

Data Analyst Report

1. Sales Overview

Objective: To obtain a comprehensive understanding of sales performance trends and patterns over time.

Analysis:

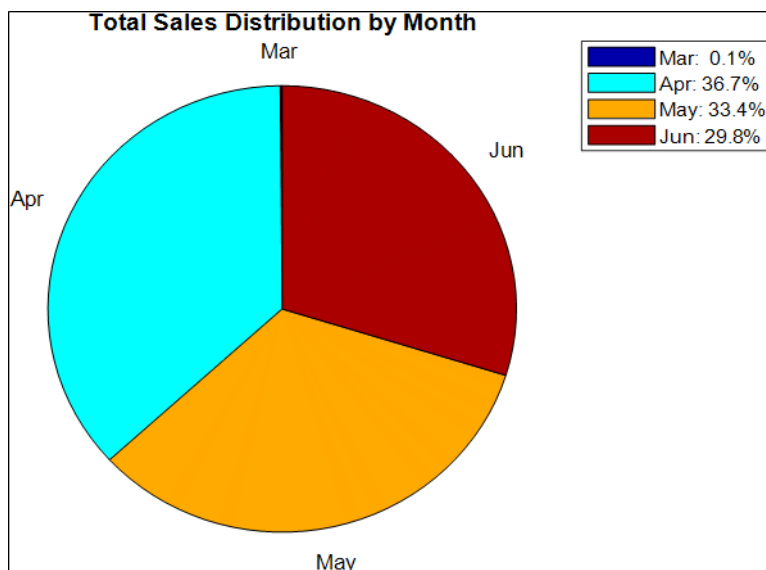
Total Sales Distribution by Month:

- March: 0.1%
- April: 36.7%
- May: 33.4%
- June: 29.8%

The data shows a significant surge in sales during April, followed by a gradual decrease in May and June. Sales in March were minimal.

Visualizations:

Pie Chart: Depicts the monthly sales distribution, with a notable peak in April.



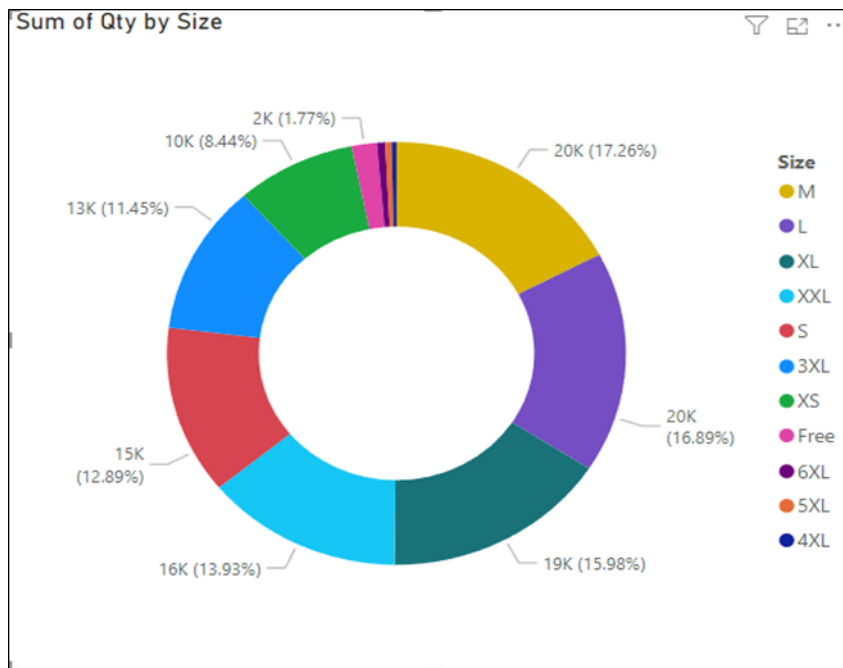
2. Product Analysis

Objective: To analyze the distribution of product categories, sizes, and quantities sold to identify the most popular products.

Analysis:

