

Lab 3 Model Data in Power BI

Objectives

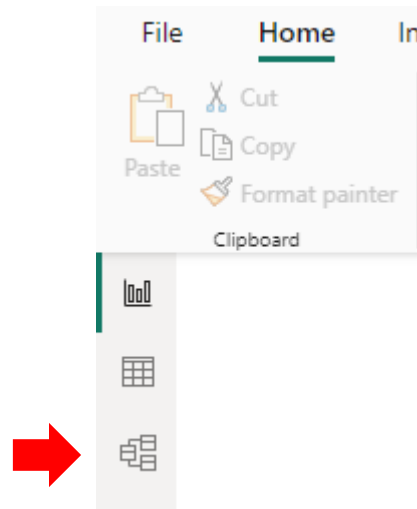
Time: 20-30 Minutes

1. Organizing tables in the data model
2. Creating relational connections between Fact and Dimension tables
3. Validate filter propagation.
4. Create a doughnut chart showing the count segmentation of resellers based on product category.

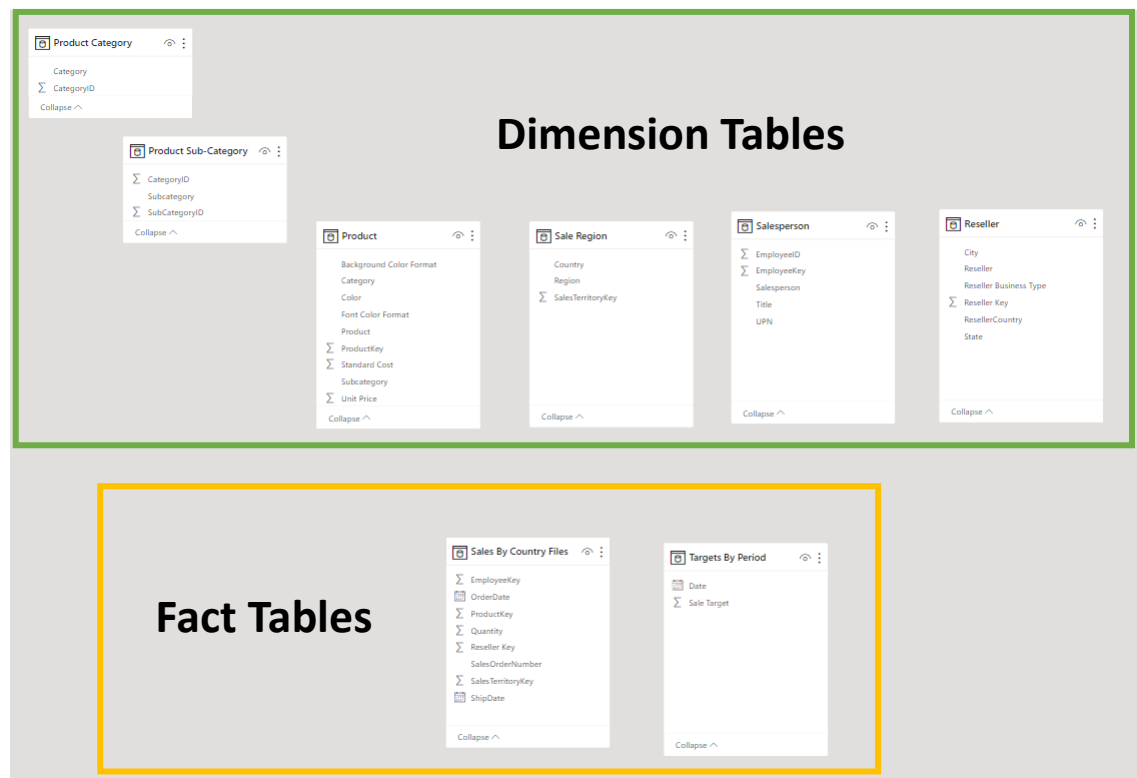
Lab steps

Organizing tables in the data model

- Launch Lab 2 Start Up - Data Modeling Power BI File
- Navigate to the Model view.



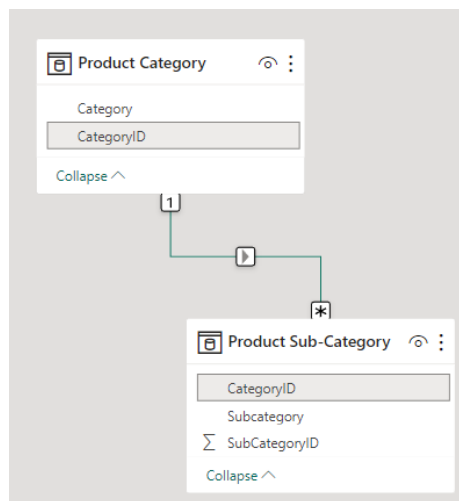
- Organize the data tables separating the dimension tables placing them on the upper part of the model canvas and the Fact tables below.



2) Creating relational connections between Fact and Dimension tables

- Make table connections by connecting the corresponding Primary key from the **Dimension** tables to the **Fact** tables.
- You can use the drag and drop method or from the **Home** tab select Manage relationships.

Drag & Drop Option



Manage Relationship

1

2

3

4

5

1:* One Side

Many Side

Create relationship

Select tables and columns that are related.

