Creating and Deploying Dashboards in Power BI

Lab Time: 60 minutes

Lab Folder: C:\Student\Modules\Dashboards\Lab

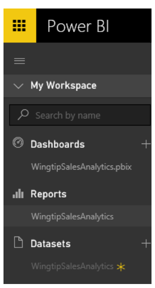
Lab Overview: In this lab you will continue to work with the dataset and the report that you have been designing in the Power BI Desktop project named **WingtipSalesAnalytics.pbix** in earlier labs. You will focus on the techniques required to create and deploy dashboards to an audience of business users.

Important: This lab assumes you have completed the previous lab titled **Designing and Publishing Reports with Power BI Desktop** in which you completed your data modeling work in the **WingtipSalesAnalytics.pbix** project and then published its report and dataset to the Power BI Service. If you would like to start this lab without completing the previous lab, copy the lab solution at **C:\Student\Modules\TimeIntelligence\LabSolution\WingtipSalesAnalytics.pbix** into the folder at **C:\Student\Projects** using the Windows Explorer. After that, you must complete **Exercise 5** from the previous lab titled **Publish Your Project and Its Reports to the Power BI Service** in order to reach the starting point for this lab.

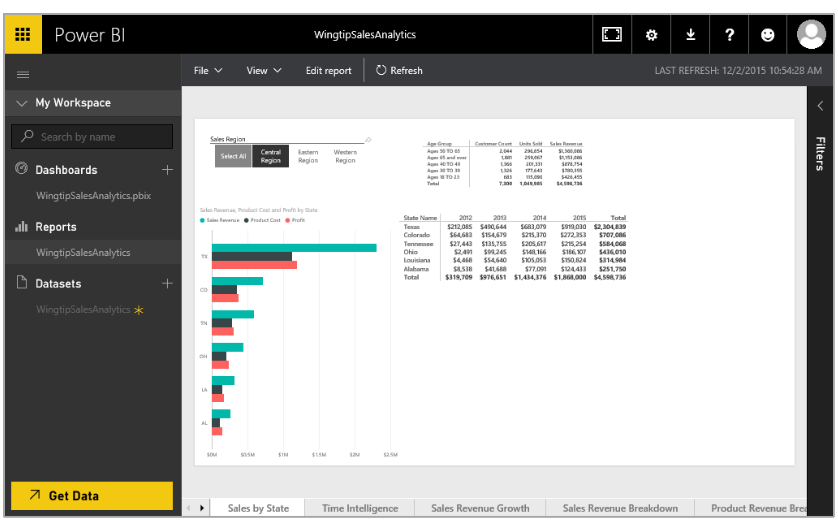
Exercise 1: Create the Product Sales Analysis Dashboard

In this exercise you will create a new dashboard using the dataset and report you created in early labs using Power BI Desktop.

1. Log in to the Power BI service.
   a) Open a browser and navigate to the Power BI service at https://app.powerbi.com.
   b) Login with your primary Office 365 account.
   c) Make sure you are running in the context of your personal workspace.
   d) You should be able to see the dataset and report named **WingtipSalesAnalysis** that you published at the end of the last lab using Power BI Desktop. There is also a minimal dashboard named **WingtipSalesAnalysis.pbix** that was automatically created during the PBIX publishing process for the Power BI Desktop project file named **WingtipSalesAnalysis.pbix**.



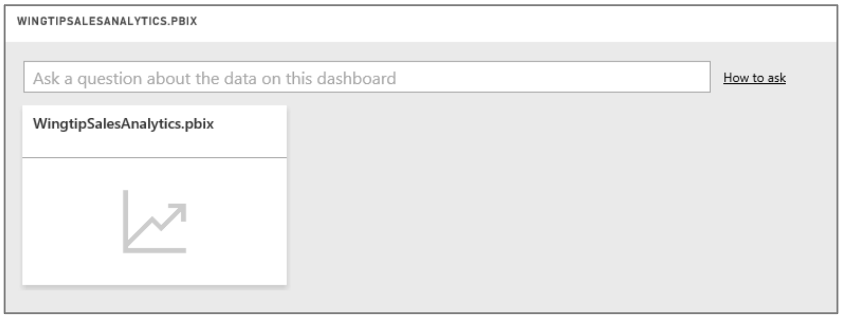
2. Click on the report named **WingtipSalesAnalysis** in the **Reports** section. Examine the pages in the report and verify that these are the same report pages that you have been designing over the last several labs.



3. Click on the dataset named **WingtipSalesAnalysis** in the **Datasets** section. The Power BI service responds by displaying a new report that allows you to begin adding visuals.

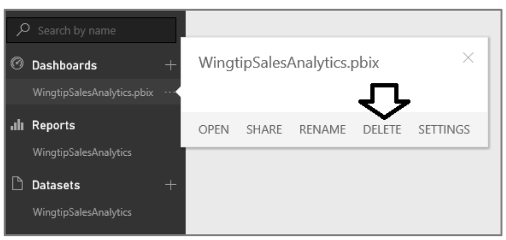
> When you navigate to a dataset in the Power BI service, it provides a different experience compared to when in Power BI Desktop. That's because Power BI Desktop allows you to customize and extend a dataset while the browser-based experience of the Power BI service only allows you to consume datasets but not to modify them. Given the fact that a dataset is a read-only object, the Power BI service responds to user's request to navigate to a dataset by opening a new report and showing the **Fields** list for that dataset.

4. Click on the dashboard named **WingtipSalesAnalysis.pbix** in the **Dashboards** section. You should be able to verify that the dashboard isn't very interesting as it only contains the Q&A search box and a tile with the name of the PBIX project file.

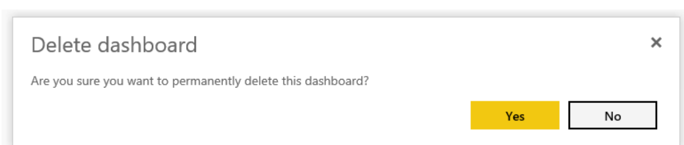


5. Delete the **WingtipSalesAnalysis.pbix** dashboard.

   a) Click the ellipse (**…**) button to the right of the dashboard to display the dashboard fly out menu and then selecting the **DELETE** command.



   b) Confirm you want to delete the dashboard by clicking the **Yes** button.

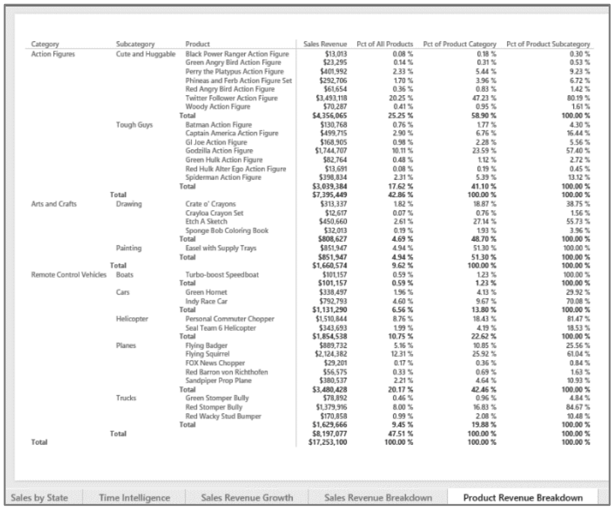


   c) You should be able to verify that the dashboard has been deleted.

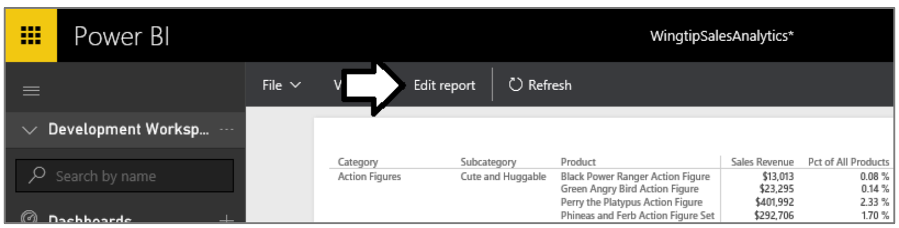
6. Navigate to the **Product Revenue Breakdown** report page and add a new visual.

   a) Click on the report named **WingtipSalesAnalysis** in the **Reports** section.

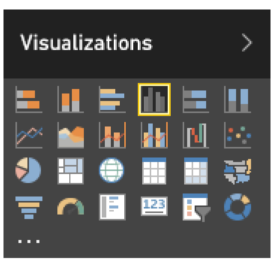
   b) Navigate to the **Product Revenue Breakdown** page.



c) The report is initially displayed in **Reading view**. Click on the **Edit report** button to enter edit view.

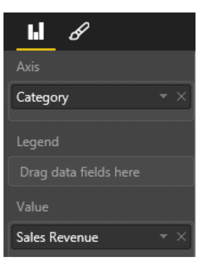


d) Add a new visual to the page based on the **Clustered column chart** visualization type.

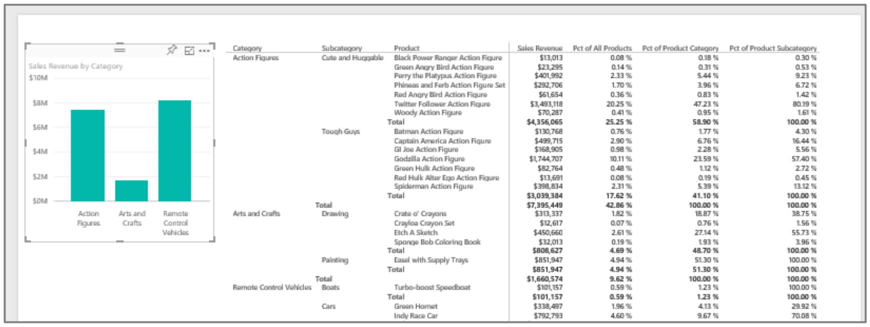


e) Drag the **Categories** column from the **Products** table and drop it into the **Axis** well.

f) Drag the **Sales Revenue** measure from the **Sales** table and drop it into the **Value** well.



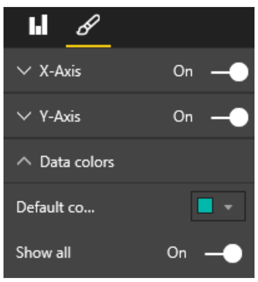
g) Rearrange the two visuals on the page to match the visuals shown in the following screenshot.



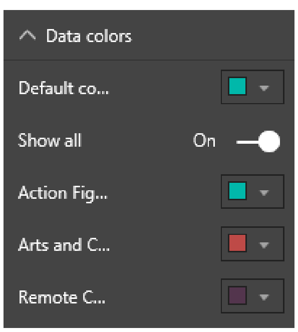
The new column chart visual contains three columns that are all the same color by default. In the next step, you will make the visual a little more fancy by configuring each a column with a different color.

h) With the column chart visual selected, click the brush icon in the **Visualization** pane to display the visual's **Format** properties.

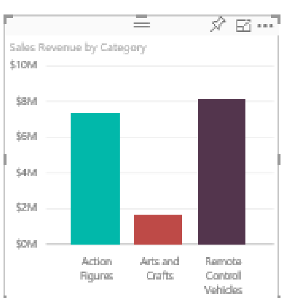
i) Locate the **Show All** property inside the **Data colors** section and set its value to **On**.



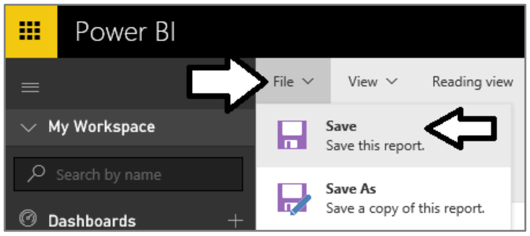
j) Modify the colors so that each category is a different color.



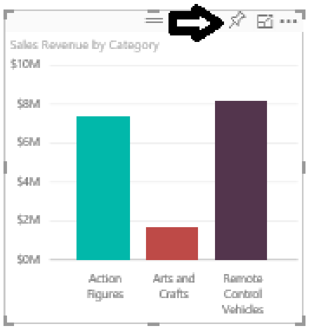
k) The visual should now display in a multicolored format.