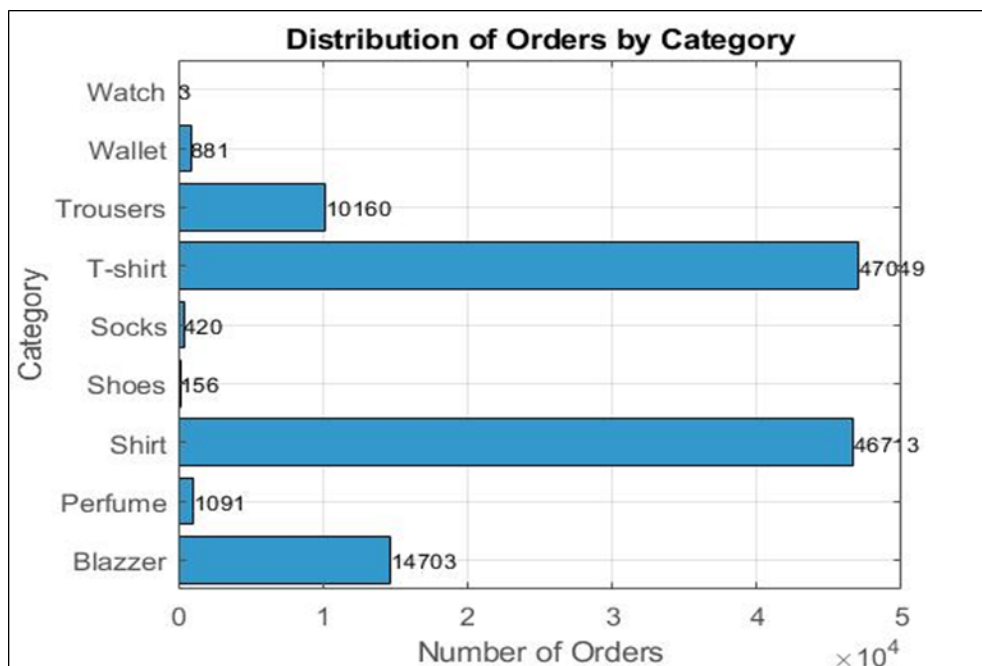
Distribution of Orders by Size:

- ✓ Most popular sizes: M, L, XL
- ✓ Sizes 3XL to 6XL have significantly fewer orders.



Distribution of Orders by Category:

- ✓ Most ordered: T-shirts (47,049 orders), followed by shirts (46,713 orders).
- ✓ Least ordered: Watches.



Visualizations:

1. Pie Chart: Shows the number of orders for each size, identifying Medium (17.26%) and Large (16.89%) as the most popular sizes.
2. Bar Chart: Displays the number of orders for each category, highlighting T-shirts and shirts as the most popular products.

3. Fulfillment Analysis

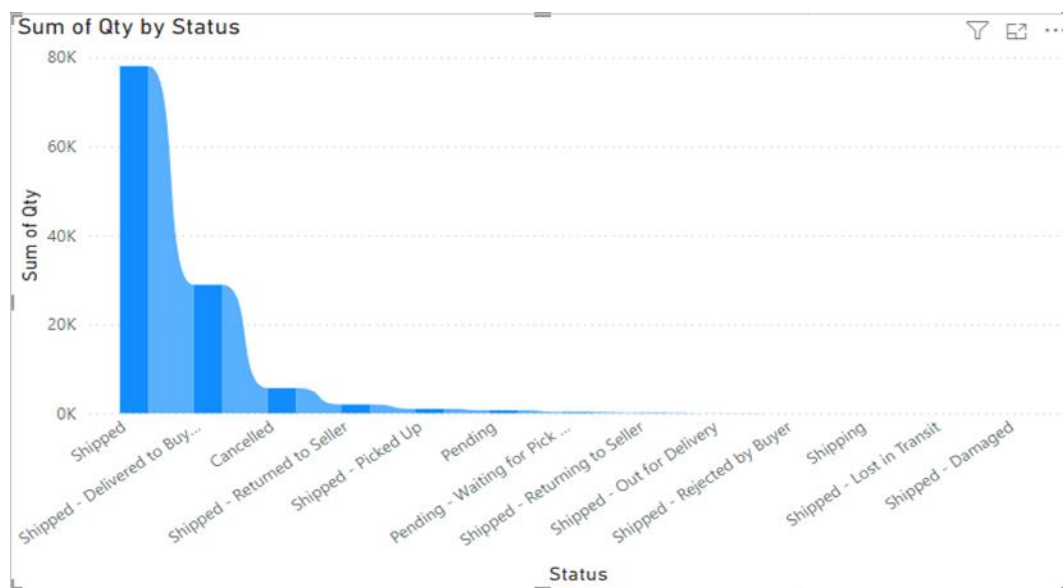
Objective: To evaluate the effectiveness of fulfillment methods used in delivering orders.

Analysis:

Effectiveness can be inferred from geographical distribution and order satisfaction levels. Additional data on delivery times and customer feedback would provide a more detailed analysis.

Visualizations:

Geographical Distribution of Orders: Helps understand the reach and efficiency of different fulfillment methods across various regions.



