Power BI Questions

Question1: Analysis of Product Sales Growth Across Regions (2015-2020)

Objective:
Management wants to explore the growth of product sales across different regions from 2015 to 2020. The aim is to analyze the performance of various product categories over this timeframe and understand how sales are distributed among the regions.
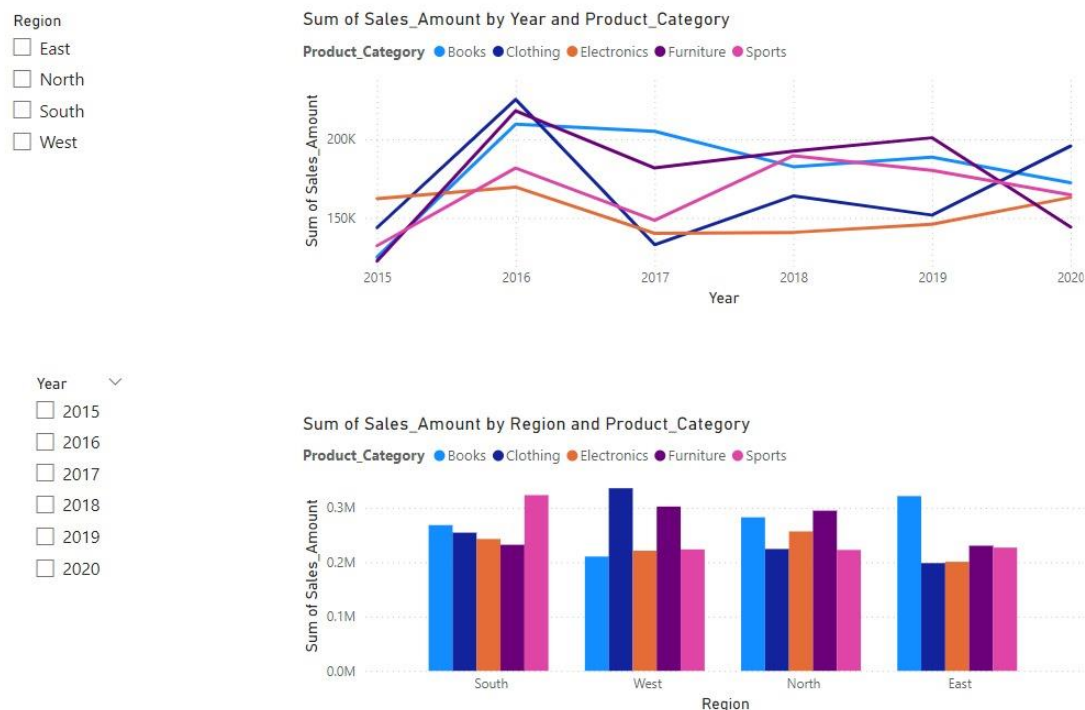
Requirements:

1. Present a visual representation of the sales trends over time, showcasing the performance of each product category and how it has changed year-over-year.

2. Provide a visual comparison of total sales by product category across different regions, allowing for an easy assessment of performance in various locations.

Interactive Elements:

- Implement filters to allow users to select specific regions and years, enabling a focused analysis of the data.

Solution

Question 2: Analysis of Monthly Profit Trends and Payment Mode Preferences (2024)

