

Amazon Sales Analysis: Insights and Recommendations

Introduction

The purpose of this report is to provide a comprehensive analysis of the Amazon Sales Data using the created dashboards: "Sales" and "Service." The report aims to uncover key insights and trends within the dataset, helping stakeholders make informed decisions to enhance sales performance and customer service.

The dataset used for this analysis is the 'Amazon Sales Data,' which encompasses a wide range of information about sales transactions, product categories, order statuses, and regional distributions. This data has been visualized through two dashboards to facilitate a clear and concise understanding of various metrics.

The "Sales" dashboard focuses on metrics such as total revenue, quantity sold, sales distribution by product category, and geographic distribution of orders. These visuals help to identify top-performing products and regions, offering insights into consumer preferences and market trends.

The "Service" dashboard provides an overview of courier status, order trends over time, and regions with the highest cancellation rates. This helps in understanding the efficiency of the delivery process and identifying areas that may require improvements.

The report aims to answer several critical questions about sales performance, product popularity, regional sales variations, and service efficiency by analysing these dashboards. The insights derived from this analysis will inform strategies to boost sales, enhance customer satisfaction, and optimise service operations.

Sales Dashboard Analysis

The Sales Dashboard provides a detailed view of key metrics related to the sales performance of Amazon products. This section of the report will delve into various aspects of the sales data, offering insights into total revenue, quantity sold by category, and the geographic distribution of orders. By analysing these visuals, we aim to answer important questions about product popularity, sales trends, and regional performance.

Total Revenue and Quantity Sold

The dashboard reveals that the total revenue generated is ₹19.53M, with a total of 117K units sold. These figures provide a high-level overview of the sales performance. They help in assessing the overall market demand and revenue-generating potential of the products.

Quantity Sold by Category

This section breaks down the quantity sold across different product categories, including Set Kurta, Western Dress, Top Ethnic Dress, Blouse, Bottom, Saree, and Dupatta. The column chart highlights which categories are performing well and which are underperforming.

The most popular product categories among customers are sets (45,289) and kurtas (45,045) and the least popular are sarees (152) and dupattas (3).

Top 10 States by Number of Orders

The geographic distribution of orders is analysed to identify the top 10 states contributing the most to the sales volume. The states include Maharashtra, Karnataka, Tamil Nadu, Telangana, Uttar Pradesh, Delhi, Kerala, West Bengal, Andhra Pradesh, and Gujarat. This analysis helps in understanding regional sales trends and customer preferences.

The states with the highest number of orders are Maharashtra, Karnataka and Tamil Nadu, indicating that states with higher urbanisation rates tend to have more people ordering on Amazon.

These aspects of the Sales Dashboard can help derive actionable insights that will aid in making data-driven decisions to optimise product offerings and target key markets effectively.

Service Dashboard Analysis

The Service Dashboard provides a comprehensive view of the order fulfilment process, focusing on courier status, order trends over time, and cancellation rates across different states. This section analyses these metrics to understand the efficiency of the delivery system and identify potential areas for improvement.

Courier Status

The pie chart categorises orders based on their status: Shipped, Not Specified, Unshipped, and Cancelled. Most of the orders, 109.49K (84.89%), are shipped, while 6.87K (5.33%) are not specified, 6.68K (5.18%) are unshipped, and 5.94K (4.6%) are cancelled. This distribution helps in evaluating the effectiveness of the logistics and fulfilment process.

Orders Over Time

This section analyses the trend of orders over the period from March 31, 2022 to June 29, 2022. By examining the order volumes across these months, we can identify any seasonal patterns or significant fluctuations in demand. From the chart, we can see that the volume of orders peaked near the beginning of May 2022. However due to the short time-span of the data it is difficult to conclude any sales trends or patterns.

Top 5 States with Highest Percentage of Cancelled Couriers

The analysis highlights the states with the highest cancellation rates: Puducherry (6.27%), Bihar (6.05%), Sikkim (5.85%), Himachal Pradesh (5.84%), and Odisha (5.75%). These states have a higher share of non-urban population and less developed infrastructure, indicating potential problems in delivering couriers.

Exploring these dimensions of the Service Dashboard can help us gain valuable insights into the delivery performance and identify opportunities to enhance the efficiency and reliability of the order fulfilment process.

Conclusions and Recommendations

This section synthesises the key findings from the Sales and Service Dashboards and provides actionable recommendations to improve sales performance and service efficiency. By addressing the insights derived from the data, we can formulate strategies to optimize operations and enhance customer satisfaction.

Summary of Key Findings

- **Sales Performance:**
 - Total revenue is ₹19.53M with 117K units sold.
 - Set & kurta are the most popular categories.
 - Maharashtra, Karnataka, and Tamil Nadu are the top states by order volume.
- **Service Efficiency:**
 - 84.89% of orders are successfully shipped, while 4.6% are cancelled.
 - Orders show a consistent trend from March 2022 to June 2022, with a peak in the beginning of May.
 - States with the highest cancellation rates are Puducherry, Bihar, Sikkim, Himachal Pradesh, and Odisha.