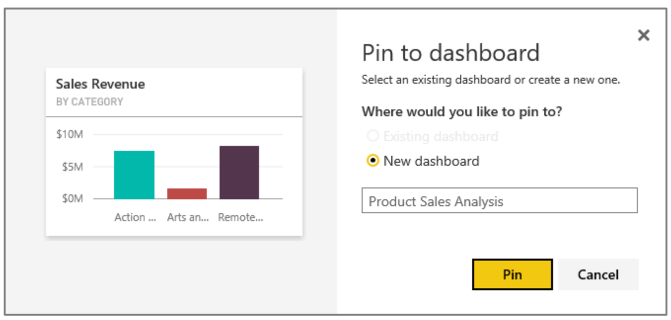
l) Save the report by dropping down the **File** menu and clicking **Save**.



7. Create the **Product Sales Analysis** dashboard.
   a) At this point, you be looking at the **Product Revenue Breakdown** report page in edit view.
   b) If you select the column chart visual, you will notice several icon buttons in the upper-right corner. Click on the thumbtack icon button to pin the visual to display the **Pin to dashboard** dialog.



   c) The **Pin to dashboard dialog** prompts you enter a name for a new dashboard name. Enter a value of **Product Sales Analysis** as the new dashboard name and then click the **Pin** button to create the new dashboard and pin the visual to it.

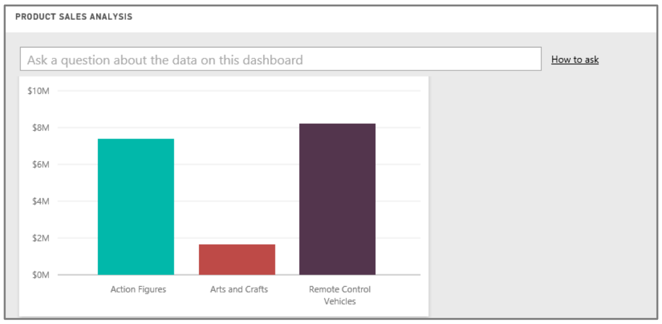


   d) At this point, the Power BI service displays a notification indicating success.

Your day's always a bit brighter when someone gives you a little positive reinforcement!

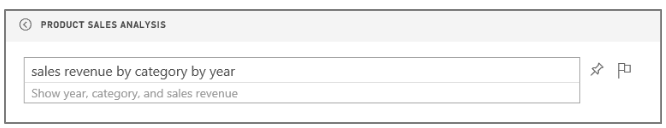
   e) At this point, you should be able to see the new **Product Sales Analysis** dashboard in the **Dashboards** section

8. Examine the **Product Sales Analysis** dashboard.
   a) Click on the link for the **Product Sales Analysis** dashboard in the **Dashboards** section.
   b) Examine the dashboard. It currently contains the Q&A search box and a tile for the column chart visual.

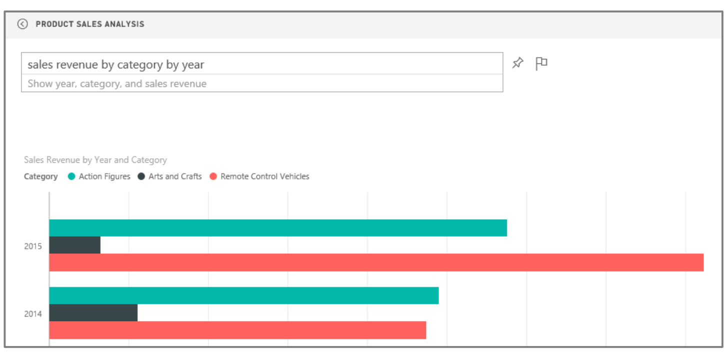


Note that when a user clicks on a dashboard tile created from a report visual, the user is then redirected to underlying report page where the original visual was created.

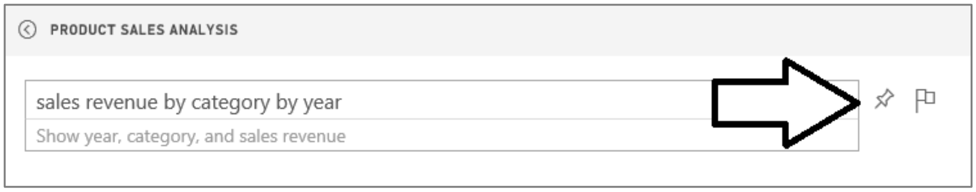
9. Add a new dashboard tile using the Q&A search box.
   a) Navigate to the **Product Sales Analysis** dashboard if you are not already there.
   b) Type ***sales revenue by category by year*** into the Q&A search box and press the ENTER key to run the query.



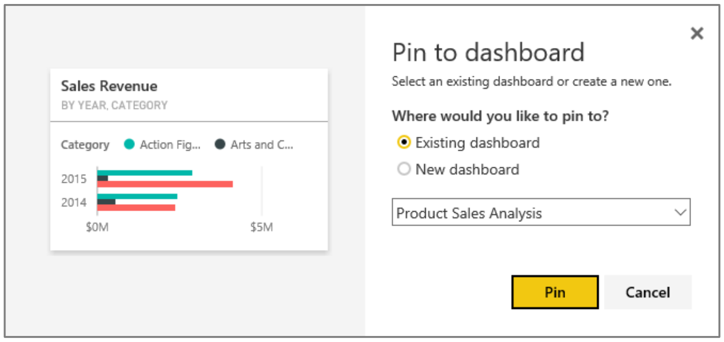
   c) The Power BI service should respond by running the query and then creating a bar chart visual displaying the query results.



   d) Click on the thumbtack icon button to display the **Pin to dashboard** dialog.

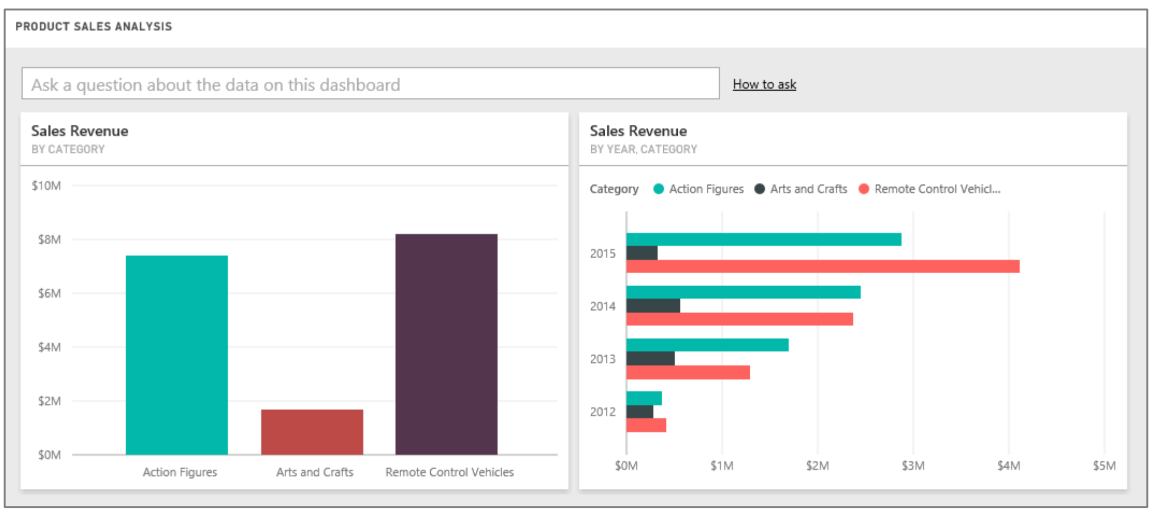


e) In the **Pin to dashboard** dialog, ensure that you are pinning the visual to the **Product Sales Analysis** dashboard and click the **Pin** button.

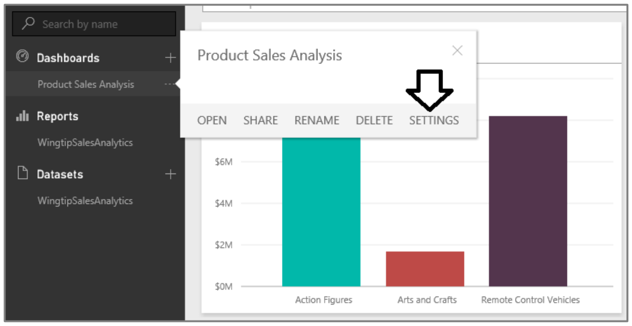


f) Click on the link to navigate back to the **Product Sales Analysis** dashboard.

g) You should now see the new dashboard tile that's been added by pinning the visual created using the Q&A search box.



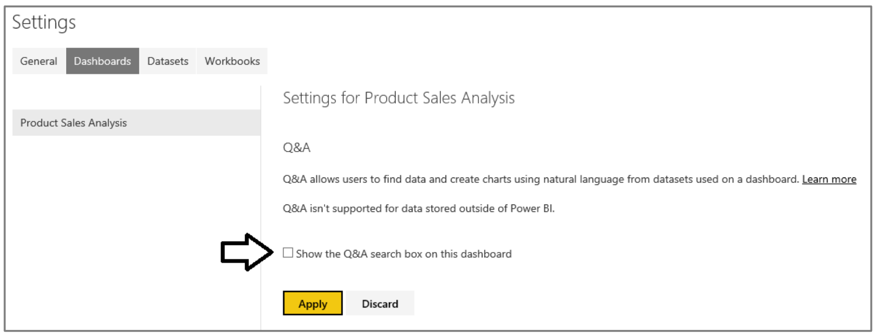
10. Remove the Q&A search box from the dashboard.
    a) Use the fly out menu of the for the **Product Sales Analysis** dashboard and click the **SETTINGS** menu.



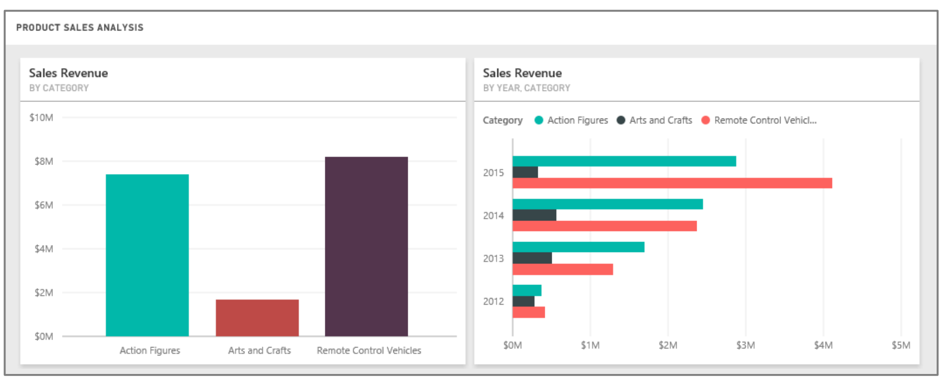
b) On the **Settings** page for the dashboard, navigate the **Dashboards** tab.

c) Uncheck the checkbox with the caption of **Show the Q&A search box**.

d) Click the **Apply** button.



e) You should be able to verify that the dashboard no longer displays the Q&A search box.

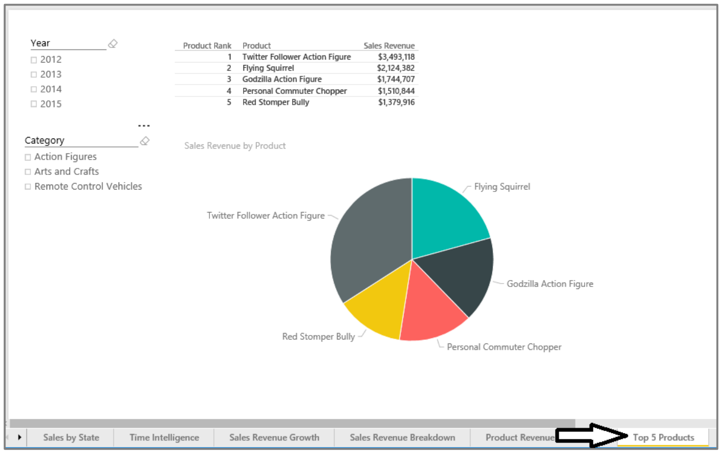


11. Add two more tiles to the dashboard by pinning visuals from the **Top 5 Product** report page.

a) Click on the report named **WingtipSalesAnalysis** in the **Reports** section.

