Assignment 7 - Analytics PBI

Customer Location	Sum of Order Quantity	Sum of Order Total	Average of Order Total
Australia	1	$600	$600
Canada	6	$7,900	$2,633.3333
China	5	$11,600	$2,900
England	2	$6,400	$6,400
France	6	$9,500	$2,375
Germany	7	$7,700	$1,925
Greece	1	$2,200	$2,200
India	2	$4,000	$4,000
Ireland	2	$6,000	$6,000
Italy	2	$4,400	$2,200
Total	**78**	**$147,800**	**$3,079.1667**

Fig 1

1. Table: Customer Location, Sum of Order Quantity, Sum of Order Total, Average of Order Total

- **Data Used**: Customer Location, Order Quantity, Order Total
- **Explanation**: This table displays a summary of orders per customer location. It includes:
    - The total number of orders (Sum of Order Quantity).
    - The total sales value (Sum of Order Total).
    - The average value per order (Average of Order Total).
- **Insights**: The table provides a quick view of which locations have the most orders and the highest revenue. For example, China has the highest total sales ($11,600), while Australia has only 1 order but low total sales.

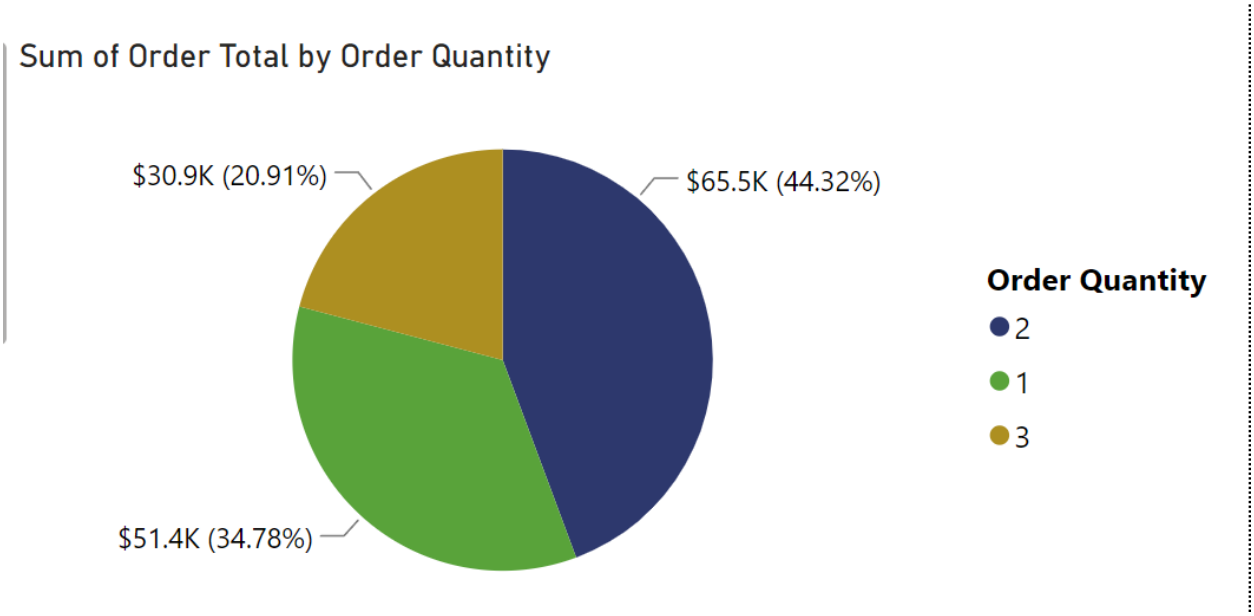


Fig 2

2. Pie Chart: Sum of Order Total by Order Quantity

- **Data Used**: Order Quantity, Order Total
- **Explanation**: This pie chart shows the distribution of total sales (order total) based on order quantity. Each segment represents a different order quantity.
- **Insights**:
    - Most of the total sales come from orders with a quantity of 1 (44.32% of the total, amounting to $65.5K).
    - The second largest segment is for orders of quantity 3 (34.78% or $51.4K).
    - Orders with a quantity of 2 make up the smallest share of the total (20.91% or $30.9K).

