

Introduction to DAX & Custom Visuals

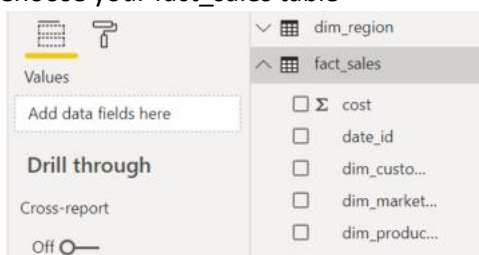
Read Me: This lab builds on the previous labs for our product sales project. You will be focusing on visualization.

Lab Time: 30 minutes

Exercise 1: Introduction to DAX

In this exercise you will create some DAX Calculations, you can copy and paste the syntax to your report.

1. If you do have your Power BI desktop report open, please go ahead and open it. This lab builds on the previous completed labs.
2. Choose your fact_sales table

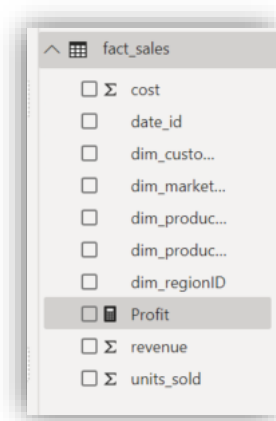


3. Click on **New Measure** in **Table tools** in the ribbon
 - a. In the formula bar, create profit calculation
 - i. Create Profit

Profit = sum(fact_sales[revenue]) - sum(fact_sales[cost])



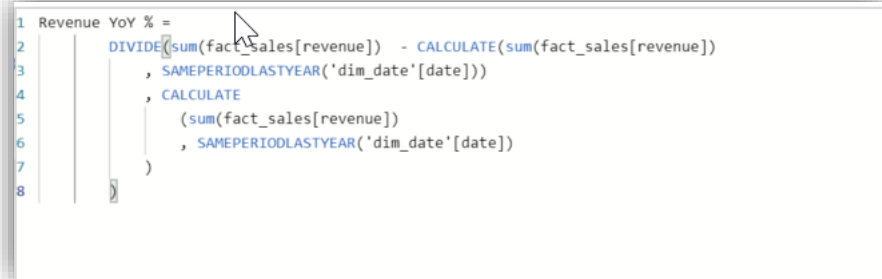
The table should now have a Profits Measure



- ii. Create YoY Revenue

```
Revenue YoY % = DIVIDE(sum(fact_sales[revenue]) -  
CALCULATE(sum(fact_sales[revenue]),  
SAMEPERIODLASTYEAR('dim_date'[date])),  
CALCULATE(sum(fact_sales[revenue]),  
SAMEPERIODLASTYEAR('dim_date'[date])))
```

To format your formula to make it readable use **Alt+Enter** or **Shift-Enter** keyboard shortcuts to go to next line.



```
1 Revenue YoY % =  
2     DIVIDE(sum(fact_sales[revenue]) - CALCULATE(sum(fact_sales[revenue])  
3         , SAMEPERIODLASTYEAR('dim_date'[date])),  
4         , CALCULATE  
5             (sum(fact_sales[revenue])  
6             , SAMEPERIODLASTYEAR('dim_date'[date]))  
7     )  
8
```