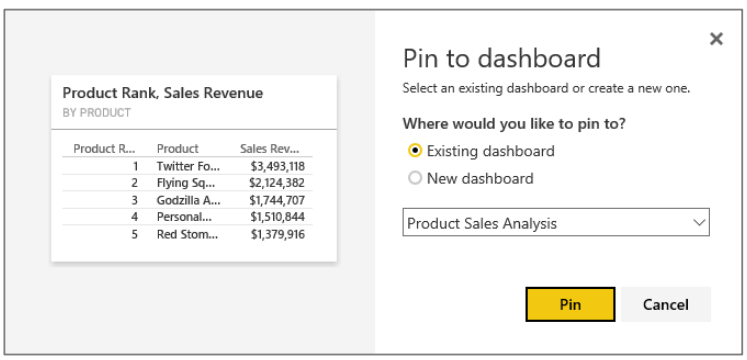
b) Navigate to the **Top 5 Product** page.

c) Make sure that both the slicers on the page are cleared so that the other visuals reflect sales revenue for all sales.

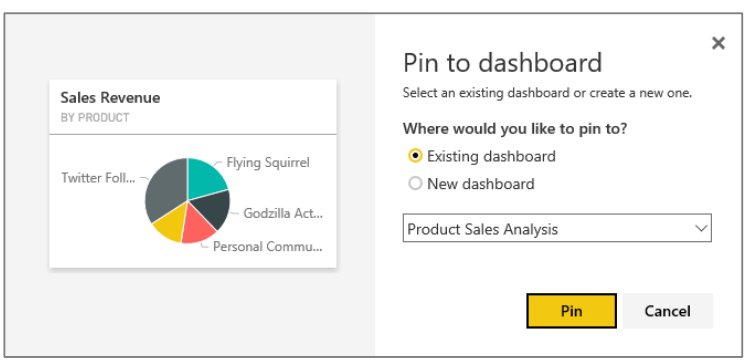


d) Select the table visual with the top five products. Click the thumbtack icon button to display the **Pin to dashboard** dialog.

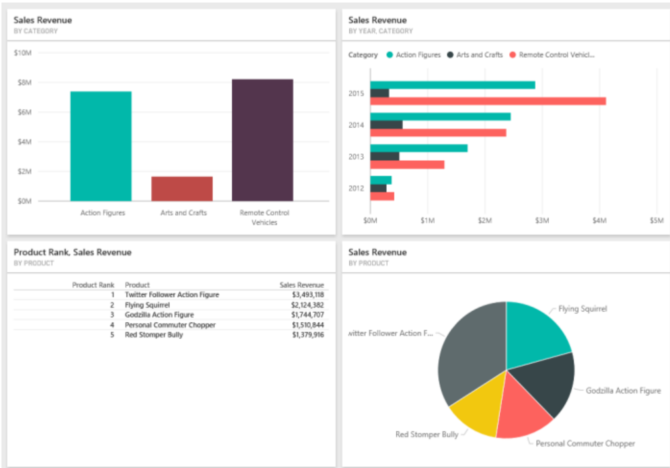
e) On the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Product Sales Analysis** dashboard.



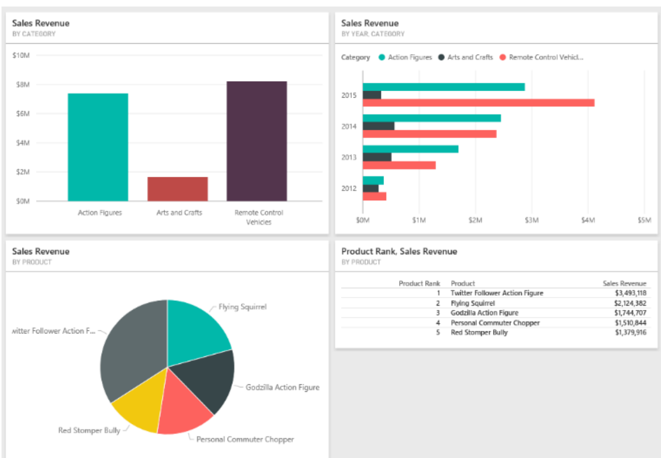
f) Go through the same steps to pin the other visual which shows a pie chart of the top 5 products.



g) Navigate to the **Product Sales Analysis** dashboard and verify you see tiles for the two visuals on the **Top 5 Products** page.

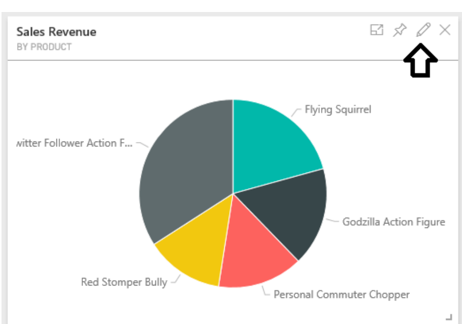


h) Rearrange the two tiles by reversing their positions and decreasing the height of tile for the table visual.

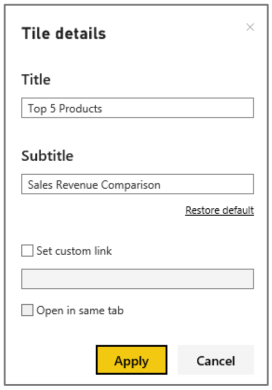


12. Modify the title and subtitle for the tile with the pie chart visual.

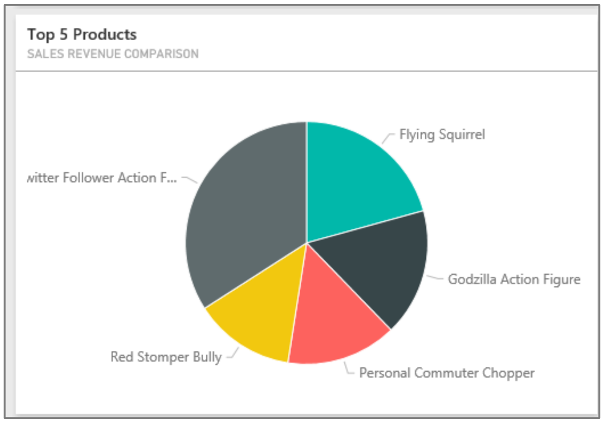
a) Select the tile with the pie chart visual and click on the pencil icon button to edit the tile details.



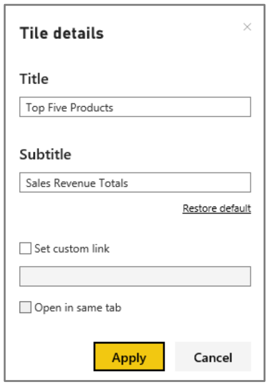
b) Enter a **Title** of **Top 5 Products** and a **Subtitle** of **Sales Revenue Comparison** and then click **Apply**.



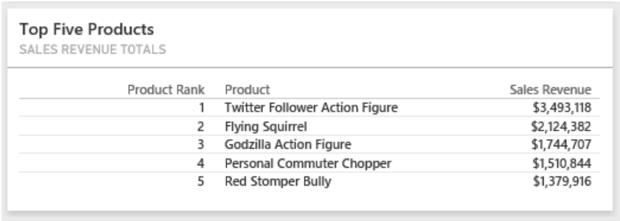
c) You should be able to see that the tile has been updated with a new title and subtitle.



13. Modify the title and subtitle for the tile with the pie chart visual.
   a) Select the tile with the top 5 products table and click on the pencil icon button to edit the tile details.
   b) Enter a **Title** of **Top 5 Products** and a **Subtitle** of **Sales Revenue Totals** and then click **Apply**.



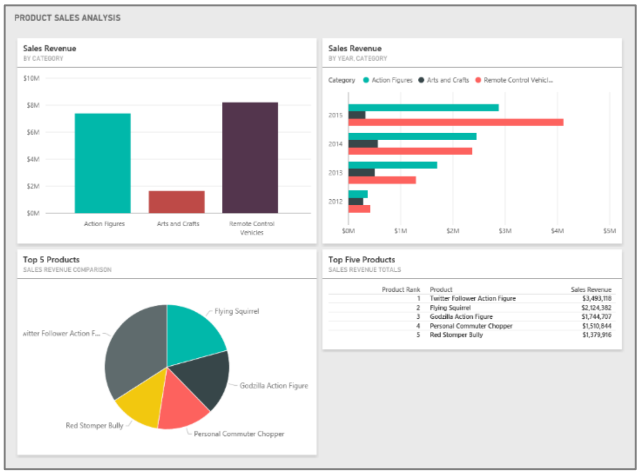
   c) You should be able to see that the tile has been updated with a new title and subtitle.



Top Five Products
SALES REVENUE TOTALS

Product Rank	Product	Sales Revenue
1	Twitter Follower Action Figure	$3,493,118
2	Flying Squirrel	$2,124,382
3	Godzilla Action Figure	$1,744,707
4	Personal Commuter Chopper	$1,510,844
5	Red Stomper Bully	$1,379,916

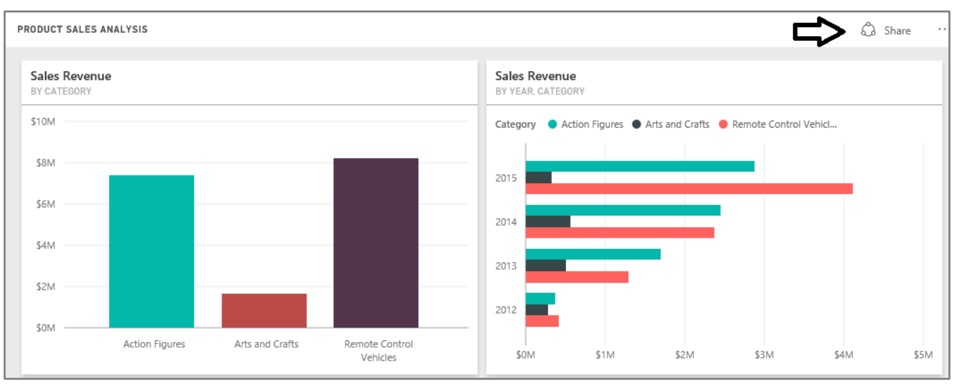
14. At this point, you are now done creating the **Product Sales Analysis** dashboard.



Exercise 2: Share the Product Sales Analysis Dashboard

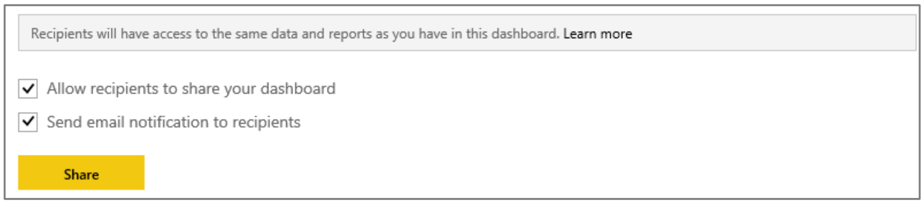
In this exercise you will share the Products Sales Analysis dashboard and test it out from the perspective of a user who is a dashboard consumer as opposed to a dashboard author.

1. Navigate to the **Product Sales Analysis** dashboard.
2. Click the **Share** link at the top, right-hand side of the page.

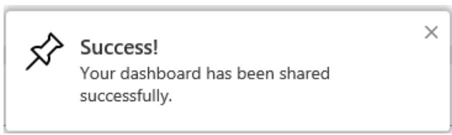


3. At this point, you are prompted with the **Share Dashboard** page where you can enter information about the users and/or groups with which you want to share your new dashboard. Enter the email address of the secondary user account that you created earlier in the very first lab.

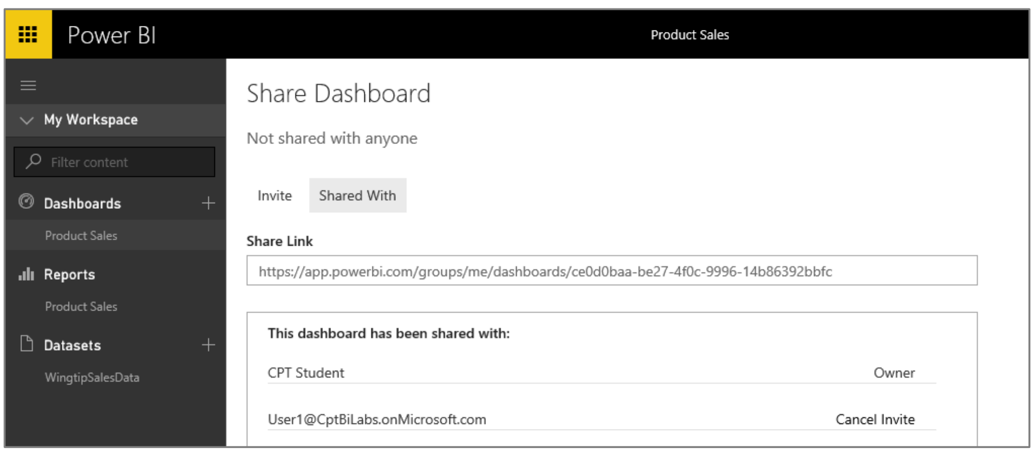
4. After you have entered the email address, click the **Share** button at the bottom of the page.



