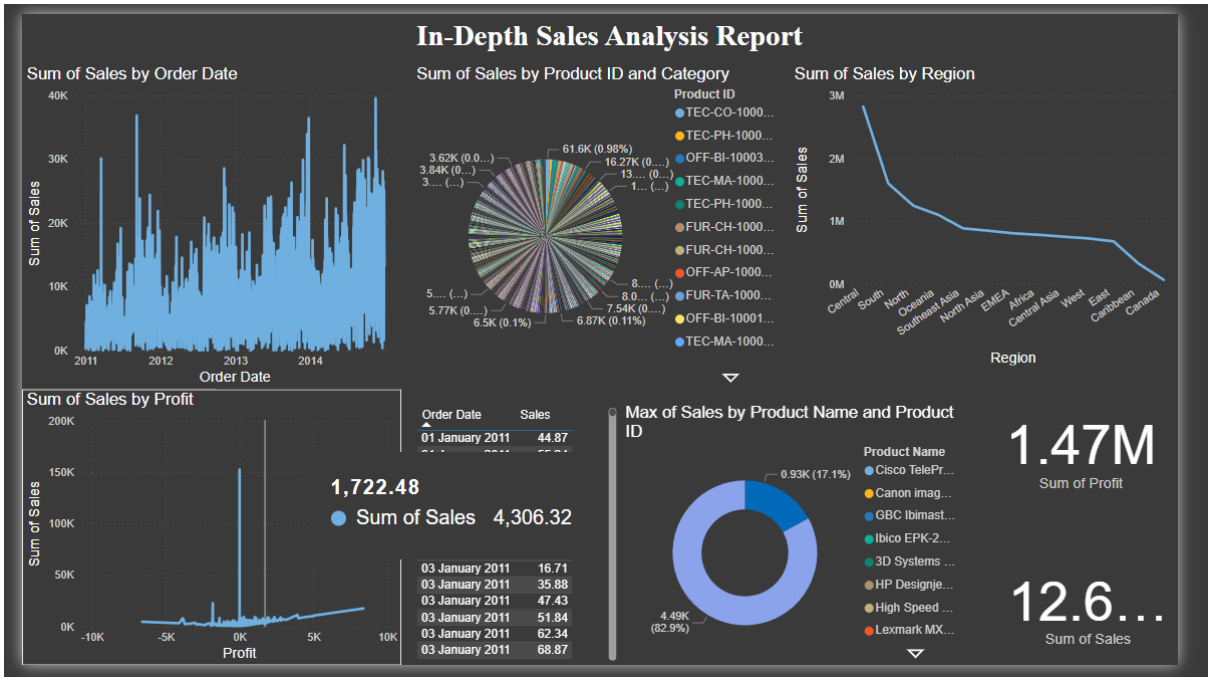
In-Depth Sales Analysis Report

Power BI Dashboard Documentation



To construct a detailed sales analysis dashboard in Power BI, follow these steps:

Data Import and Cleaning

The first step involved importing the data from Global-Superstore.xlsx into a data visualization tool, such as Power BI or Tableau. Ensuring correct data types for each column was crucial, with dates formatted appropriately for order dates, numerical values assigned to sales and profit, and categorical values designated for product IDs and regions.

Creating Visualizations

Once the data was imported and cleaned, various visualizations were created to represent different aspects of the sales data:

- **Sum of Sales by Order Date**: A line chart was used with the Order Date on the X-axis and the Sum of Sales on the Y-axis.
- **Sum of Sales by Product ID and Category**: A pie chart was chosen, with Product ID as the category and Sum of Sales as the values.

- **Sum of Sales by Region**: Illustrated using a line chart, displaying the Region on the X-axis and Sum of Sales on the Y-axis.
- **Sum of Sales by Profit**: A scatter plot was utilized with Profit on the X-axis and Sum of Sales on the Y-axis.
- **Max of Sales by Product Name and Product ID**: A donut chart was used, categorizing by Product Name and showing Max of Sales as values.

Custom Calculations and Transformations

Several custom calculations and transformations were applied to derive meaningful insights:

- **Sum of Sales**: Calculated by summing all sales figures in the dataset.
- **Max of Sales**: Determined by finding the highest sales figure for each product.
- **Sum of Profit**: Computed by summing all profit figures.

Data Modeling: Switch to the **Model** view to set up relationships between your tables. Drag fields between tables to create relationships, ensuring the correct relationship types (one-to-many, many-to-one) are established.

Design Choices

Design choices were made to enhance clarity and usability:

- **Color Scheme**: A consistent color scheme was employed to differentiate various data points, making the visualizations more intuitive.
- **Layout**: Designed to provide a comprehensive overview, allowing easy comparison and analysis of different metrics.
- **Interactivity**: Incorporated through filters and slicers, enabling users to drill down into specific time periods, regions, or products for a more detailed analysis.

Additional Considerations

Additional considerations included ensuring the dashboard was responsive, allowing it to be viewed effectively on different devices. Tooltips were added to

provide additional context for data points, and provisions were made to regularly update the data source, keeping the dashboard current and relevant.