

Data Transformation

The provided dataset was loaded into Power BI, and the following data cleaning steps were performed:

- **Blank Items and Errors:** All blank items and errors were removed from the relevant columns to ensure data accuracy and integrity.
- **Data Validation:** The data was validated to ensure there were no null values, especially in critical columns such as Country, Sales, and Product Category.

2. Tree Map Visualization: Country & Sales

- **Objective:** To identify the top 3 countries contributing to the highest sales.
- **Visual Description:**
 - A Tree Map was created to represent the sales distribution across different countries.
 - The top 3 countries with the highest sales were highlighted using the following colors:
 - **Blue:** [Country 1]
 - **Red:** [Country 2]
 - **Green:** [Country 3]
 - The visual was further customized for readability, with clear data labels, a well-defined background, and a consistent font style.

3. Gauge Visual: Average Standard Cost

- **Objective:** To display the average standard cost across all products.
- **Visual Description:**
 - A Gauge visual was created to represent the average standard cost.
 - The gauge was customized with a Blue color scheme, and the minimum, maximum, and target values were set according to the dataset.
 - The visual was further enhanced by adding a title and adjusting the needle and range colors for clarity.

4. Funnel Visual: Product Category & Sales

- **Objective:** To visualize the sales distribution across different product categories.
- **Visual Description:**
 - A Funnel visual was created to represent the sales distribution across product categories.
 - The highest-selling product category was highlighted in Red to draw attention to its significant contribution.

- The visual was customized with a consistent font size and background, and gradient fill was added to emphasize the sales drop-off.

5. Line Graph: Order Quantity & Total Discount Amount

- **Objective:** To analyze the correlation between order quantity and total discount amount.
- **Visual Description:**
 - A Line Graph was created, plotting Order Quantity on the X-axis and Total Discount Amount on the Y-axis.
 - The graph revealed [positive/negative/no] correlation between the two quantities, indicating [insert analysis].
 - The visual was customized with matching colors, clear axis labels, and data labels for better insight.

6. Dashboard Overview

- **Design:** The dashboard was designed with a consistent color theme using Blue, Red, and Green as primary colors, ensuring visual coherence.
- **Layout:** All visuals were arranged logically, starting with the Tree Map, followed by the Gauge, Funnel, and Line Graph.
- **Font and Style:** A consistent font type and size were applied across all visuals for uniformity and readability.

7. Key Findings

- **Top Performing Countries:** The top 3 countries in sales were [Country 1], [Country 2], and [Country 3].
- **Average Standard Cost:** The average standard cost was [\$value].
- **Highest Selling Product Category:** The product category with the highest sales was [Product Category].
- **Correlation Analysis:** A [positive/negative/no] correlation was observed between order quantity and total discount amount.

8. Conclusion

The data analysis provided valuable insights into the sales performance across different countries and product categories. The use of visualizations in Power BI effectively highlighted the key metrics, allowing for informed decision-making.