5. The Power BI service responds with even more positive reinforcement.

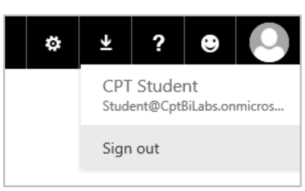


6. Once the dashboard has been successfully shared, you should be able to confirm that the secondary user has access to this dashboard by examining the **Shared With** tab of the **Share Dashboard** page as shown in the following screenshot.

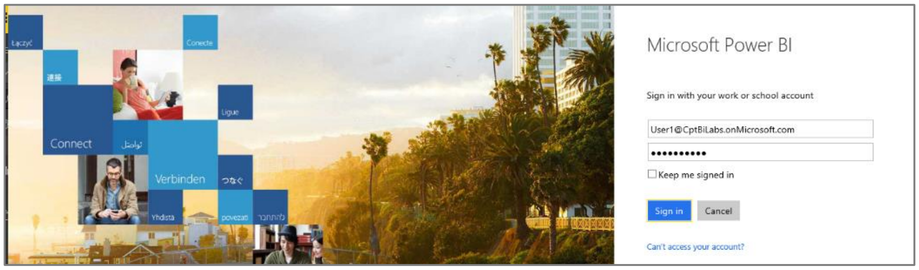


Now you have completed the steps to share the dashboard, the next step is to test out the dashboard experience when logged in as a user who is not the dashboard author, but instead a dashboard consumer. This will require that you sign out of the Power BI service and then sign back in under the identity of the secondary user account. By accessing the shared dashboard in this fashion, you will be able to observe the typical experience of a dashboard consumer when accessing a dashboard that has been shared by another user.

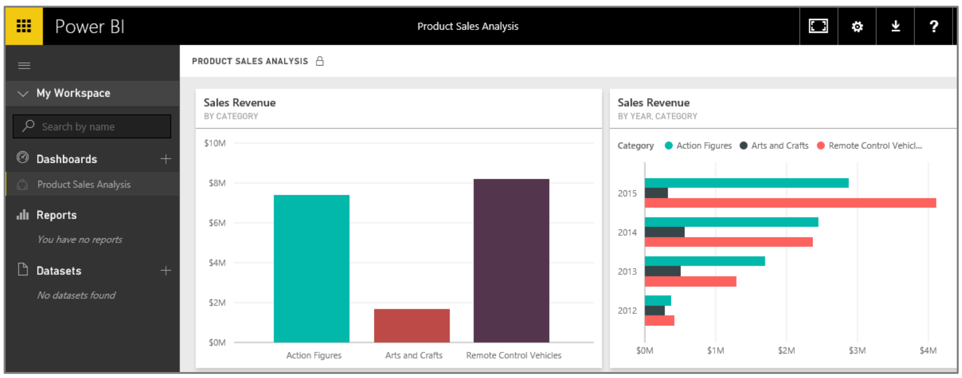
7. Drop down the user menu from the top, right-hand corner of the page and click the **Sign out** command.



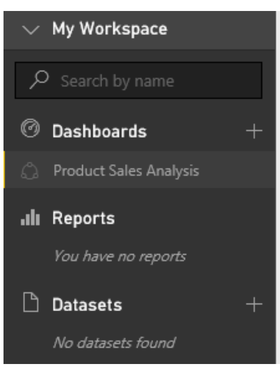
8. Now, sign back in using the account name and the password of the secondary user account you created earlier.



9. Once you have signed in, navigate to the Power BI service at https://app.powerbi.com. You should be able to see that the Product Sales Analysis dashboard is accessible to you through your personal workspace.



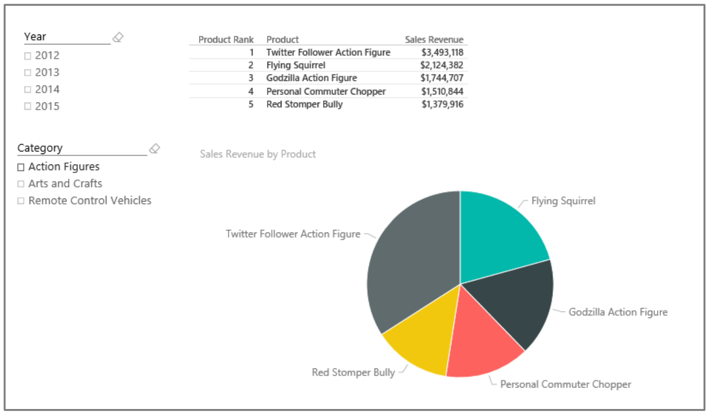
10. You should be able to verify that the current user can see the **Product Sales Analysis** dashboard link in the left navigation menu but the current user cannot see links to any of the reports or datasets behind the dashboard.



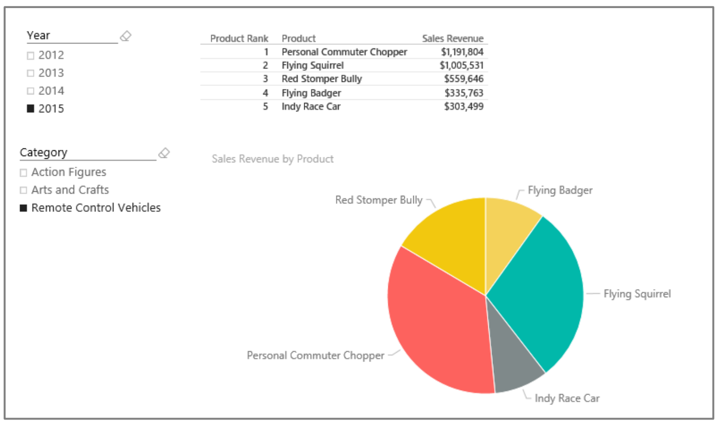
Note that Power BI does not include links to provide the dashboard consumer with direct access to the report or the dataset behind the dashboard. However, Power BI does supply the dashboard consumer with indirect access to the report and the dataset behind the dashboard. It's just that the dashboard consumer can only access the report and dataset by interacting with the dashboard. A key benefit is that this approach keeps the left navigation less cluttered when the user is accessing many different shared dashboards. Another benefit as that the dashboard can serve as a security boundary on which you can configure permissions to grant users access to reports and datasets.

11. Navigate to the **Product Sales Analysis** dashboard and observe that the dashboard page is in read-only view. The user is not able to delete, move or resize any of the tiles. Only the dashboard author is able to edit this dashboard page.
12. On the **Product Sales Analysis** dashboard, experiment by clicking on the dashboard tile with the three columns at the top right corner. This will allow you to navigate to the **Product Revenue Breakdown** page of the report behind the dashboard.
13. Navigate back to the **Product Sales Analysis** dashboard.

14. Click one of the two tiles in the bottom row to navigate the **Top 5 Products** report page.



15. Once you see the **Top 5 Products** report page, interact with the report by selecting different years and product categories to see how individual products are selling from year to year and across product categories.



You are now finished with your dashboard testing.

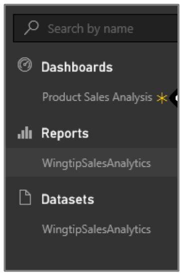
16. Sign out the current user and then log back in using your primary Office 365 account.

Exercise 3: Create the Regional Sales 2015 Dashboard

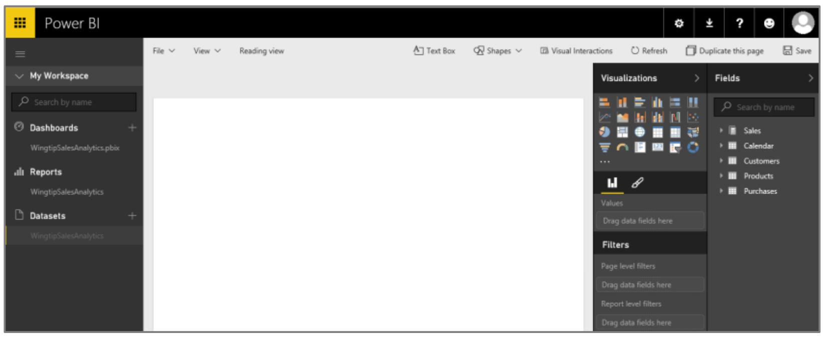
In this exercise you will begin by creating a new report named **2015 Regional Sales** which pulls its data from the **WingtipSalesAnalysis** dataset that that you created over the last few labs. After creating the new report, you will then pin visuals from this report to a new dashboard named **Regional Sales 2015**.

IMPORTANT: In case you somehow missed the last step of the previous exercise, make sure you are no longer running as the secondary user. You should have logged out at the end of the previous exercise and then you should have logged back in with the primary Office 365 account you have been using to published your Power BI Desktop project to the Power BI service.

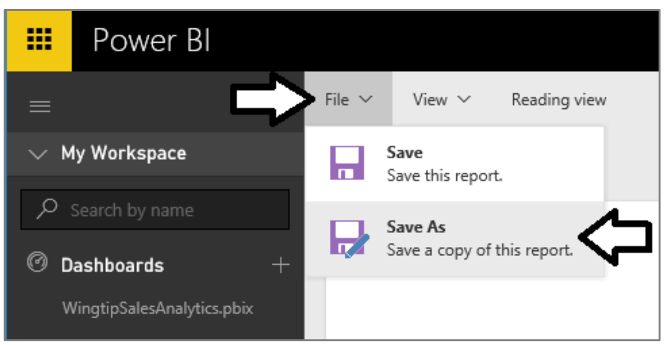
1. Navigate to the Power BI service at https://app.powerbi.com if you are not already there.
2. Make sure you are running in the context of your personal workspace.
3. Create the **Regional Sales 2015** report.
   a) Click the **WingtipSalesAnalysis** link in the **Datasets** section.



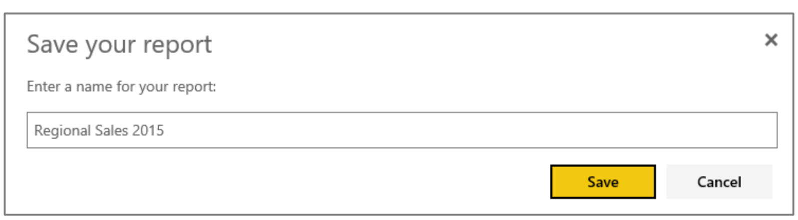
b) When you navigate to the **WingtipSalesAnalysis** dataset, the Power BI service displays a new empty report.



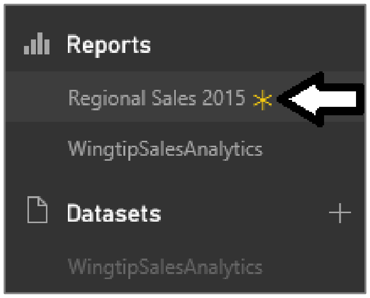
c) Save the report by dropping down the **File** menu and select the **Save** menu.



d) In the **Save your report** dialog, enter a report name of **Regional Sales 2015** and click **Save**.

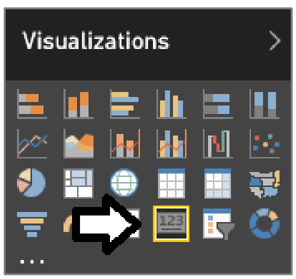


e) You should now be able to see the new report in the **Reports** section.