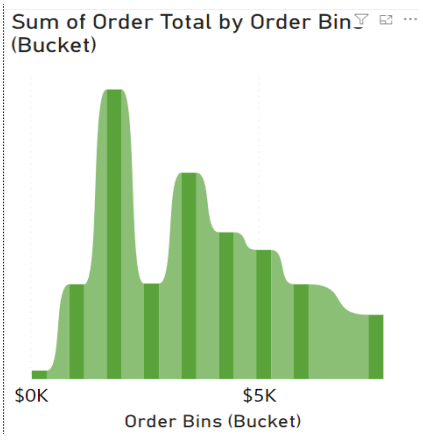


Fig 3

3. Bar Chart: Sum of Order Total by Order Bins (Bucket)

- **Data Used**: Order Total
- **Explanation**: This bar chart visualizes the distribution of order totals grouped into buckets (bins). It segments the order totals into predefined ranges (e.g., $0K–$5K).
- **Insights**: Most orders fall within the lower bucket ranges, with significant spikes in the lower value bins (around $2K-$5K). This indicates that most orders have relatively small totals.

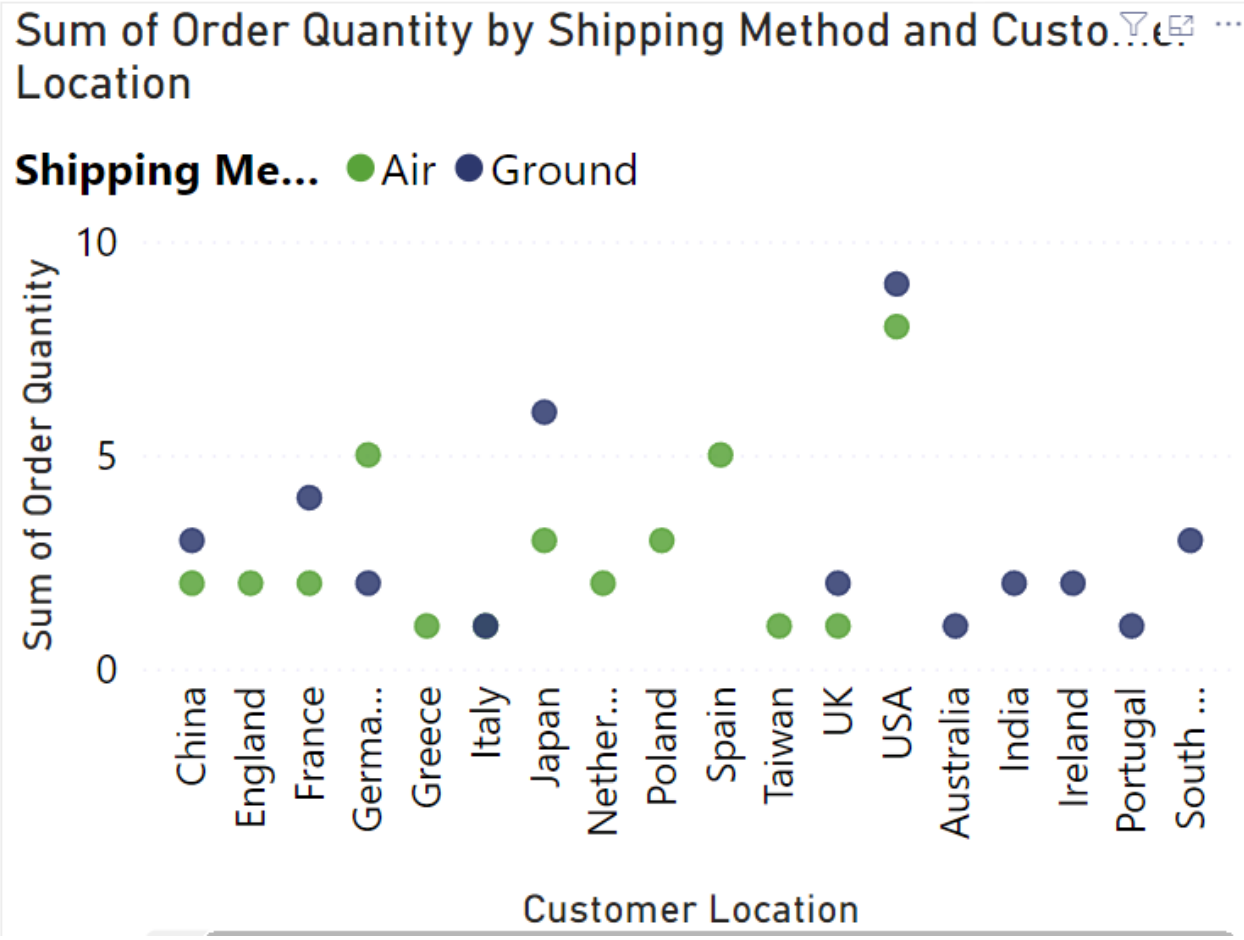


Fig 4

4. Scatter Plot: Sum of Order Quantity by Shipping Method and Customer Location

- **Data Used**: Shipping Method, Order Quantity, Customer Location

- **Explanation**: This scatter plot shows how the number of orders varies by customer location and shipping method. The data points are color-coded based on shipping methods (green for air and blue for ground).
- **Insights**:
    - For example, Canada, China, and Australia show a mix of both air and ground shipping, with varying order quantities.
    - Most customer locations have fewer orders (1-5 orders), with a few exceptions like Germany and France.

