

Project Overview: Global Sales Performance Dashboard Problem Statement

The primary objective of this project is to create a comprehensive sales analysis dashboard for a global retail company. The dashboard aims to provide insights into sales performance, identify key trends, and facilitate datadriven decision-making by visualizing sales data across different dimensions such as products, regions, and demographics. The dashboard is intended for use by management, sales teams, and other stakeholders who need to monitor and analyze sales metrics to optimize business strategies and improve profitability.

Reasons for Creating This Dashboard

- 1. **Centralized Data Visualization**: To consolidate sales data from multiple countries and categories into a single, easily accessible platform.
- 2. **Performance Monitoring**: To track sales performance over different time periods, across various regions, and by product categories.
- 3. **Informed Decision-Making**: To provide actionable insights that help management make informed decisions to enhance sales strategies.
- 4. **Trend Analysis**: To identify sales trends and patterns, enabling proactive adjustments to marketing and sales efforts.
- 5. **Performance Benchmarking:** To compare sales performance across different regions, products, and demographics.

How This Dashboard Helps

- 1. Data Consolidation: Combines data from various sources to present a unified view of sales performance.
- 2. Quick Insights: Provides quick access to key metrics such as total sales amount, product costs, and total profit.
- Detailed Analysis: Allows users to drill down into specific data points, such as sales by product, region, or customer demographics.
- 4. **Performance Tracking**: Helps in tracking performance against targets and identifying areas needing improvement.

Strategic Planning: Facilitates strategic planning by highlighting profitable products and regions.

DAX Measures/KPIs Used

- 1. Total Sales Amount: Sum of all sales transactions.
 TotalSalesAmount = SUM(Sales[Amount])
- 2. Total Product Cost: Sum of all product costs.
 TotalProductCost = SUM(Sales[Cost])
- 3. **Total Profit**: Difference between total sales amount and total product cost.

TotalProfit = [TotalSalesAmount] - [TotalProductCost]

- 4. Sales by Gender: Sum of sales grouped by gender
 SalesByGender = CALCULATE(SUM(Sales[Amount]), Sales[Gender])
- 5. Top Products Sales: Sales figures for the top 5 products TopProductsSales = TOPN(5, SUMMARIZE(Sales, Products[ProductName], "Sales", SUM(Sales[Amount])), [Sales], DESC)

Graphs, Charts, and Slicers Used

- 1. **Pie Chart**: Displays the sales distribution of the top 5 products. Each segment represents a product's contribution to total sales.
- 2. Bar Chart:
 - **Top 3 Countries Sales**: Horizontal bar chart showing the total number of sales for the top 3 countries.
 - Total Profit by Products Category: Vertical bar chart illustrating the total profit by different product categories.
- 3. Line Chart:
 - Top 5 Cities Sales: Line chart showing the total number of sales in the top 5 cities, providing a clear view of sales trends across these locations.

4. Slicers:

- Date: Allows users to filter the data by specific years (2017, 2018, 2019, 2020).
- Months: Enables filtering by month to view seasonal trends.
- Country: Allows filtering data by specific countries.
- Category: Provides the option to filter data by product categories.

Detailed Explanation of the Project

1. Dashboard Layout:

- **Top Section**: Includes filters (date, months, country, category) for interactive data exploration.
- Left Section: Pie chart representing the top 5 product sales, giving a visual summary of which products contribute most to sales.
- **Right Section**: Key performance indicators (KPIs) displaying total sales amount, total product cost, and total profit, providing a quick snapshot of overall performance.
- Middle Section: Detailed breakdown of total profit by region and sales by gender across different countries, showing how different segments perform.

• Bottom Section:

- Left: Bar chart for top 3 countries sales, indicating which countries have the highest sales volume.
- Middle: Line chart for top 5 cities sales, offering insights into urban sales distribution.
- **Right**: Bar chart for total profit by products category, highlighting which categories are most profitable.

2. Interactivity and Usability:

- **Slicers** enhance the interactivity, allowing users to customize their view and focus on specific time periods, regions, or product categories.
- Responsive Visuals: Charts and graphs update dynamically based on slicer selections, ensuring real-time data analysis.

Conclusion:

This Power BI dashboard is a powerful tool for the sales team and management, providing them with critical insights needed to drive sales growth, optimize operations, and improve overall business performance.