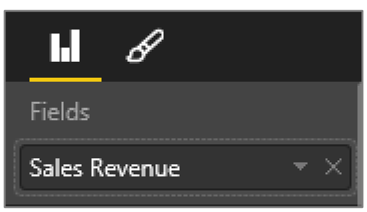


4. The report current has one page name **Page 1**. Modify the page name to **US Sales**.

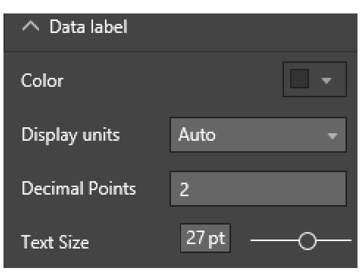
5. Add a card visual to the page to display to sales revenue for the year **2015**.
   a) Add a new Card visual to the page.



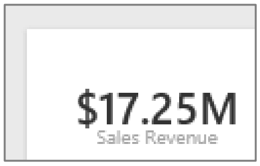
   b) Drag the **Sales Revenue** measure from the **Sales** table into the **Fields** well.



   c) Click the brush icon button in the **Visualizations** page to display the visual's Format properties.
   d) In the **Data label** section, set the **Decimal Point** properties to **2** and the **Text Size** property to **27 pt**.

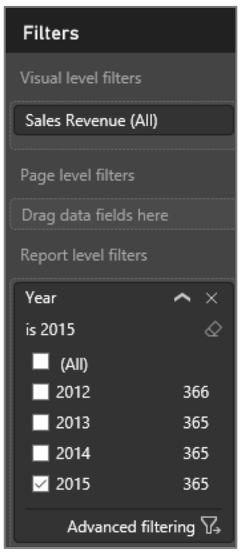


   e) The visual should appear like the visual shown in the following screenshot.

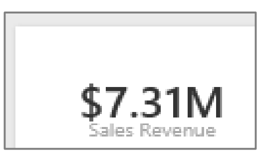


There is a problem because the card visual is displays a sum of sales revenue across all years instead of a total for the year 2015.

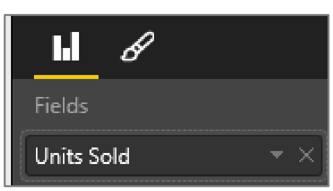
6. Set a report-level filter for the year 2015.
   a) Drag the **Year** column from the **Calendar** table in the **Fields** list and drop it into **Report level filters** section at the bottom of the **Visualization** pane. Set the report level filter to the year 2015 as shown in the following screenshot.



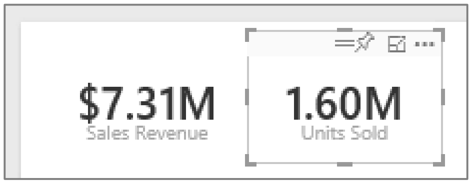
   b) The Card visual should now refresh display the sales revenue for just the year 2015.



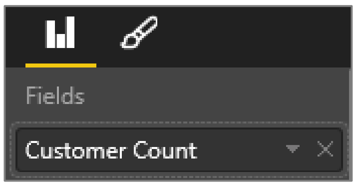
7. Add a second card visual to the page to display the number units sold for the year **2015**.
   a) Select the card visual which displays sales revenue.
   b) Copy and paste the visual to make a cloned copy.
   c) Select the copy and modify it so it uses the Units Sold measure instead of the Sales Revenue measure.



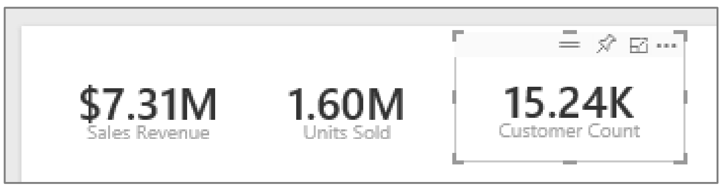
   d) Arrange the two visuals so they are side by side on the page.



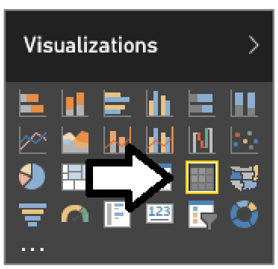
8. Add a third card visual to the page to display the total number of customers for the year **2015**.
    a) Select the card visual which displays sales revenue.
    b) Copy and paste the visual to make a cloned copy.
    c) Select the copy and modify it so it uses the **Customer Count** measure instead of the **Sales Revenue** measure.



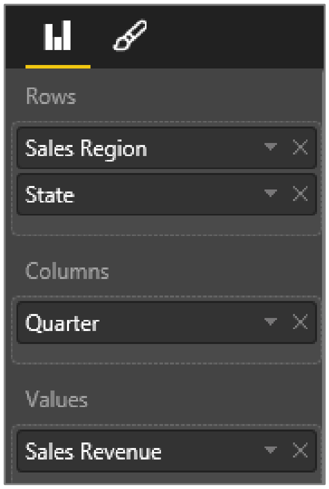
    d) Arrange the three visuals so they are side by side on the page.



9. Add a new matrix visual to the page to visualize how 2015 sales revenue breaks down across sales region, state and quarter.
    a) Add a new matrix visual to the page.



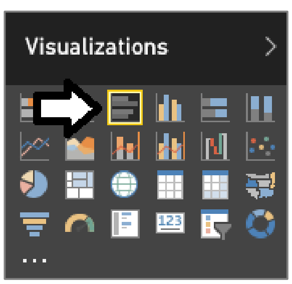
    b) Drag the **Sales Regions** column from the **Customers** table into the **Rows** well.
    c) Drag the **State** column from the **Customers** table into the **Rows** well.
    d) Drag the **Quarter** column from the **Calendar** table into the **Columns** well.
    e) Drag the **Sales Revenue** measure from the **Sales** table into the **Values** well.



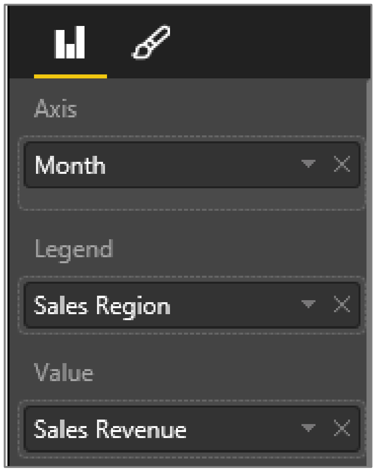
f) The visual should now appear as the visual shown in the following screenshot.

Sales Region	State	2015-Q1	2015-Q2	2015-Q3	2015-Q4	Total
Central Region	AL	$32,490	$31,474	$32,862	$27,606	$124,433
	CO	$62,219	$56,826	$83,215	$70,093	$272,353
	LA	$31,390	$37,177	$46,920	$35,338	$150,824
	OH	$47,054	$47,603	$46,947	$44,504	$186,107
	TN	$52,871	$53,173	$51,099	$58,111	$215,254
	TX	$197,849	$232,880	$256,854	$231,447	$919,030
	Total	$423,873	$459,132	$517,896	$467,099	$1,868,000
Eastern Region	CT	$56,312	$61,126	$56,120	$71,318	$244,876
	FL	$199,071	$239,994	$220,827	$231,453	$891,345
	GA	$96,214	$102,793	$107,631	$110,399	$417,037
	MA	$54,789	$64,603	$64,721	$59,750	$243,864
	NC	$107,437	$112,272	$114,401	$114,530	$448,639
	NH	$23,469	$11,358	$24,744	$20,925	$80,496
	NJ	$41,600	$51,876	$58,096	$55,737	$207,308
	NY	$85,329	$108,225	$112,466	$124,951	$430,971
	PA	$65,456	$62,837	$71,976	$92,294	$292,563
	RI	$10,550	$16,834	$15,003	$18,287	$60,675
	SC	$28,253	$39,834	$28,912	$36,352	$133,352
	VA	$86,496	$92,707	$98,455	$84,224	$361,882
	Total	$854,977	$964,460	$973,352	$1,020,220	$3,813,009
Western Region	AZ	$56,910	$81,762	$76,120	$66,921	$281,713
	CA	$179,554	$210,179	$187,467	$193,201	$770,402
	NM	$33,405	$38,447	$32,404	$34,939	$139,195
	OR	$39,729	$35,868	$45,376	$51,192	$172,165
	UT	$18,010	$18,002	$26,547	$20,578	$83,137
	WA	$36,172	$50,623	$53,627	$43,618	$184,039
	Total	$363,779	$434,882	$421,541	$410,449	$1,630,651
Total		$1,642,629	$1,858,474	$1,912,789	$1,897,768	$7,311,660

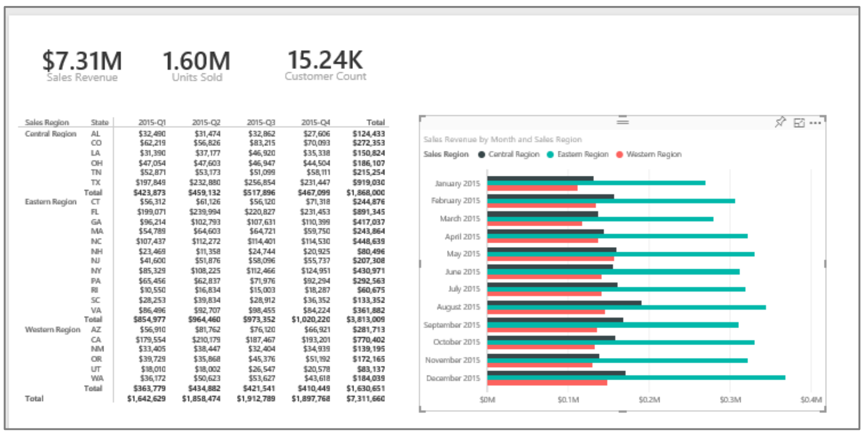
10. Add a new clustered bar chart visual to the page to show how 2015 sales revenue breaks down across sales region and month.
    a) Add a new clustered bar chart visual to the page.



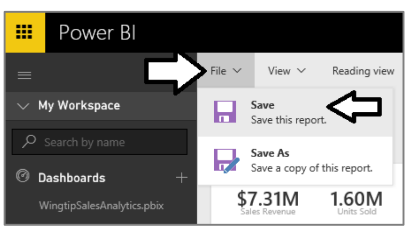
b) Drag the **Month** column from the **Calendar** table into the **Axis** well.
c) Drag the **Sales Regions** column from the **Customers** table into the **Legend** well.
d) Drag the **Sales Revenue** measure from the **Sales** table into the **Value** well.



e) The visual should now appear as the visual shown in the following screenshot.



11. Save the work you have done by drop down the **File** menu and select the **Save** command.

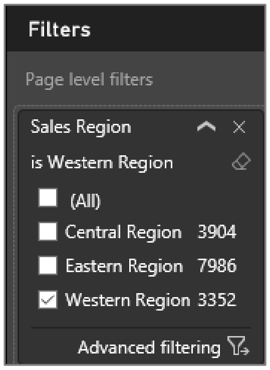


12. Add a new page and rename it to **Western Sales Region**.

13. Set a page-level filter for the wester sales region.

   a) Drag the **Sales Region** column from the **Customers** table in the **Fields** list and drop it into **Page level filters** section at the bottom of the **Visualization** pane.

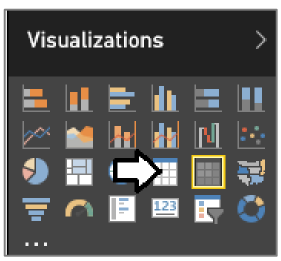
   b) Set the page level filter to **Western Region** as shown in the following screenshot.



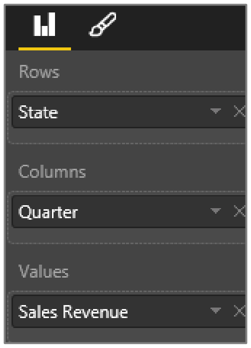
14. Copy and paste the three card visuals from the **US Sales** page to the **Western Regional Sales** page.
    a) Navigate to the **US Sales** page.
    b) Select the card visual on the left.
    c) Copy the card visual to the Windows clipboard.
    d) Navigate the **Western Regional Sales** page.
    e) Paste the visual in the windows clipboard to the **Western Regional Sales** page.
    f) Repeat the same steps to copy the second and third card visual as well.

You can observe that the card visuals on the **Western Regional Sales** page do not return the same results as the card visuals on the **US Sales** page. That's because of the page-level filter you applied after creating the **Western Regional Sales** page.