4. Customer Segmentation

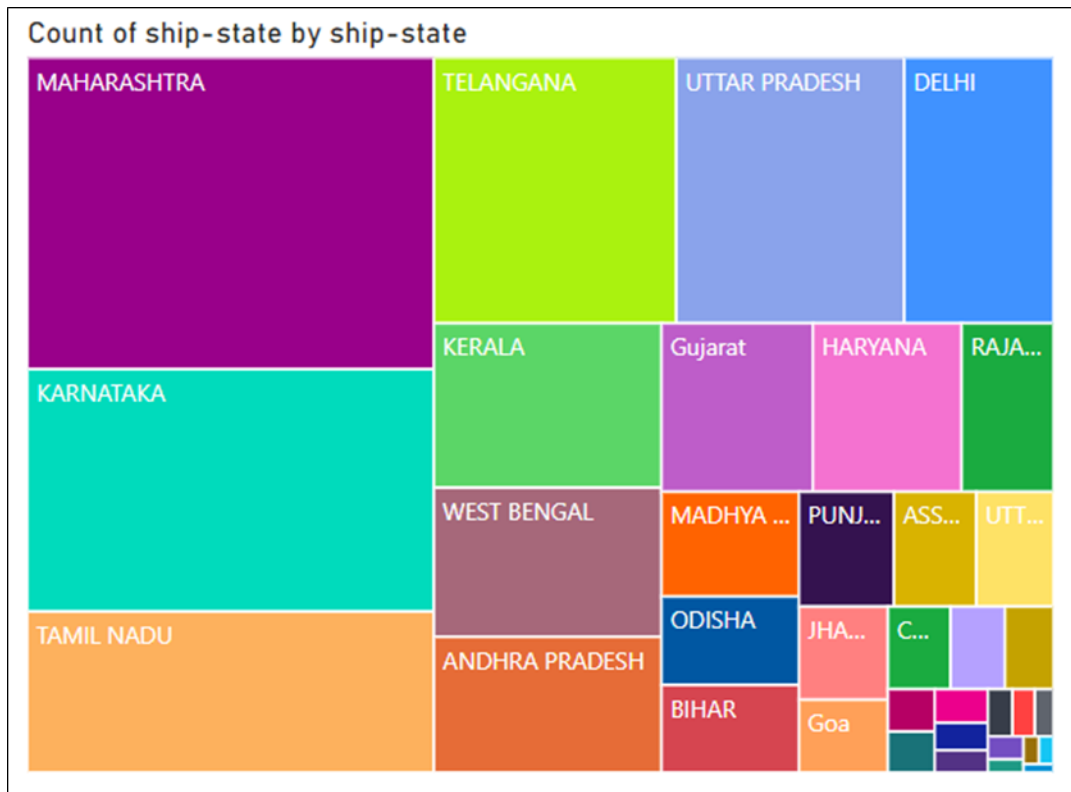
Objective: To segment customers based on their buying behavior, location, and other relevant factors.

Analysis:

Segmentation by Location: Orders are distributed across various states, with significant concentrations in Maharashtra, Delhi, and Karnataka.

Visualizations:

Treemap: Shows the number of orders from each state, identifying key customer segments geographically.



5. Geographical Analysis

Objective: To explore the geographical distribution of sales, focusing on states and cities.

Analysis:

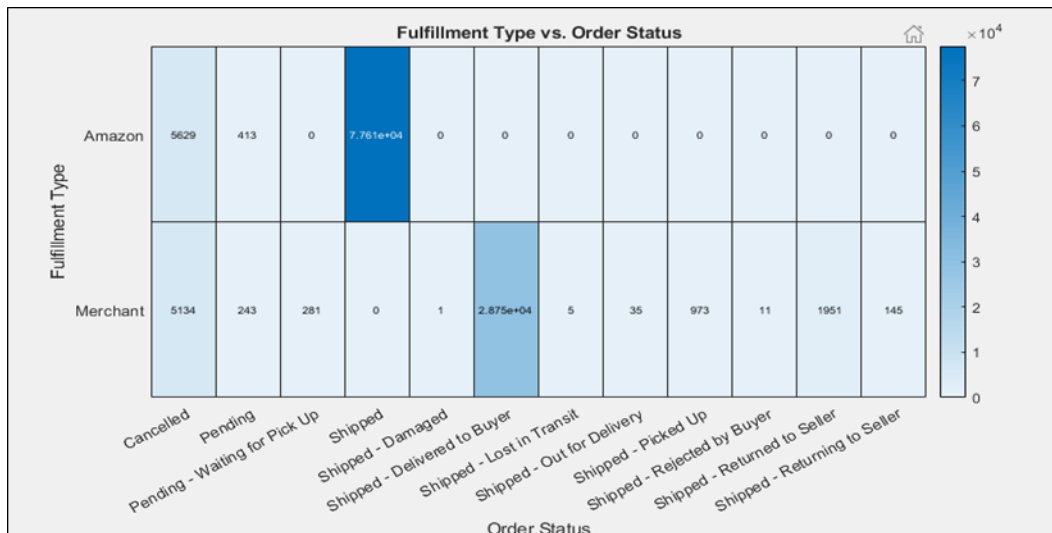
Sales Distribution by State: Higher sales in states like Maharashtra, Karnataka, and Delhi.

