

Exercise 6.2: Calculated Fields and Tableau Calculations.

Business Scenario

Comparing business quarterly earnings is an important way to measure the financial performance during a specific year. This helps to give analysts, investors, and participants an idea of how much a company's sales are increasing over time. For this purpose, the Data Analyst of a Consumer Product Company needs to analyze the difference between the average orders and the current orders for this year and all years, on a quarterly basis. This will give the investors a much better idea of how well the company is doing.

Overview

- Use the Sample-Superstore excel sheet as the data source.
- Create a calculated field to calculate this year's avg. difference using the formula: $SUM([Quantity]) - WINDOW_AVG(SUM([Quantity]), First(), Last())$.
- Create another calculated field to calculate all years' avg. difference using the formula: $ZN(SUM([Quantity])) - Window_AVG(SUM([Quantity]))$.
- Use Order Date dimension and perform drilling to break the data into quarters.
- Use the newly created calculated fields and order quantity to complete the view.
- Use the Category dimension to differentiate the data using colors.

The result should resemble the image below:



Detailed Instructions:

1. Navigate to a new sheet.
2. In the Data pane, on the Dimensions header, click the drop-down and select **Create Calculated Field**.
3. Name the new field as **This Year's Avg. Difference**.
4. In the **Formula** text box, type the following:
SUM ([Quantity]) - WINDOW_AVG (SUM ([Quantity]), First (), Last ())
5. Click **OK**.
6. In the Data pane, on the Dimensions header, click the drop down and select **Create Calculated Field**.
7. Name the new field as **All Years' Avg. Difference**.
8. In the **Formula** text box, type the following:
ZN (SUM ([Quantity])) - Window_AVG (SUM ([Quantity]))
9. Click **OK**.
10. In the Data pane, under Dimensions, locate and drag **Order Date** to the Columns shelf.
11. Drill from Year (Order Date) to Quarter (Order Date) by clicking the + icon on **Year (Order Date)** on the Columns shelf.
12. In the Data pane, under Measures, locate and drag **This Year's Avg. Difference**, **All Years Avg. Difference**, and **Quantity** to the Rows shelf.
13. In Marks card, in the drop down, select **Bar**.
14. In the Data pane, under Dimensions, locate and drag **Category** to Color shelf in the Marks card.
15. Rename the sheet as **Quarterly Sales Average**.
16. Save this workbook as **Lesson 6 - Exercise**.