Objective:
Management wants to examine monthly profit trends and understand customer preferences for different payment modes. The goal is to identify high and low-profit months and determine the most popular payment methods used by customers throughout the year.
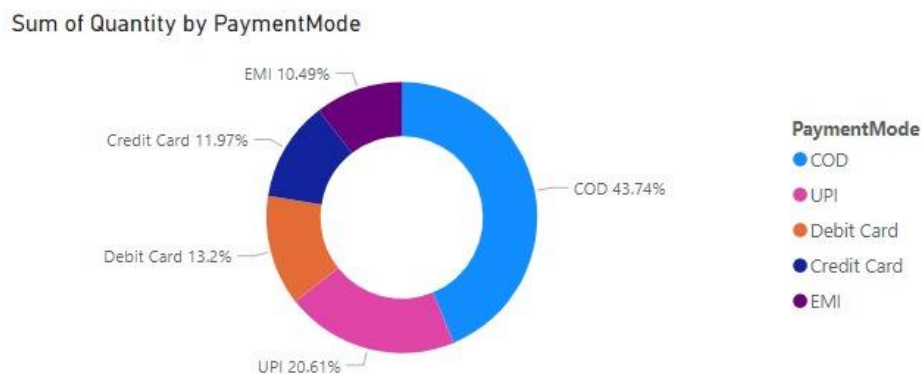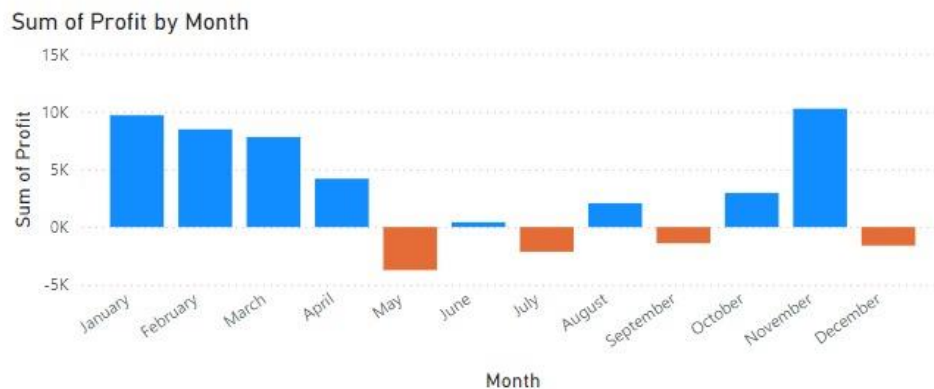
Visualization Requirements:

1. Display the monthly profit values, highlighting both positive and negative trends over the year to identify profitable and loss-making periods.

2. Show the distribution of quantity sold across different payment methods, illustrating the percentage share of each payment type.

Interactive Filters:

- Include filters for Month and Payment Mode to allow management to focus on specific time periods or payment preferences.

Solution

Sum of Profit by Month

Sum of Quantity by PaymentMode

Question 3: Analysis of Billing Amount, Admission Types, and Medical Conditions (2024)

Objective:

Management is interested in understanding the total billing amount and gaining insights into patient distribution based on admission types and medical conditions. The goal is to evaluate the volume of patients by admission type and identify the most common medical conditions.

Visualization Requirements:

1. Display the total billing amount to provide an overview of revenue.

2. Show the count of patients categorized by admission type to understand the distribution between elective, urgent, and emergency admissions.

3. Present the distribution of patients across different medical conditions, highlighting the prevalence of each condition.
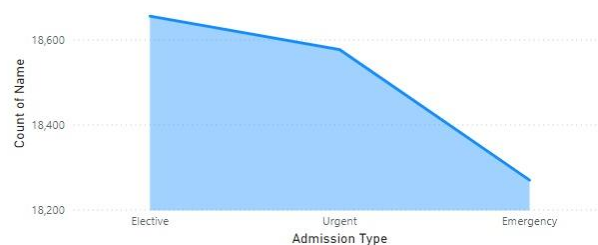
Interactive Filters:

- Include filters for Admission Type and Medical Condition to allow management to focus on specific categories of patient data.
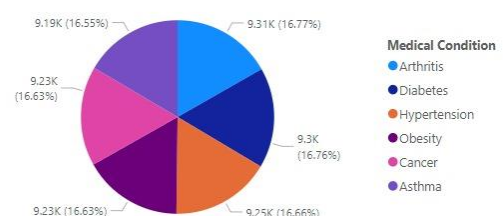
Solution

Question 4: Analysis of Sales and Profit Distribution by Month, Product Category, Region, and Customer Segment (2024)

Objective:

