## OLAP ANALYSIS REPORT

The OLAP queries executed on the data warehouse provided valuable multi-level insights into sales performance across time, geography and product categories. The roll-up query aggregated total sales by country and quarter, revealing that the United Kingdom consistently dominates revenue in every quarter. Other strong performers include the Netherlands, EIRE and Germany, while smaller markets contribute significantly less. This trend suggests that sales are heavily concentrated in a few countries, which presents both strengths in market dominance and risks from over-reliance.

The drill-down query for the United Kingdom provided a month-by-month breakdown of sales. The data indicated seasonal fluctuations, with noticeable peaks in November and December likely linked to holiday shopping seasons followed by slower sales in early months. These temporal patterns can inform targeted marketing campaigns and inventory planning to align with peak demand periods.

The slice query isolated total sales for the electronics category. Although this category generated meaningful revenue, it represented a smaller share compared to home décor and giftware. This could indicate a stable market or an underdeveloped segment with growth potential, depending on strategic priorities.

The visualization of total sales by country, including top and bottom 10 countries, further emphasized the revenue disparity. Leading countries had sales volumes several orders of magnitude greater than the smallest markets.

Top 10 Countries by Sales

Bottom 10 Countries by Sales
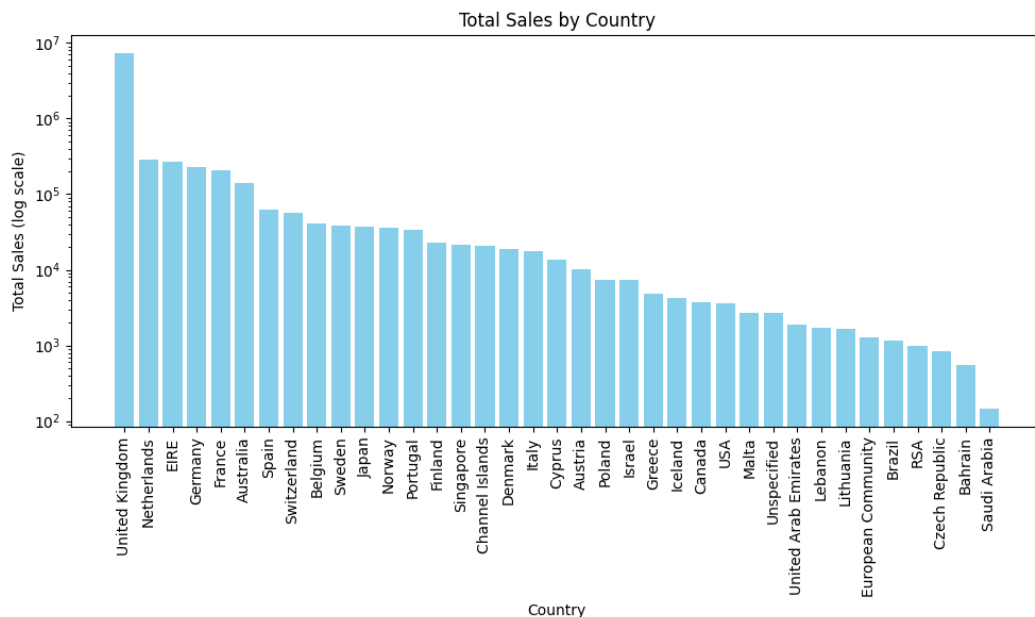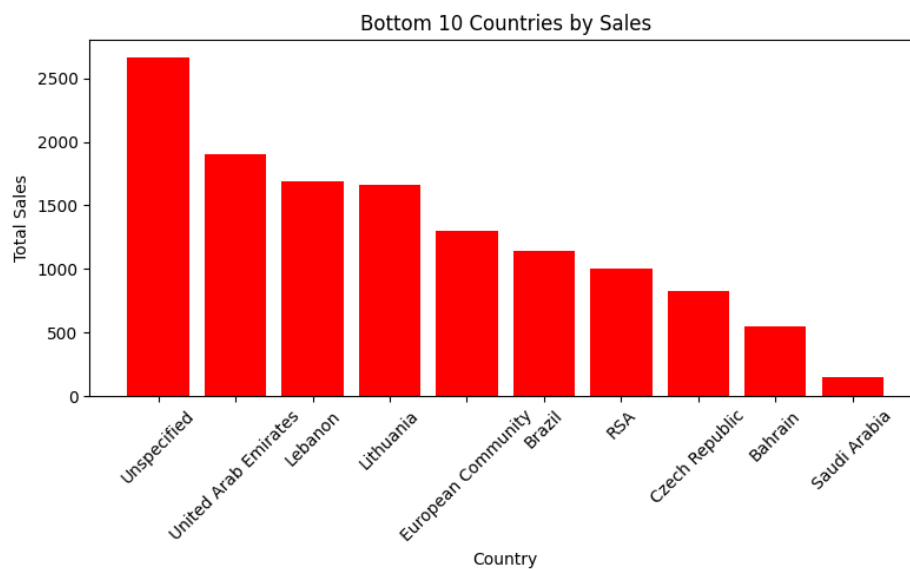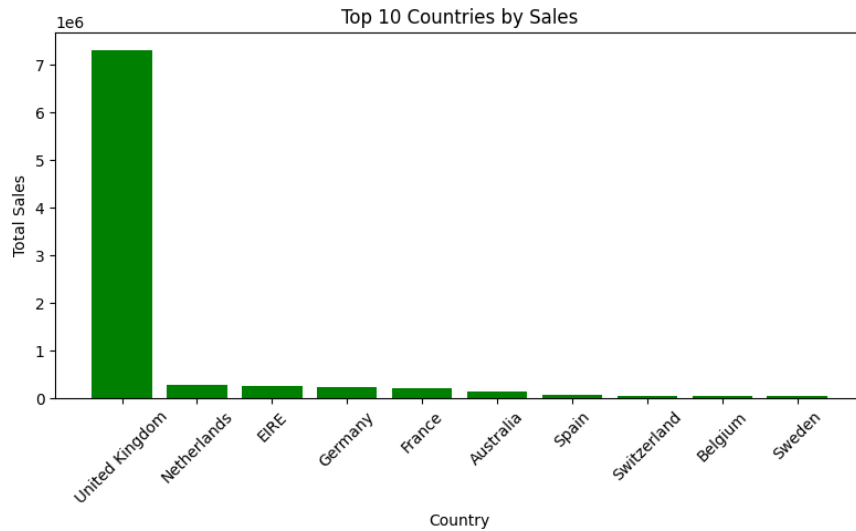
Overall, the data warehouse structure enabled efficient multi-dimensional analysis, supporting strategic decision-making through rapid aggregation, filtering and trend identification. While the dataset is partially synthetic, its structure and relationships reflect realistic business scenarios, making the insights operationally relevant, though with some limitations in real-world accuracy.