

Exercise: Data modeling and visualizations



You are employed as a sales manager with Northwind Traders. You have assembled important sales information which you would like all your department staff to be aware of. The data is currently in an Excel spreadsheet, but you feel that it would be easier for the staff to read and assimilate in the form of a Power BI report.

Setup Instructions

- . In Power BI Desktop choose Get Data and then Excel Workbook and click connect. Navigate to sample data → northwind → 15 nov update.xlsx, select it, and choose open. Choose the table called **tbl_sales** and click load.

Task #1: Formatting

Use the formatting choices in the Column Tools ribbon to make these formatting changes:

- Format the numbers in the CSAT¹ column as percentages with no decimal places.
- Format the numbers in the Sales column with a dollar currency symbol.
- Format Tax as percentage

Task #2: visualization

Visualization #1

- Add a table in the bottom left corner of the canvas which contains the customer names and four columns showing sales figures. Initially all four columns will show the same totals, but you should then customize them so that they show *Total Sales, Average Sales, Minimum Sale, and Maximum Sale*.
- Add a column that displays the total sales as percentage of grand total.

¹ The "CSAT" field refers to "Customer Satisfaction" and contains values between 0 and 1, indicating satisfaction levels for each transaction

- Adjust the format of the average column to show whole numbers without any decimal places.
- Change the background color only for the average column
- Sort the visual by sum of sales in descending order.

Visualization #2

- Add a Clustered Column Chart visualization in the bottom right-hand corner. It should show total sales by month.
- Add an average line on the column chart. Place it in front of columns and display the value (label) that presents the average.

Visualization #3

- Add a Stacked Bar Chart visualization in the top left corner of the page.
- It should show Sales by type.
- Filter the visual to display top five products by sum of sales

Visualization #4

- Add a Table at the top middle of the page.
- It should include Product Name and Sales.
- Filter the visual to display top five products by sum of sales

Visualization #5

- In the top right corner of the canvas add a Donut Chart which shows Sales by Payment type.

Visualization #6

- In the top left Insert a slicer using the state/province field. Display the slicer as a drop-down list.

Visualization #7

- Next to the slicer add one card the display sum of sales.

Task #4

- Add a background to the report page using wallpaper, select a solid color.
- Add borders around each visualization and space them in a balanced way on the page.
- Feel free to do some formatting for the visualizations.

Task #5 Save

Rename the report page Customer Information.