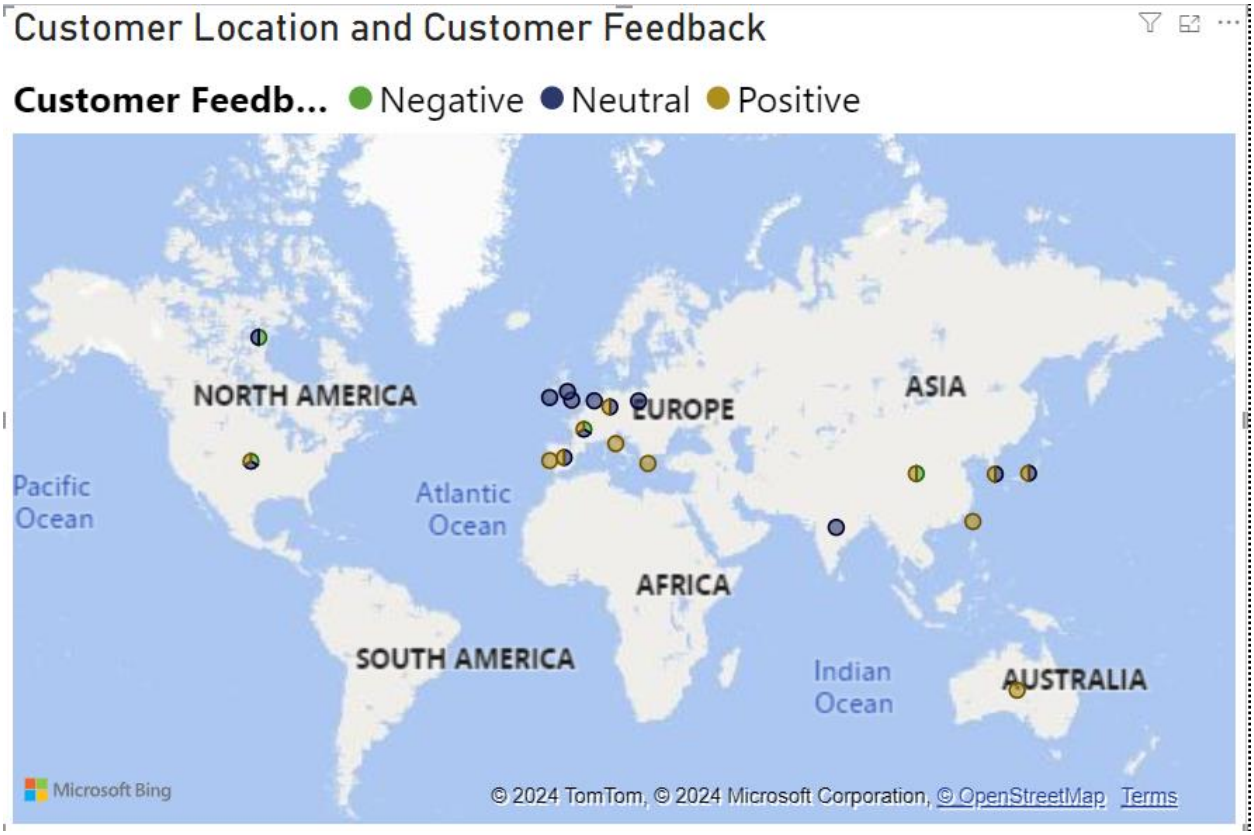


Fig 5

5. Map: Customer Location and Customer Feedback

- **Data Used**: Customer Location, Customer Feedback
- **Explanation**: This map shows customer feedback across different geographical locations. The feedback is color-coded (green for positive, yellow for neutral, and blue for negative).
- **Insights**:

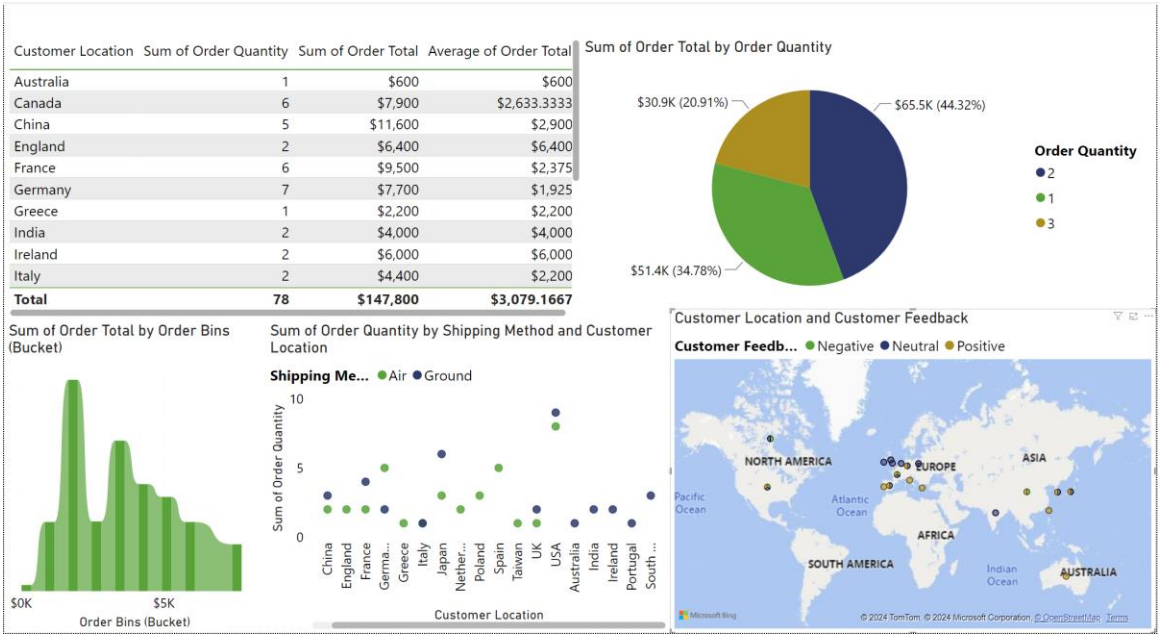
- European countries, North America, and parts of Asia show a distribution of feedback, with most areas showing neutral to positive feedback.
- This provides insights into customer satisfaction based on geographical regions.

Dataset and Fields Visible:

- **Customer Feedback**: This field indicates customer satisfaction levels, which is used in the map to color-code feedback across locations.
- **Shipping Method**: Used in the scatter plot to differentiate between air and ground shipping methods.
- **Order Bins (Bucket)**: The order total amounts are grouped into bins, used in the bar chart to show the distribution of orders by order total.
- **Order Quantity**: Used in multiple visualizations to represent the number of items ordered.
- **Order Total**: Summarized in various charts and the table to show sales performance.
- **Customer Location**: A common dimension used across many charts to compare orders, shipping, and feedback across countries.

Conclusion:

The dashboard provides a comprehensive view of customer orders and feedback, with a variety of visualizations to help understand the distribution of order totals, quantities, and customer satisfaction across different locations. The combination of a table, pie chart, bar chart, scatter plot, and map allow for multidimensional analysis of the data.



Author(2024). Dashboard analysis of customer orders and feedback [Data visualization]. Microsoft Power BI.