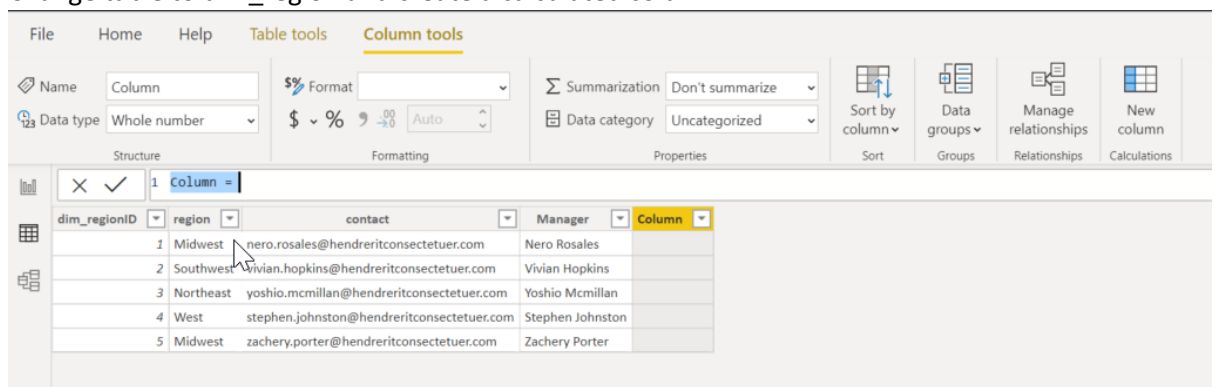
iii. Create AI, General Purpose and Utility Revenue

```
AI Revenue = SUMX(FILTER(fact_sales,  
RELATED(dim_productcategory[ProductCategory_name])="AI"),fact_sales[revenue])
```

```
GP Revenue = SUMX(FILTER(fact_sales,  
RELATED(dim_productcategory[ProductCategory_name])="General  
Purpose"),fact_sales[revenue])
```

```
Utility Revenue = SUMX(FILTER(fact_sales,  
RELATED(dim_productcategory[ProductCategory_name])="Utility"),fact_sales[revenue])
```

4. Change table to dim_region and create a calculated column



dim_regionID	region	contact	Manager	Column
1	Midwest	nero.rosales@hendreritconsectetur.com	Nero Rosales	
2	Southwest	vivian.hopkins@hendreritconsectetur.com	Vivian Hopkins	
3	Northeast	yoshio.mcmillan@hendreritconsectetur.com	Yoshio Mcmillan	
4	West	stephen.johnston@hendreritconsectetur.com	Stephen Johnston	
5	Midwest	zachery.porter@hendreritconsectetur.com	Zachery Porter	

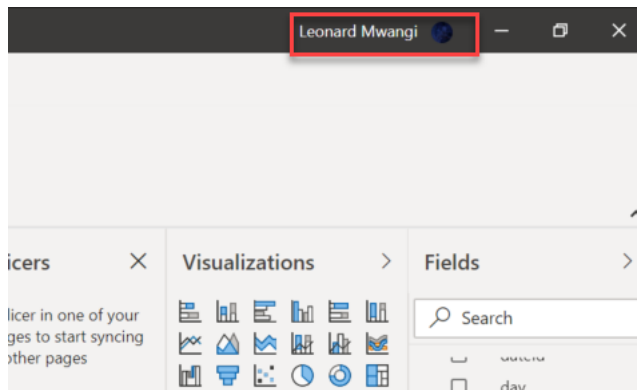
Split Manager name to get first name

```
First name = LEFT(SUBSTITUTE(dim_region[Manager]," ","-"),SEARCH("-",SUBSTITUTE(dim_region[Manager]," ","-"))-1)
```

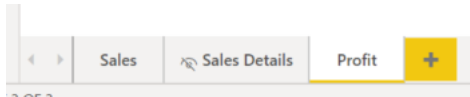
Exercise 2: Custom Visuals

In this exercise you will import some custom visuals to enhance your report.

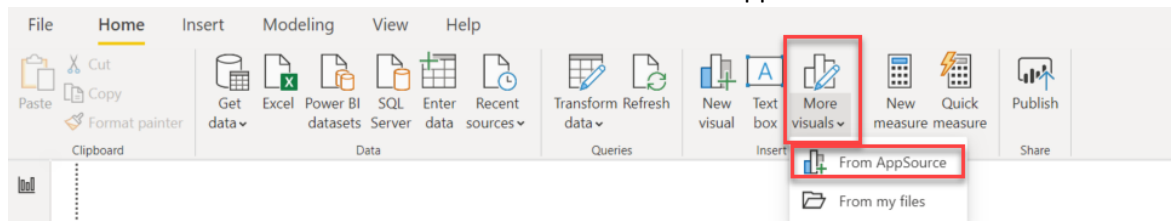
1. Make sure you are signed into Power BI Desktop, if you are not click sign in and use your domain credentials.