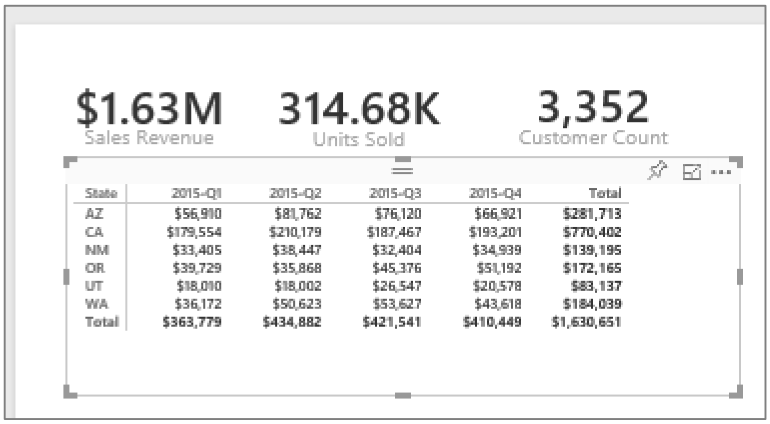
15. Add a new matrix visual to the page to show how sales revenue is broken out across state and quarter.
    a) Add a new matrix visual to the page.



    b) Drag the **State** column from the **Customers** table into the **Rows** well.
    c) Drag the **Quarter** column from the **Calendar** table into the **Columns** well.
    d) Drag the **Sales Revenue** measure from the **Sales** table into the **Values** well.



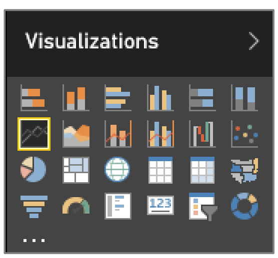
e) The visual should now appear as the visual shown in the following screenshot.



State	2015-Q1	2015-Q2	2015-Q3	2015-Q4	Total
AZ	$56,910	$81,762	$76,120	$66,921	$281,713
CA	$179,554	$210,179	$187,467	$193,201	$770,402
NM	$33,405	$38,447	$32,404	$34,939	$139,195
OR	$39,729	$35,868	$45,376	$51,192	$172,165
UT	$18,010	$18,002	$26,547	$20,578	$83,137
WA	$36,172	$50,623	$53,627	$43,618	$184,039
Total	$363,779	$434,882	$421,541	$410,449	$1,630,651

16. Add a new line chart visual to the page to show sales revenue by quarter split out across sales regions.

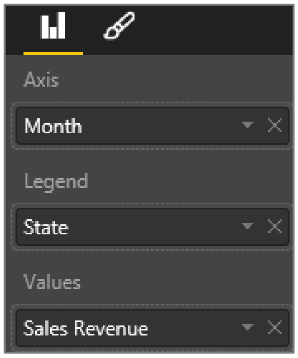
a) Add a new line chart visual to the page.



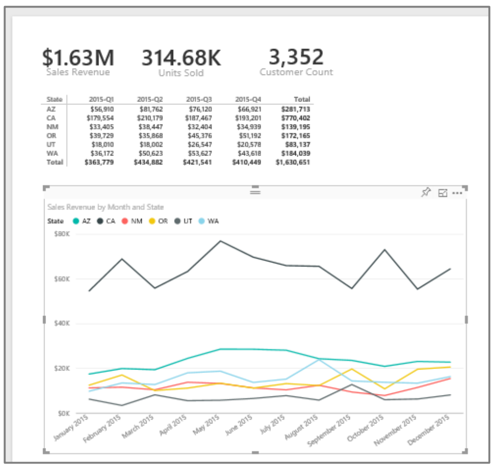
b) Drag the **Month** column from the **Calendar** table into the **Axis** well.

c) Drag the **Sales Regions** column from the **Customers** table into the **Legend** well.

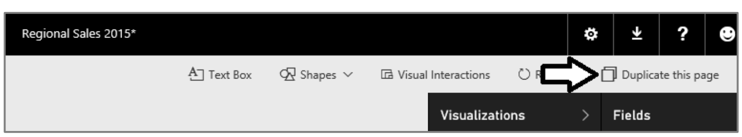
d) Drag the **Sales Revenue** measure from the **Sales** table into the **Value** well.



e) The line chart visual should now appear as the visual shown in the following screenshot.

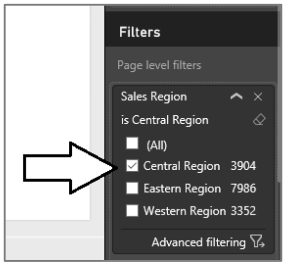


17. Save your work by dropping down the **File** menu and selecting the **Save** command.
18. Duplicate the **Western Regional Sales** page to create the **Central Regional Sales** page.
    a) Click the **Duplicate this page** button.

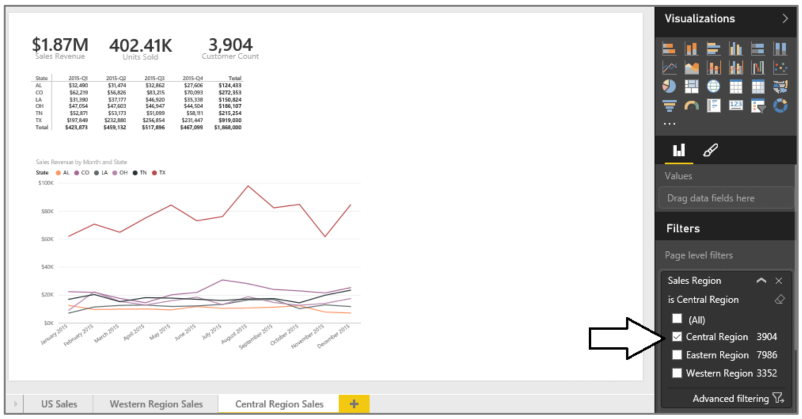


    b) Rename the new page to **Central Regional Sales**.

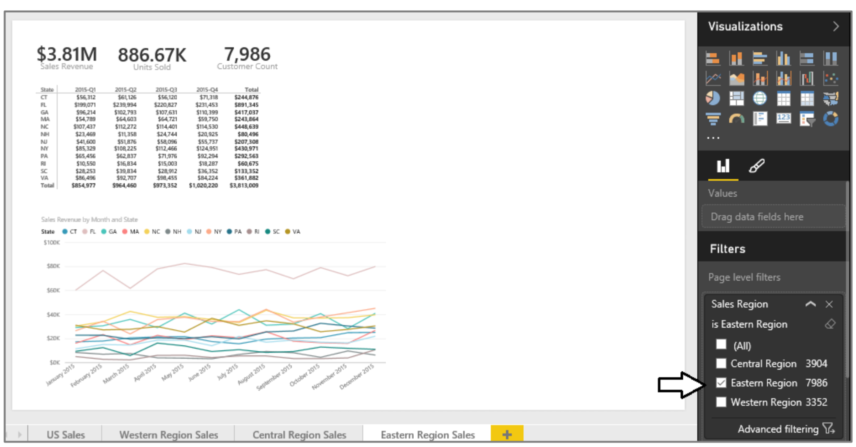
    c) Modify the page-level filtering to filter on **Central Region**.



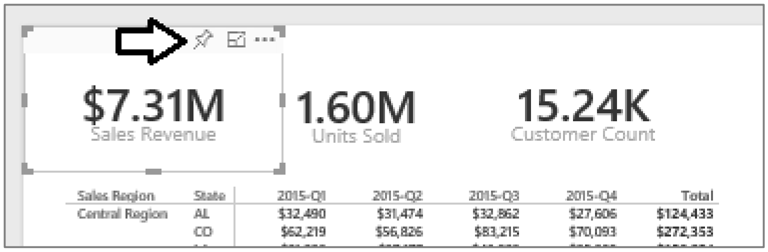
d) Now the **Western Regional Sales** page and the **Central Regional Sales** page display different results even though they are using the exact same visuals.



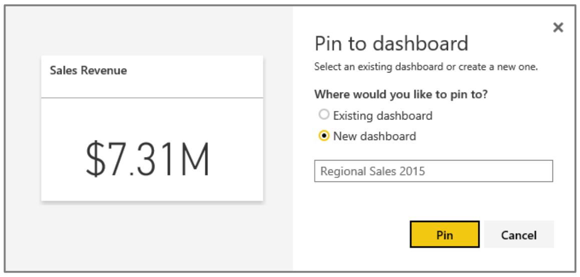
19. Duplicate the **Central Regional Sales** page to create the **Eastern Regional Sales** page.
    a) Click the **Duplicate this page** button.
    b) Rename the new page to **Eastern Regional Sales**.
    c) Modify the page-level filtering to filter on **Eastern Region**.



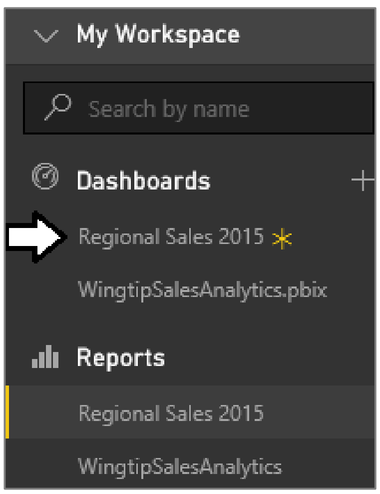
20. Save your work by dropping down the **File** menu and selecting the **Save** command.
21. Create the **Regional Sales 2015** dashboard.
    a) Navigate to the **US Sales** page.
    b) If you select the card visual on the left, you will notice several icon buttons in the upper-right corner. Click on the thumbtack icon button to pin the visual to display the **Pin to dashboard** dialog.



c) The **Pin to dashboard dialog** prompts you enter name for a new dashboard name. Enter a value of **Regional Sales 2015** as the new dashboard name and then click the **Pin** button to create the new dashboard and pin the visual to it.



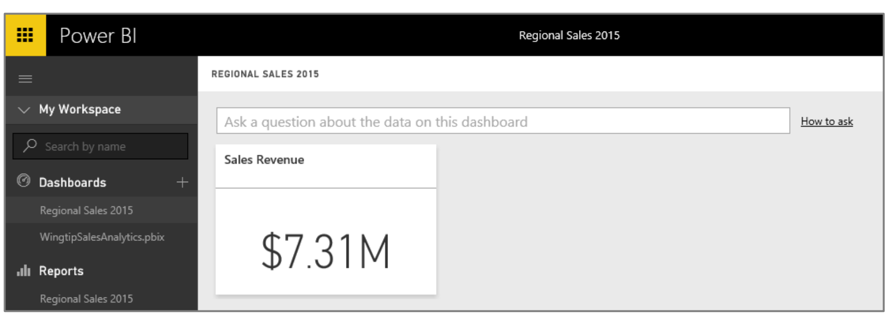
d) At this point, you should be able to see the new **Regional Sales 2015** dashboard in the **Dashboards** section



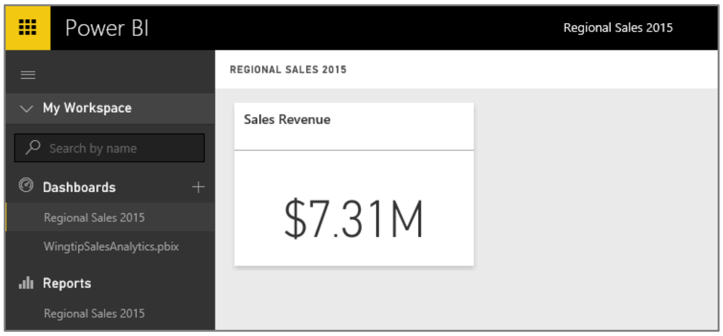
22. Examine the **Regional Sales 2015** dashboard.

a) Click on the link for the **Regional Sales 2015** dashboard in the **Dashboards** section.

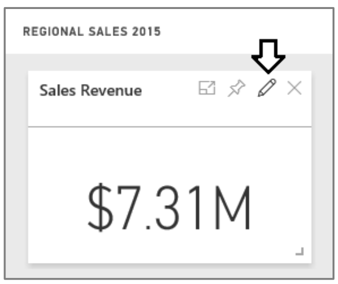
b) Examine the dashboard. It currently contains the Q&A search box and a tile for the card visual.



