arrow to drill down.
92. Then, select the **Back to report** button in the top left hand corner of the page.



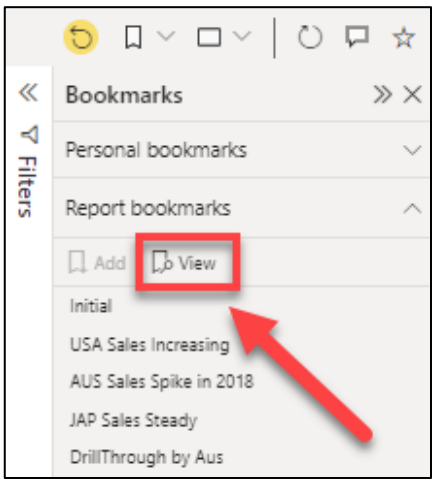
93. From the menu in the top right corner of the screen, select **Bookmarks** and then choose **Show more bookmarks**. The **Bookmark** pane opens on the right. There are two options: **Personal** bookmarks and **Report** bookmarks.



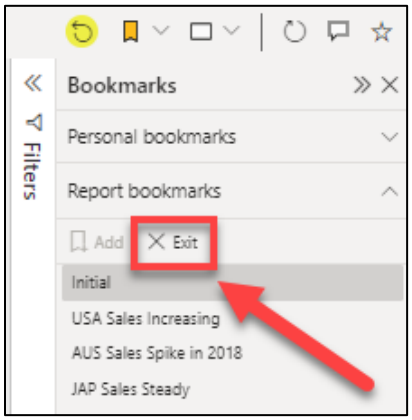
- **Report bookmarks** are the bookmarks the report author created (we did this in Power BI Desktop).
- **Personal bookmarks** on the report are ones which the consumer can create on their own.

94. 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.

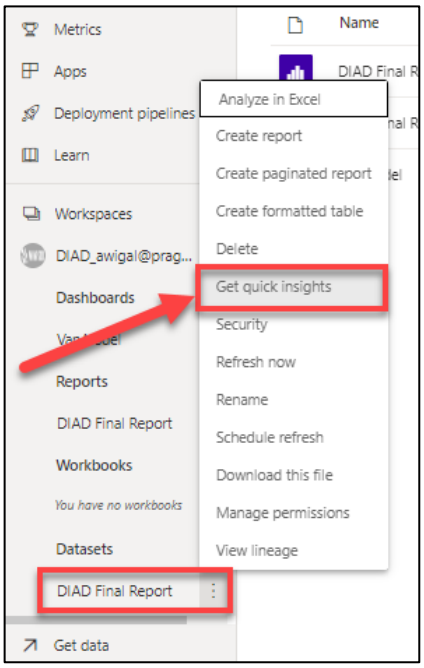


95. Select **Exit** under the **Report bookmarks** section of the pane to close it.



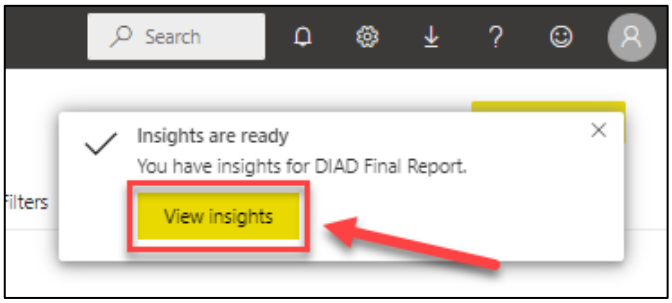
Power BI provides an option to get quick insights into the complete dataset.

96. Navigate back to the Workspace you created earlier in the lab using the menu to the left of the screen. In the left pane, under the **Datasets** section, hover over the **DIAD Final Report**.
97. Select the **ellipse**.
98. From the menu, select **Get quick Insights**.

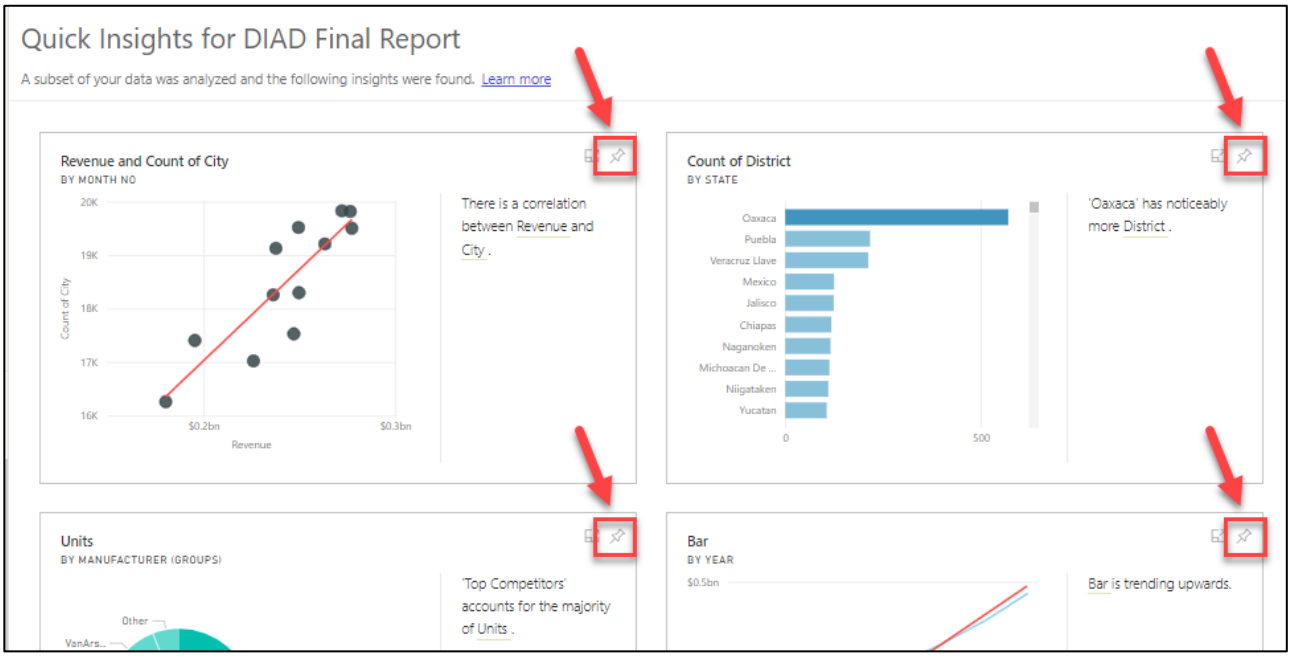


It might take a few minutes for the insights to be created. Once insights are ready, a message appears in the top right corner.

99. 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.

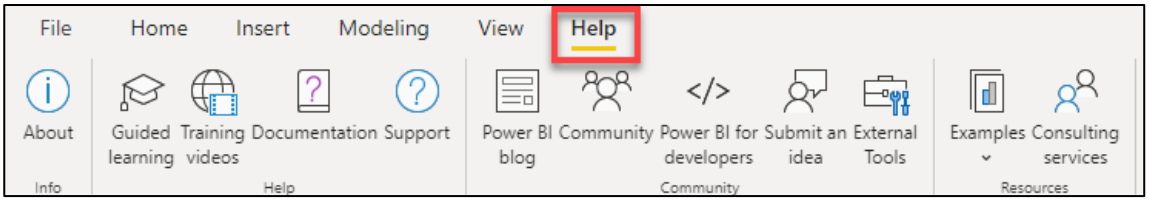


You've now completed Lab four!

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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