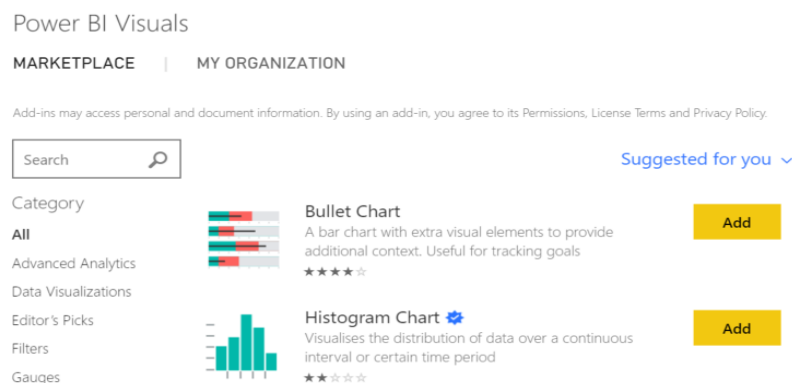
2. Create a new Report Page and name it **Profits**



3. Navigate to More Visuals on the home tab of the ribbon
 - a. On the ribbon make sure the Home tab is selected and click on from MarketPlace which is accessible from **Home** Tab → **More Visuals** → **From AppSource**