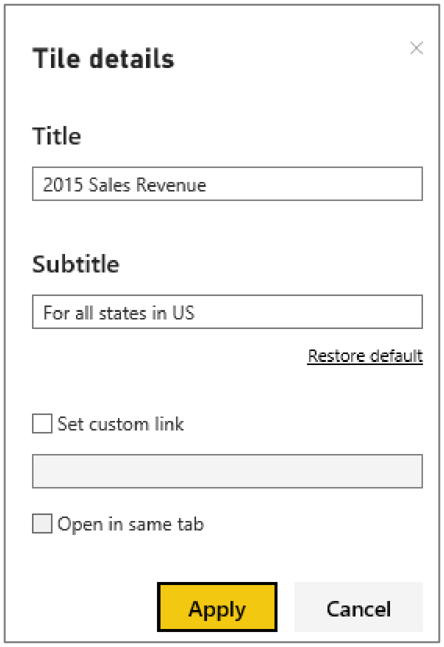
23. Remove the Q&A search box from the dashboard.
    a) Use the fly out menu of the for the **Regional Sales 2015** dashboard and click the **SETTINGS** menu.
    b) On the **Settings** page for the dashboard, navigate the **Dashboards** tab.
    c) Uncheck the checkbox with the caption of **Show the Q&A search box**.
    d) Click the **Apply** button.
    e) You should be able to verify that the dashboard no longer displays the Q&A search box.



24. Modify the title and subtitle for the tile with the **Sales Revenue** card visual.
    a) Select the tile for the **Sales Revenue** card visual and click on the pencil icon button to edit the tile details.

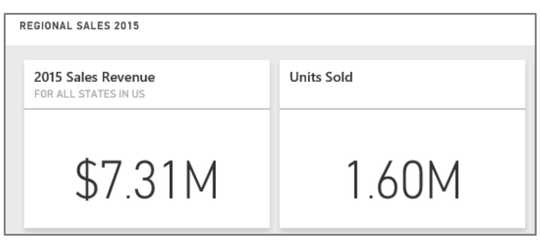


    b) Enter a **Title** of **2015 Sales Revenue** and a **Subtitle** of **For all states in US** and then click **Apply**.

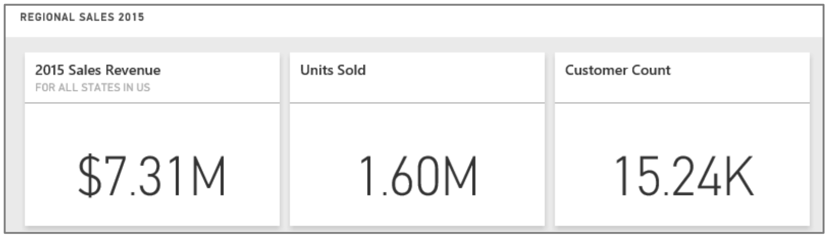


c) You should be able to see that the tile has been updated with a new title and subtitle.

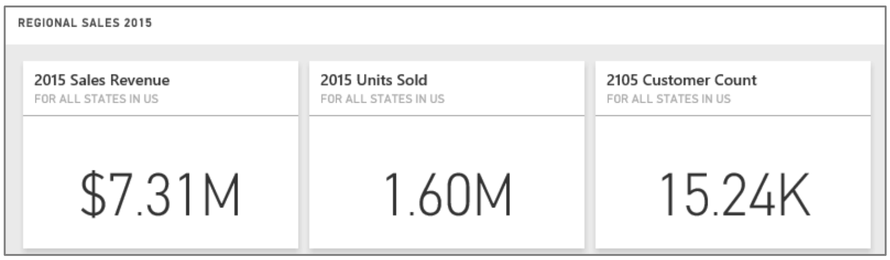
25. Pin the **Units Sold** visual from the **US Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **US Sales** page.
    b) Select the card visual with Units Sold and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **Units Sold** card visual.



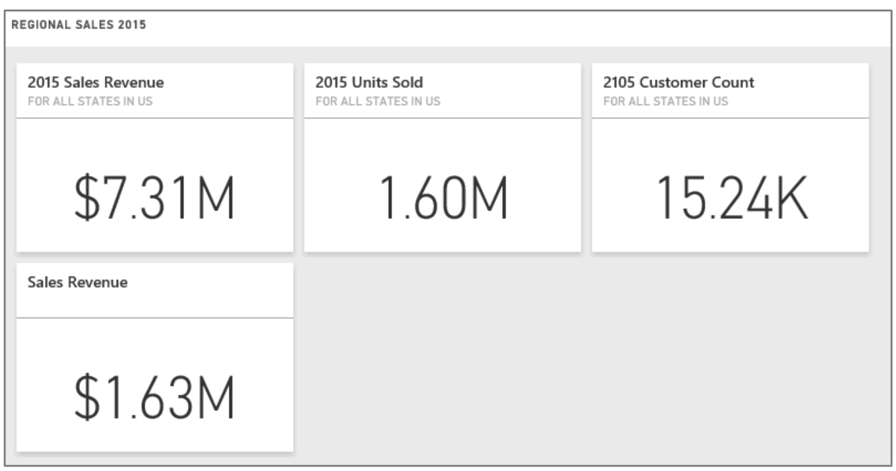
26. Pin the **Customer Count** visual from the **US Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **US Sales** page.
    b) Select the card visual with Customer Count and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **Customer Count** card visual.



27. Modify the title and subtitle of the two new tiles.
    a) Select the **Units Sold** card tile and click on the pencil icon button to edit the tile details.
    b) Enter a **Title** of **2015 Units Sold** and a **Subtitle** of **For all states in US** and then click **Apply**.
    c) Select the **Customer Count** card tile and click on the pencil icon button to edit the tile details.
    d) Enter a **Title** of **2015 Customer Count** and a **Subtitle** of **For all states in US** and then click **Apply**.



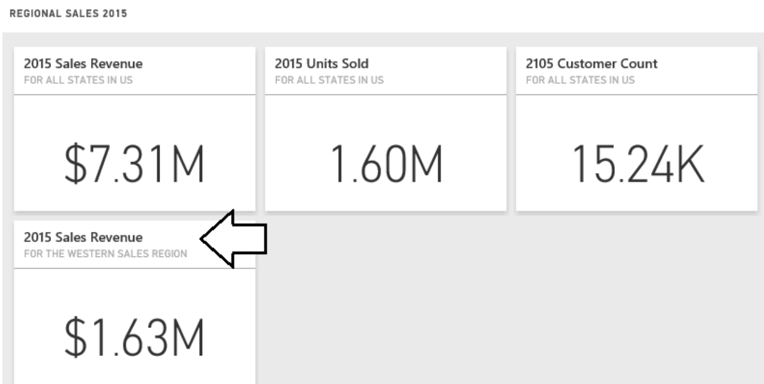
28. Pin the **Sales Revenue** visual from the **Western Region Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **Western Region Sales** page.
    b) Select the card visual with Sales Revenue and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **Sales Revenue** card visual.



You can see there is a potential problem because the tile only displays a title of **Sales Revenue** but the tile does not indicate that this revenue figure has been calculated for the western sales region. Therefore, you must modify the title of the tile to make this clear.

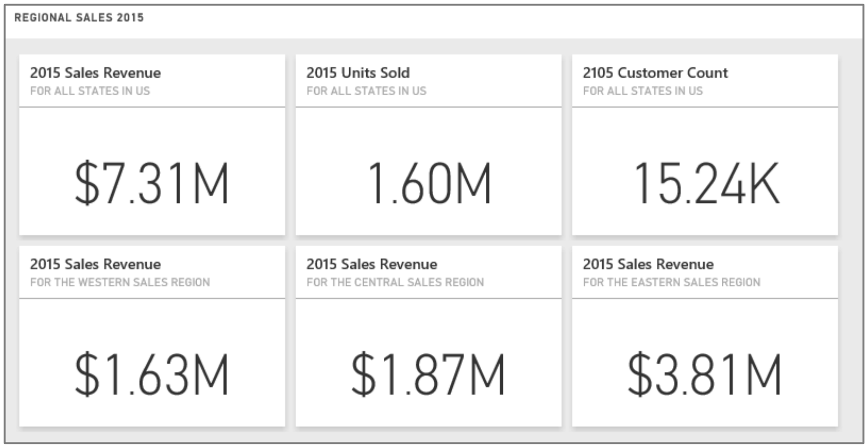
29. Modify the title and subtitle for the new **Sales Revenue** tile.
    a) Select the new tile for western sales revenue and click on the pencil icon button to edit the tile details.
    b) Enter a **Title** of **2015 Sales Revenue** and a **Subtitle** of **For the Western Sales Division** and then click **Apply**.

c) You should be able to see that the tile has been updated with a new title and subtitle.

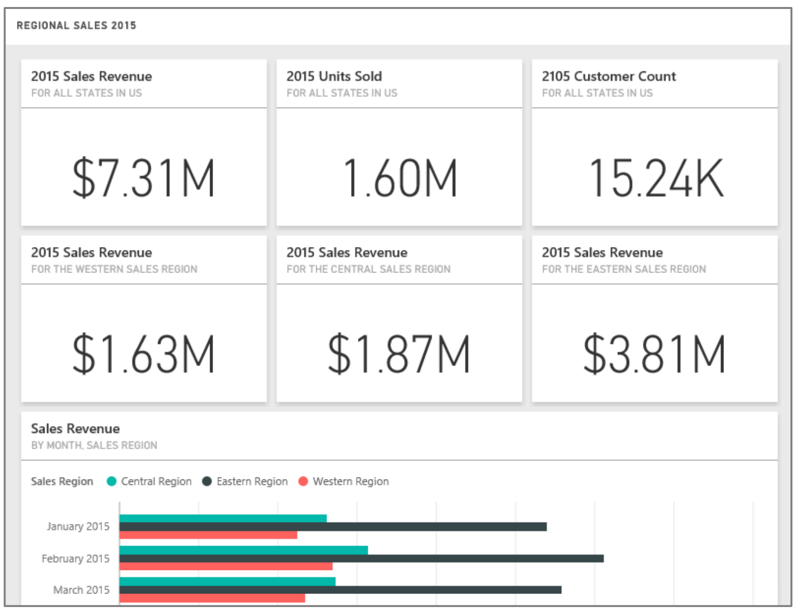


30. Pin the **Sales Revenue** visual from the **Central Region Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **Central Region Sales** page.
    b) Select the card visual with Sales Revenue and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **Sales Revenue** card visual.
31. Modify the title and subtitle for the new **Sales Revenue** tile.
    a) Select the new tile for western sales revenue and click on the pencil icon button to edit the tile details.
    b) Enter a **Title** of **2015 Sales Revenue** and a **Subtitle** of **For the Central Sales Division** and then click **Apply**.

32. Pin the **Sales Revenue** visual from the **Eastern Region Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **Eastern Region Sales** page.
    b) Select the card visual with Sales Revenue and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **Sales Revenue** card visual.
33. Modify the title and subtitle for the new **Sales Revenue** tile.
    a) Select the new tile for western sales revenue and click on the pencil icon button to edit the tile details.
    b) Enter a **Title** of **2015 Sales Revenue** and a **Subtitle** of **For the Eastern Sales Division** and then click **Apply**.



34. Pin the **Bar Chart** visual from the **US Sales** page to the **Regional Sales Revenue** dashboard.
    a) Navigate to the **US Sales** page.
    b) Select the bar chart visual with sales revenue spit out across sales region and click on the thumbtack icon button to display the **Pin to dashboard** dialog.
    c) In the **Pin to dashboard** dialog, click the **Pin** button to pin the visual to the **Regional Sales 2015** dashboard.
    d) Navigate to the **Regional Sales 2015** dashboard and confirm a new tile has been added for the **bar chart** visual.



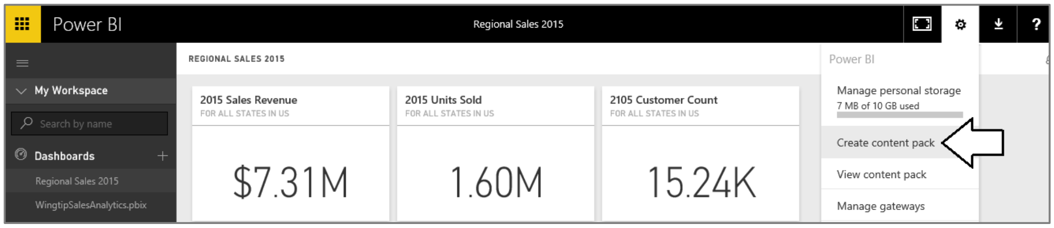
You have now finished creating the dashboard. You will now move on to the final exercise where you will deploy the dashboard using an organizational content pack.