Visualizations:

1. Geographical Distribution of Sales: Detailed maps or charts showing sales figures across different states and major cities.

6. Fulfillment Type vs. Order Status Analysis

Description: The heatmap displays the relationship between fulfillment type (Amazon and Merchant) and order statuses.



Key Observations:

High Volume of Shipped Orders: Both Amazon (27,560 orders) and Merchant (28,750 orders) have a significant number of shipped orders.

Pending and Cancelled Orders: Amazon (5,629 cancelled, 413 pending), Merchant (5,134 cancelled, 243 pending), suggesting potential issues in order processing or customer decisions.

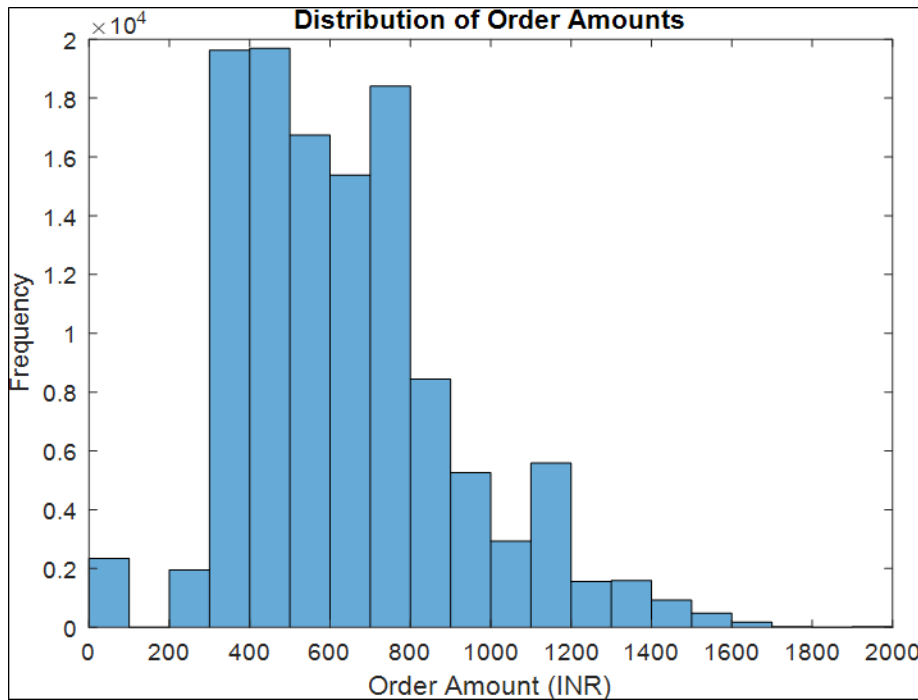
Other Statuses: Lower counts in statuses like "Shipped - Delivered," "Shipped - Damaged," "Shipped - Returned to Seller," with Merchant showing more diversity.

7. Distribution of Order Amounts

Description: Histogram illustrating the distribution of order amounts in INR.

Analysis:

- ✓ Most orders are within the 200 to 800 INR range, with a significant peak around the 400 to 600 INR range.
- ✓ Orders over 800 INR decline sharply, with very few exceeding 1200 INR.



Insights:

- The concentration of orders in the lower price range indicates a customer preference for budget-friendly products.
- Marketing strategies could focus on promoting mid-range and higher-priced products to increase the average order value.
- Understanding why higher-priced items are less frequently purchased could offer valuable insights for improving the appeal or pricing strategies for these products.

8. Business Insights

Objective: To provide actionable insights and recommendations based on the analysis to optimize sales strategies, improve customer satisfaction, and enhance overall business performance.

Insights:

1. Sales Strategies:

- a. Focus marketing efforts in April, the month with historically high sales.
- b. Investigate the low sales in March and develop strategies to boost sales during this period.

2. Inventory Management:

- a. Maintain higher inventory levels for popular sizes (M, L, XL) to meet demand.
- b. Adjust production for less popular sizes (3XL to 6XL) to avoid overstock.

3. Customer Service:

- a. Improve customer service and fulfillment processes in high-sales states to maintain and grow the customer base.
- b. Consider regional preferences and buying behaviors to tailor marketing campaigns.

4. Geographical Expansion:

- a. Identify low-sales regions and develop targeted campaigns to increase penetration.
- b. Utilize high-sales states to launch new products or services, leveraging the established customer base for initial feedback and improvements.

Visualizations:

Actionable Insights Dashboard: A comprehensive dashboard displaying key metrics and insights to aid decision-making.

Conclusion

This thorough analysis provides a clear understanding of sales performance, product popularity, fulfillment efficiency, and the geographical distribution of sales. Leveraging these insights, the company can optimize sales strategies, improve customer satisfaction, and enhance overall business performance.