Documentation for Power BI

Saundhariya Iyer N 20MIA1071

1. Total Revenue Sales

Purpose: To display the total revenue generated within the selected timeframe.

Design Choices:

Visualization Type: Card

- Reason: Cards are ideal for highlighting key performance indicators (KPIs) in a clear and concise manner.
- Data Representation: Displays the total sum of sales revenue, providing a quick snapshot of overall performance.

2. Sales by Product Category

Purpose: To visualize and compare sales figures across different product categories. Design Choices:

- Visualization Type: Bar Chart
- Reason: Bar charts effectively show comparisons between categories and are well-suited for categorical data.
- Data Representation: Bars represent sales values for each product category.

Additional Considerations:

- Include data labels to provide exact sales figures.
- Consider sorting the bars in descending order to easily identify top-performing categories.

3. Top Selling Products

Purpose: To list the top-selling products along with their sales figures in a tabular format. Design Choices:

- Visualization Type: Table Chart
- Reason: Tables are useful for presenting detailed data and rankings.
- Data Representation: Columns display product names and corresponding sales figures.

Additional Considerations:

Allow sorting by sales figures for dynamic analysis.

4. Sales Trend Over Time

Purpose: To track and visualize sales trends over a specified period.

Design Choices:

- Visualization Type: Line Chart
- Reason: Line charts are ideal for showing trends and changes over time.

• Data Representation: The x-axis represents time periods, and the y-axis represents sales figures.

5. Sales by Region

Purpose: To show the proportion of total sales attributed to different geographic regions.

Design Choices:

- Visualization Type: Pie Chart
- Reason: Pie charts are effective for illustrating parts-to-whole relationships.
- Data Representation: Each slice represents the sales contribution of a region to the total sales.

Additional Considerations:

Labeled each slice with percentage values for clarity.

6. Profit Margin by Product Category

Purpose: To visualize profit margins across different product categories, showing both individual and total margins.

Design Choices:

- Visualization Type: Stacked Column Chart
- Reason: Stacked columns help in comparing individual contributions to the total profit margin by category.
- Data Representation: Each column represents a product category with segments indicating different profit margins.

Additional Considerations:

Include a legend to explain the color coding of profit margin segments.

7. Monthly Sales Comparison

Purpose: To compare sales figures across different months.

Design Choices:

- Visualization Type: Column Chart
- Reason: Column charts are effective for comparing values across discrete categories (e.g., months).
- Data Representation: Each column represents sales for a specific month.

Additional Considerations:

Add data labels to provide precise sales figures.

8. Sales and Profit by Month

Purpose: To compare both sales and profit metrics on a monthly basis.

Design Choices:

Visualization Type: Column Chart (with dual axes if needed)

- Reason: Allows simultaneous comparison of two related metrics (sales and profit).
- Data Representation: Columns for sales and a secondary axis for profit.

Discount VS Sales

Purpose: The scatter chart aims to visualize and analyze the correlation between discount rates and sales figures. By examining this relationship, we can assess the impact of discount levels on sales and derive insights for optimizing discount strategies.

Design Choices:

- Visualization Type: Scatter Chart
- Reason: Scatter charts are ideal for visualizing the relationship between two continuous variables. They allow for the identification of patterns, correlations, and potential outliers in the data.

10. Sales Performance by Shipping Mode

Purpose: To visualize sales performance across different shipping modes.

Design Choices:

- Visualization Type: Tree Map
- Reason: Tree maps are effective for visualizing hierarchical data and showing proportions within a category.
- Data Representation: Each rectangle represents a shipping mode, with size proportional to sales performance.

Additional Considerations:

Ensure that the hierarchy is well-defined and clear.

11. Sales Performance by Segment

Purpose: To show the distribution of sales across various customer segments.

Design Choices:

- Visualization Type: Donut Chart
- Reason: Donut charts are similar to pie charts but with a central hole, making them useful for displaying proportions.
- Data Representation: Segments represent different customer segments with sales figures.

Additional Considerations:

- Label each segment with both sales figures and percentages for clarity.
- Maintain a clean and simple design to avoid clutter.

12. Customer Segmentation Analysis Using Bar Chart

Purpose: To analyze and visualize different customer segments based on sales performance. Design Choices:

Visualization Type: Bar Chart

- Reason: Bar charts are effective for comparing sales performance across different customer segments.
- Data Representation: Bars represent sales figures for each customer segment.