Power Query - The Data Cleaning

Part 1: Data Cleaning (The most important)

0.Split Column: The Segment-Country column is not useful.

1.Change Data Type,

2.Remove Empty Rows

3.Replace Values & Standardize Text:
Replace Values to change "USA" back to "United States of America".
 Also "3" to 3

4.Conditional Column
Add Column > Conditional Column.
New column name: discount Category
If Discounts is greater than 0 then "Discounted" else "Full Price"

Part 2: Data Modeling (The Foundation)

Create a Date Table: Time intelligence.
Go to the Data view.
Home > New Table and paste this DAX formula:

DateTable =
ADDCOLUMNS (
    CALENDAR (DATE(2013,1,1), DATE(2014,12,31)),
    "Year", YEAR([Date]),
    "MonthNumber", FORMAT([Date], "MM"),
    "MonthName", FORMAT([Date], "MMMM"),
    "Quarter", "Q" & QUARTER([Date]),
    "YearQuarter", FORMAT([Date], "YYYY") & "-Q" & QUARTER([Date])
)

Mark this DateTable as the official Date Table (Right-click > Mark as date table).

Create the Dimension Table

1. On the **Home** ribbon, click **Enter Data**.
2. Create a table with two columns: `Product` and `Category`.
3. Assign a category to each product (Of course! Here is a complete and meaningful list of product categories based on the product names in your dataset.

Product,Category; Amarilla,City Bikes ;Carretera,Road Bikes;Montana,Mountain Bikes;Paseo,Touring Bikes;Velo,Racing Bikes;VTT,All-Terrain Bikes

Name the table **Product Details** and click **Load**.

<u>Create Relationships:</u>
Go to the Model view.

Drag the Date field from the Financial Sample table and drop it on the `Date` field in the DateTable. This creates a relationship

Create the relationships by dragging and dropping: Drag Product from Product Details onto Product in the main table.

Part 4: DAX Measures

DAX measures perform calculations on the fly.

1. <u>Total Sales:</u>
Total Sales = SUM('Financial Sample'[Sales])

2. <u>Total Profit:</u>
Total Profit = SUM('Financial Sample'[Profit])

3. <u>Profit Margin %:</u>
Profit Margin % = DIVIDE([Total Profit], [Total Sales], 0)
After creating this measure, select it and in the "Measure tools" ribbon, change the format to **Percentage**.

4. <u>Total Units Sold:</u>
Total Units Sold = SUM('Financial Sample'[Units Sold])

5. <u>Sales PY (Previous Year - Introduction to Time Intelligence):</u>
Sales PY = CALCULATE([Total Sales], SAMEPERIODLASTYEAR('DateTable'[Date]))

6. <u> Sales Growth %:</u>
Sales Growth % = DIVIDE([Total Sales] - [Sales PY], [Sales PY], 0)