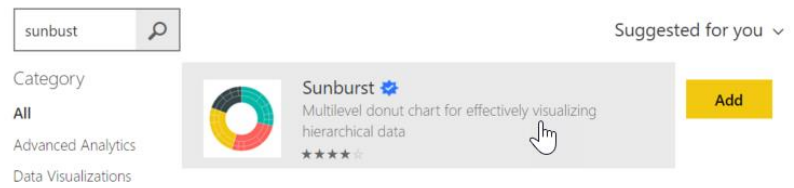


- b. Review different visuals from the marketplace

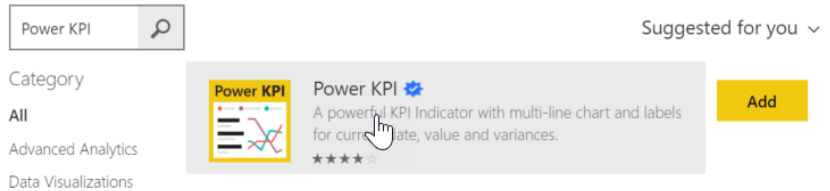


i. Search for the following visuals and click add

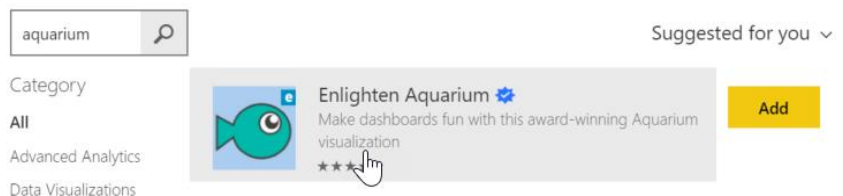
1. Sunburst



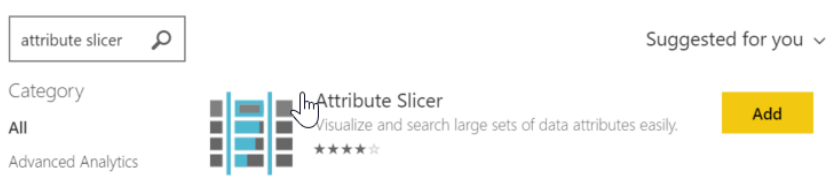
2. Power KPI



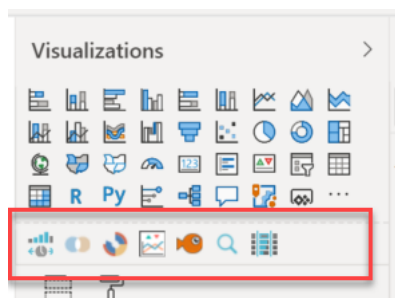
3. Aquarium



4. Attribute Slicer

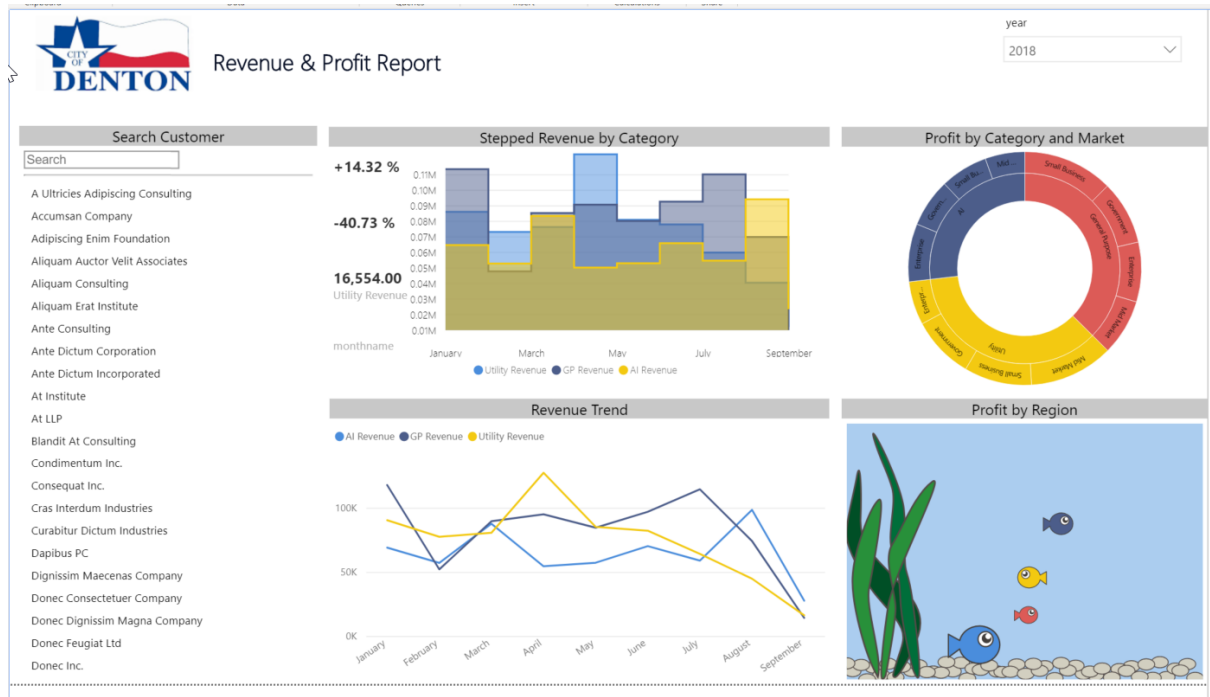


4. All the added visuals should show up in your Power BI visualization section.



5. Add visuals to the Profit Page – you can identify the visual by placing your mouse over it. Here is the result

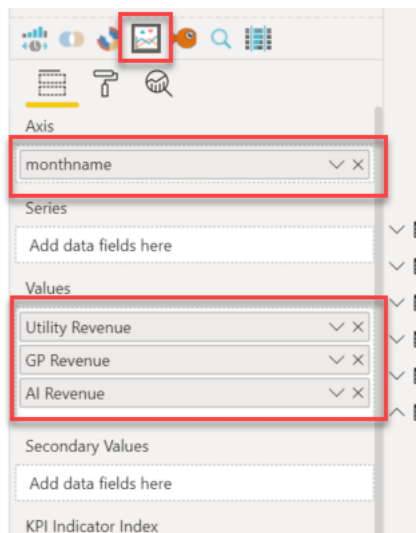
2021045A: Power BI Training
LAB 04: Reports



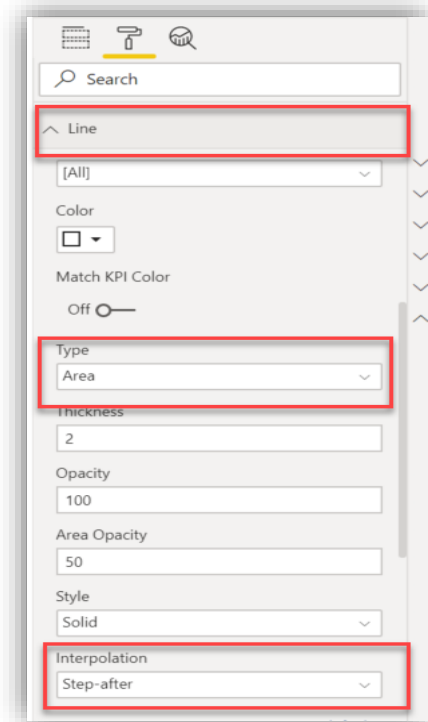
- a. Add **Attribute Slicer** and add **Customer_Name** to the visual