Product Category

CategoryID	Category
1	Components
2	Clothing
3	Accessories

Product Sub-Category

SubcategoryID	CategoryID	Subcategory
1	1	Road Frames
2	2	Jerseys
3	3	Helmets

Cardinality: One to many (1:*)

Cross filter direction: Single

☒ Make this relationship active

☐ Apply security filter in both directions

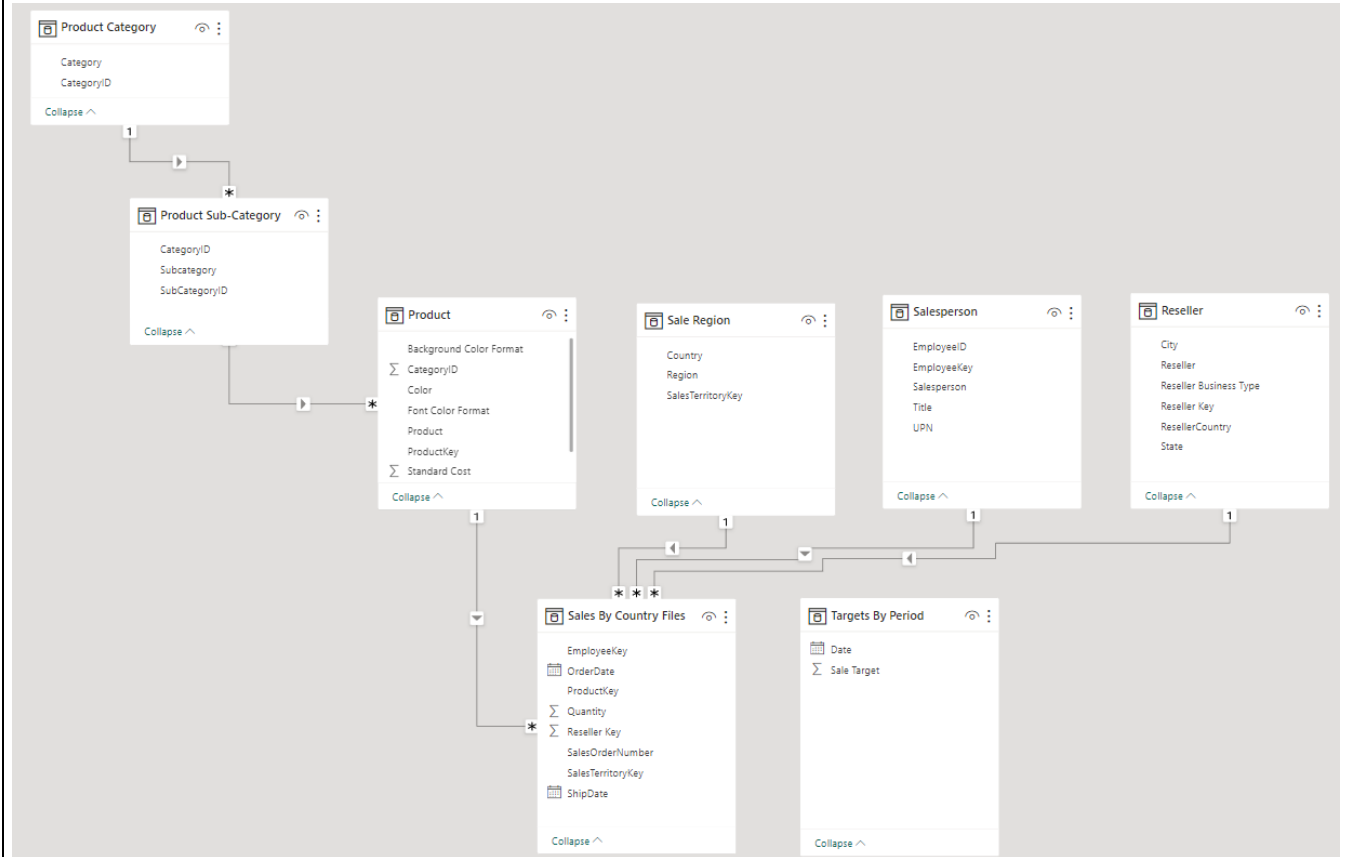
☐ Assume referential integrity

There's already a relationship between these two columns.

OK Cancel

- Create the following connections.

From		To	
Product Category		Product Sub-Category	
PK	CategoryID	FK	CategoryID
Product Sub-Category		Product	
PK	SubCategoryID	FK	SubCategoryID
Product		Sales By Country Files	
PK	Product Key	FK	Product Key
Sales Region		Sales By Country Files	
PK	Sales TerritoryKey	FK	Sales TerritoryKey
Salesperson		Sales By Country Files	
PK	EmployeeKey	FK	EmployeeKey
Reseller		Sales By Country Files	
PK	Reseller Key	FK	Reseller Key



3) Validate filter propagation

- Navigate to the **Report View**
- From the Visualizations pane select the slicer visual and place the category field from the category table into the slicer field
- Place the Subcategory field from the Subcategory table into the slicer field and the Salesperson field into another slicer as seen here.
- Add a Clustered bar chart visual onto the canvas and place the product field, and Quantity field into the table visual
- Test the slicers to ensure that the filter propagation is working correctly starting with the category slicer.

Category

- ☐ Accessories
- ☐ Bikes
- ☐ Clothing
- ☐ Components

Subcategory

- ☐ Bib-Shorts
- ☐ Bike Racks
- ☐ Bike Stands
- ☐ Bottles and Cages
- ☐ Bottom Brackets
- ☐ Brakes
- ☐ Caps
- ☐ Chains
- ☐ Cleaners
- ☐ Cranksets

Salesperson

- ☐ Amy Alberts
- ☐ Brian Welcker
- ☐ David Campbell
- ☐ Garrett Vargas
- ☐ Jae Pak

1

2

3

Sum of Quantity by Product