Exercise 4: Deploy a Dashboard using an Organizational Content Pack

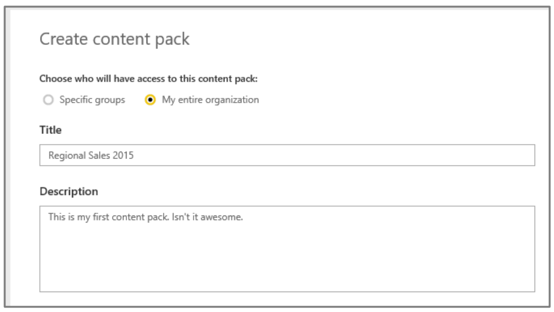
In this exercise you will create an organizational content pack to deploy the **Regional Sales 2015** dashboard. After creating the content pack for the **Regional Sales 2015** dashboard, you use the content pack to activate the **Regional Sales 2015** dashboard in a group workspace.

1. Create a content pack named the **Regional Sales 2015** to deploy the **Regional Sales 2015** dashboard.

a) Drop down the **Settings** menu from the top right corner of the page and select the **Create content pack** command to display the **Create content pack** page.



b) On the **Create content pack** page, select an access level of **My entire organization** and enter a **Title** of **Regional Sales 2015**. Enter a creative description as well.



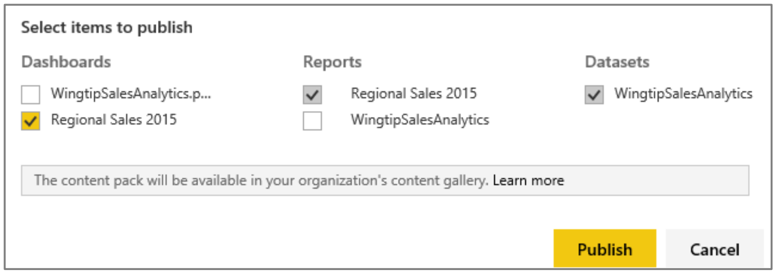
c) Below on the **Create content pack** page you should see a section to upload a custom image.

d) Click the **Upload** link and then upload the image file located at the following path.

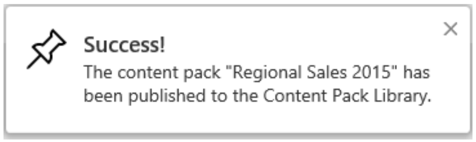
```
C:\Student\Extras\Images\CPT\CPTAppIcon96x96.png
```

e) You should see the custom image on the **Create content pack** page.

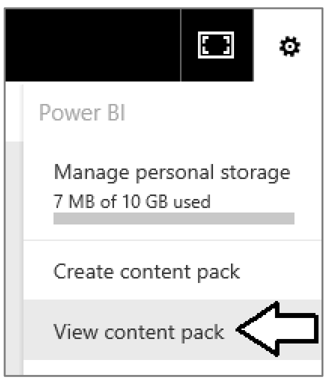
f) At the bottom of the **Create content pack** page select the checkbox for the **Regional Sales 2015** dashboard. When you do this, the underlying report and dataset are also automatically selected.



g) Click the **Publish** button. You should receive another notification of your ongoing and unstoppable success.

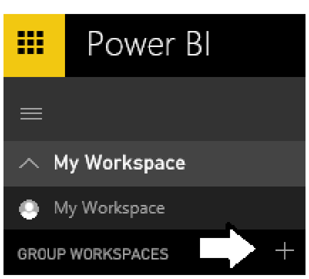


2. View the content pack you just created which is named **Regional Sales 2015**.
   a) Drop down the **Settings** menu from the top right corner of the page and select the **View content pack** command.

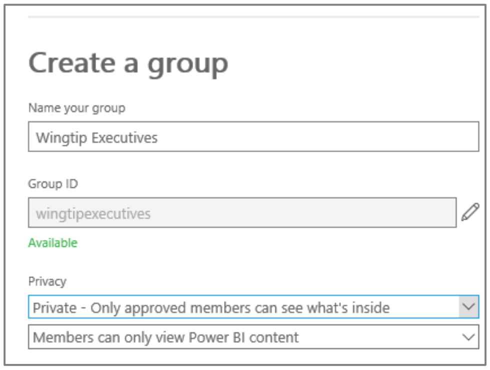


   b) You should be able to see that the **Regional Sales 2015** content pack which has been published to **My Organization**.

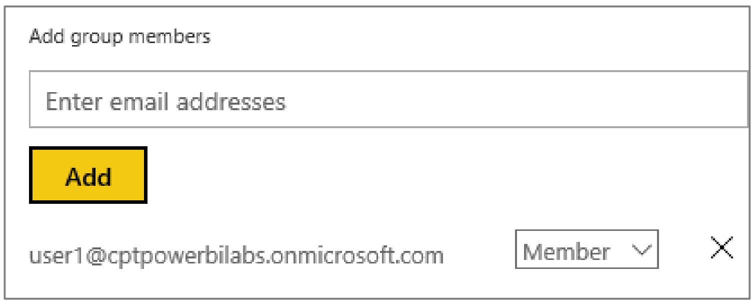
3. Create a new group workspace named **Wingtip Executives**.
   a) Click on the icon button with the plus (**+**) sign to the right of the **Group Workspaces** header.



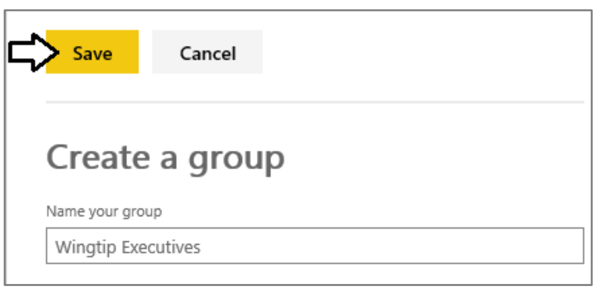
   b) On the **Create a group** page, fill out the form using the data shown in the following screenshot.



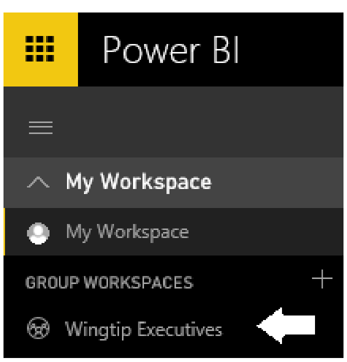
c) Enter the email address of the secondary user and click the **Add** button to add that user to the new group.



d) Click the Save button at the top of the page to save your changes.

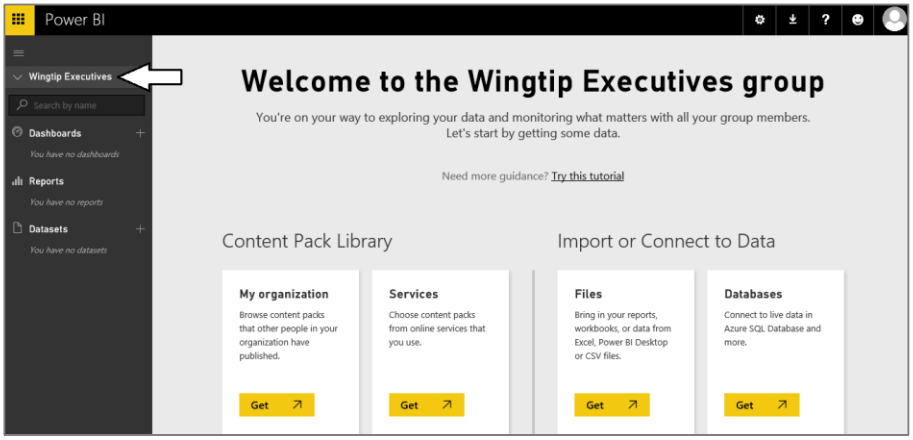


e) You should now be able to see a link to the **Wingtip Executives** group workspace in the **Group Workspaces** section of the left navigation menu.

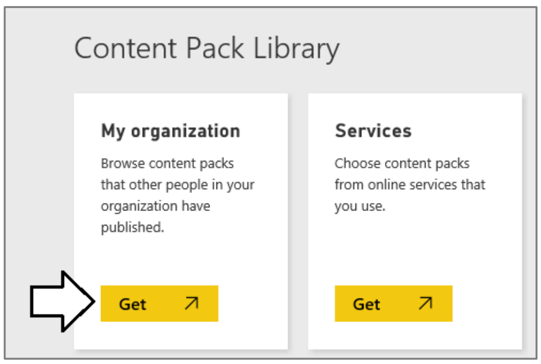


f) Click on the link for the **Wingtip Executives** group workspace.

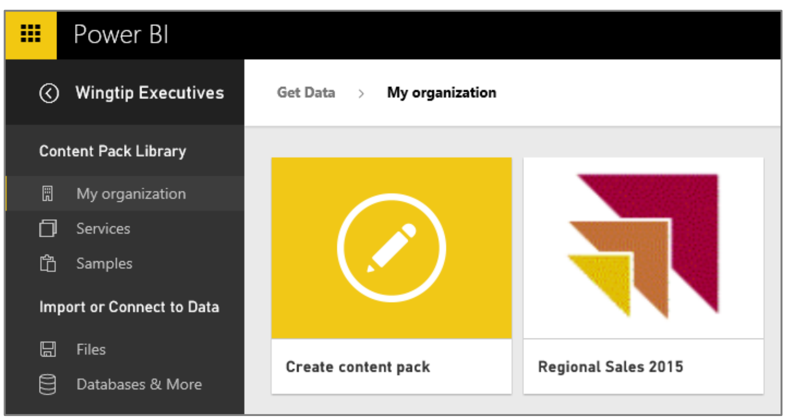
g) The Power BI service will switch the user context from your personal workspace over to the **Wingtip Executives** workspace.



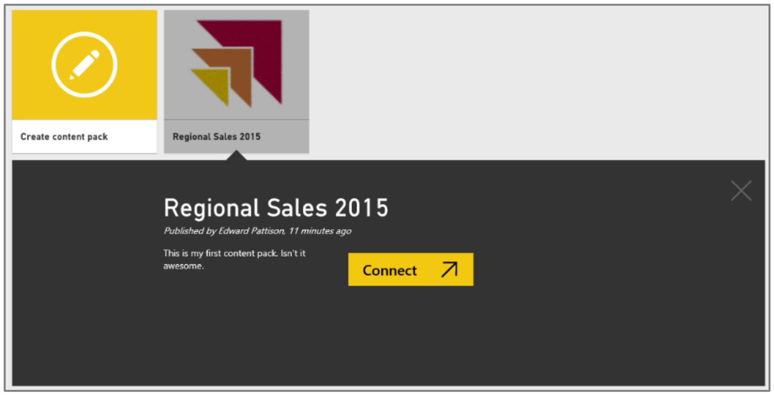
4. Activate the **Regional Sales 2015**.content pack in the **Wingtip Executives** group workspace.
   a) Click on the **Get** button the **My organization** section.



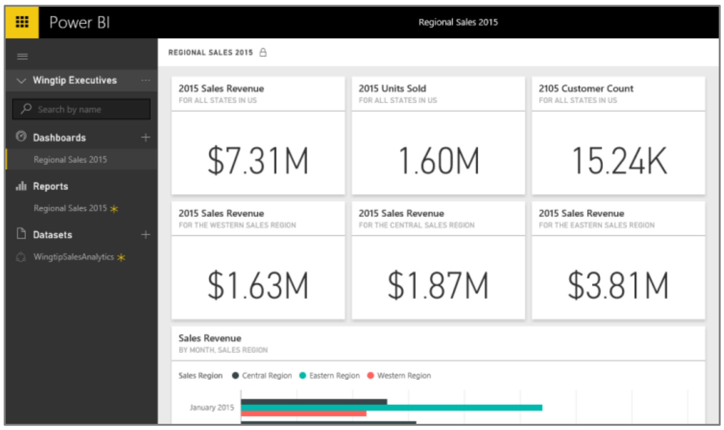
   b) Click on the **Regional Sales 2015**.content pack to invoke the **Connect** fly out menu.



   c) Click the **Connect** button.



d) Once the content pack has been activated, you should be able to access its dashboard.



You have now reach the end of this lab.