- b. Add Power KPI visual and include **Utility Revenue**, **GP Revenue**, **AI Revenue**



- i. Format the visual Line section as below.



- c. Add a **Sunburst** visual, add **ProductCategory_Name**, **Market** and **Profit**
- d. Add **Line Chart** to show trend, add **monthname**, **AI Revenue**, **GP Revenue** and **Utility Revenue**
- e. Add **Aquarium Chart** include **profit** and **Region**.

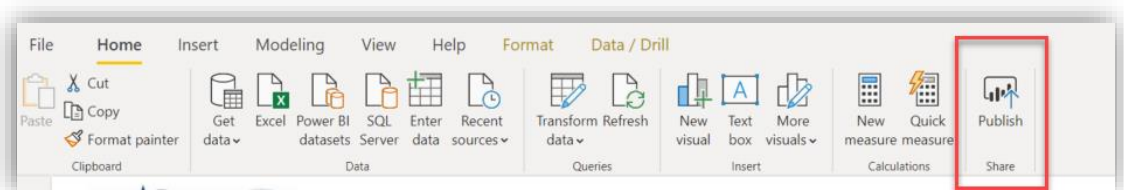
6. Save your Report

Exercise 3: Publish Report

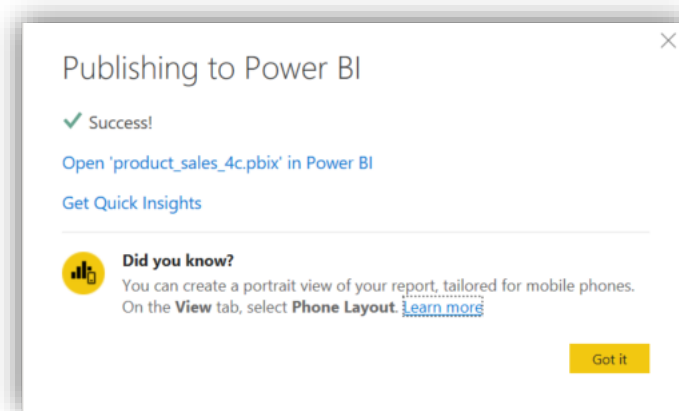
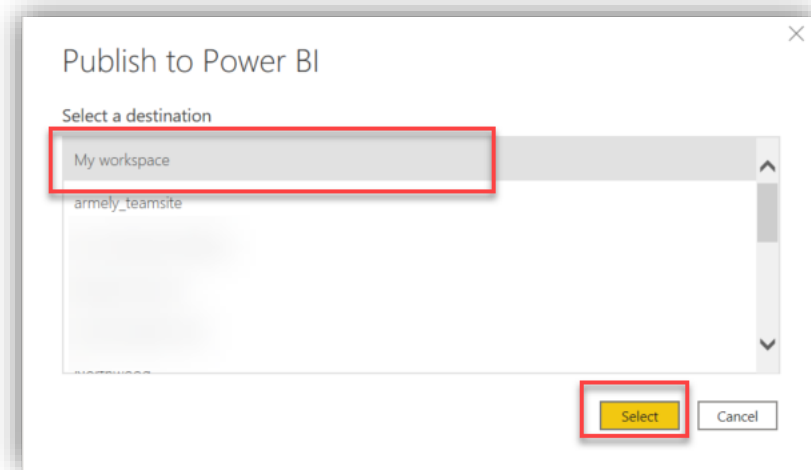
In this exercise you will publish the report to Power BI Service.

7. Publishing Report

- a. From Home tab in the ribbon, click on Publish to publish your work



- b. Select My Workspace and click Select



You have completed this lab for reports, you will continue to work on this project in subsequent labs.