Management aims to understand the monthly sales trends, profit distribution across regions and customer segments, and the performance of different product categories. Additionally, they are interested in identifying the top customers contributing to profits.
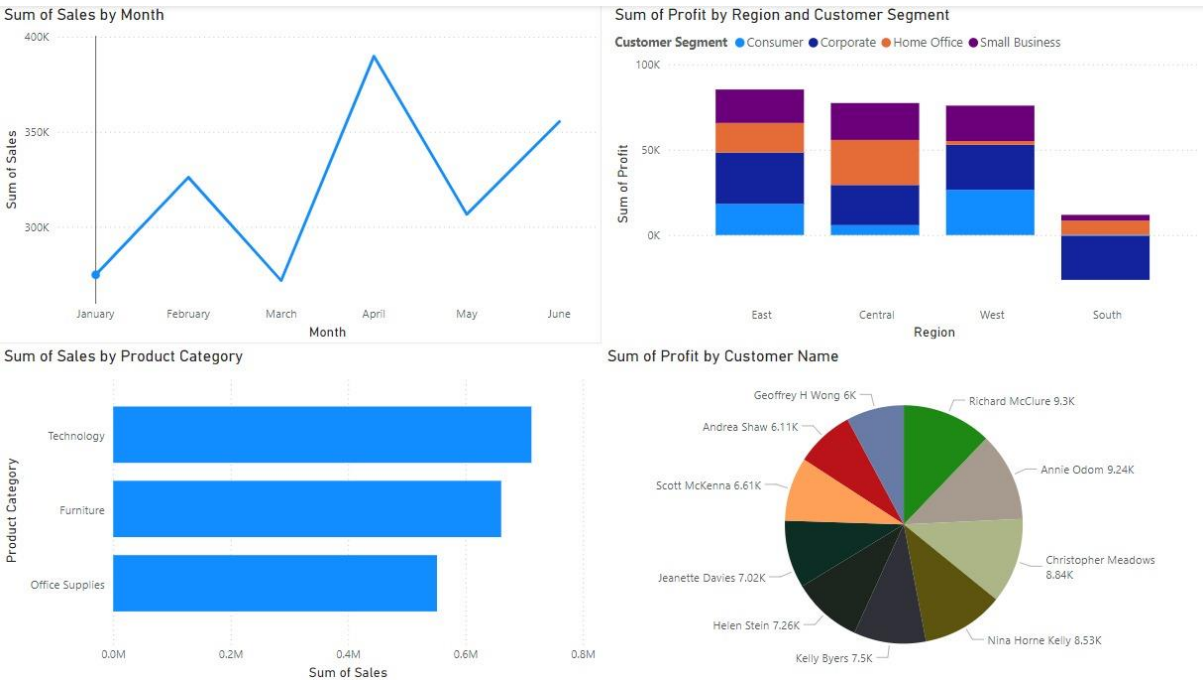
Visualization Requirements:

1. Display monthly sales trends to observe seasonal fluctuations and identify peak sales periods.

2. Show the total sales across product categories, allowing management to understand which categories generate the highest sales.

3. Present profit distribution by region and customer segment, highlighting the relative performance in each region and across customer groups.

4. Show the top 10 customers by profit contribution, identifying key customers and their impact on overall profitability.

Interactive Filters:

- Include filters for Month, Product Category, Region, and Customer Segment to allow management to focus on specific aspects of the data.

Solution

Question 4: Analysis of Financial Performance Metrics Across Business Units and Over Time (2024)

Objective:

Management wants a comprehensive overview of key financial metrics, including profit, revenue, and expenses, and how these figures vary across different business units and over time. The goal is to understand overall financial performance, trends in profitability, and variations in profit margins by business unit.

Visualization Requirements:

1. Display key financial metrics, including total profit, revenue, and expenses, to provide an overview of the company's performance.

2. Show profit trends over the years to identify growth or decline in profitability.

3. Present the relationship between revenue and profit margin across business units, helping to assess which units are most efficient.

4. Display annual revenue and expenses to visualize the company's financial health year over year.

5. Show profit margins by business unit to identify areas with higher or lower profitability.

Interactive Filters:

- Include filters for Year and Business Unit to allow management to analyze specific time periods or focus on individual business units.

Solution