Actionable Insights

- **Boosting Sales in Underperforming Categories:**
 - Focus on marketing and promotional efforts for categories with lower sales volumes, such as Blouse, Bottom, and Dupatta.
 - Conduct customer surveys to understand preferences and improve product offerings in these categories.
- **Enhancing Regional Sales Strategies:**
 - Tailor marketing campaigns to target top-performing states more effectively.
 - Explore potential in underperforming regions by understanding local market dynamics and consumer behaviour.
- **Improving Service Efficiency:**

- Investigate potential reasons for unshipped and cancelled orders, particularly in states with high cancellation rates.
- Enhance logistic partnerships and streamline fulfilment processes to reduce cancellation rates.
- Implement better tracking and communication systems to keep customers informed about their order status.

Future Work

- **Additional Analyses:**

- Conduct a deeper analysis of customer demographics and purchasing behaviour to identify new market segments.
- Analyse the impact of promotional campaigns on sales and customer engagement.
- Perform the analysis over a longer time-period to gain deeper insights into seasonal patterns and trends.

By implementing these recommendations, Amazon can leverage the insights from the dashboards to drive growth, improve customer satisfaction, and achieve operational excellence.

Appendices

The Appendices section includes additional materials and references that support the analysis and findings presented in the report. This section provides supplementary information, visuals, and detailed descriptions of the dataset used.

Visuals

Sales

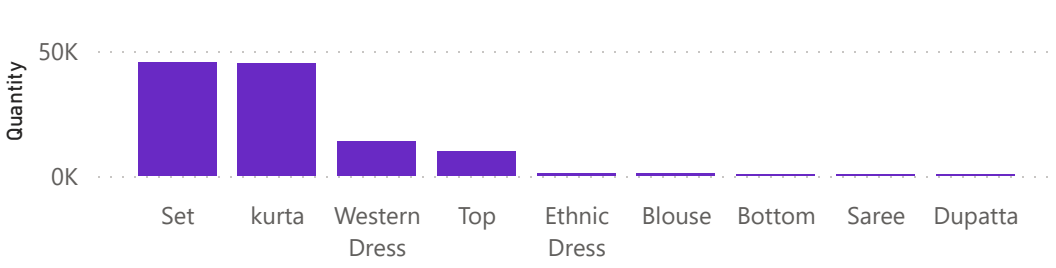
Total Revenue

₹ 19.53M

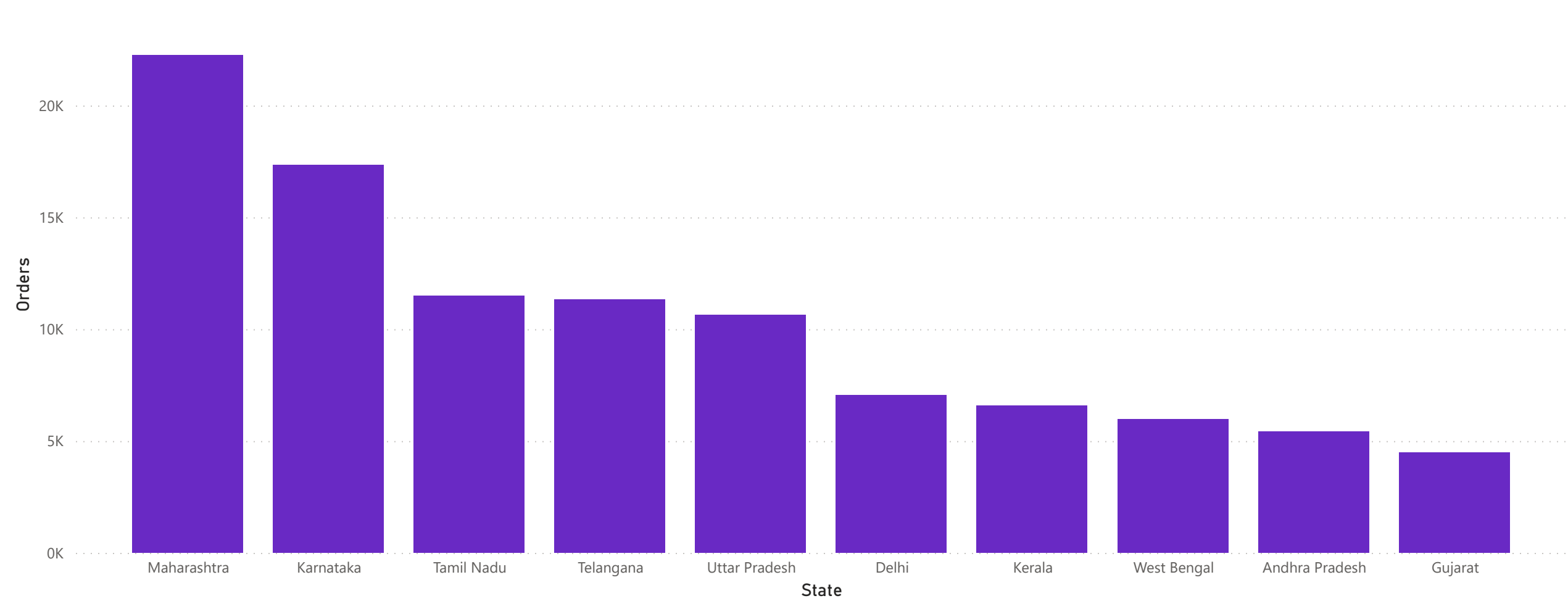
Quantity Sold

117K

Quantity Sold by Category

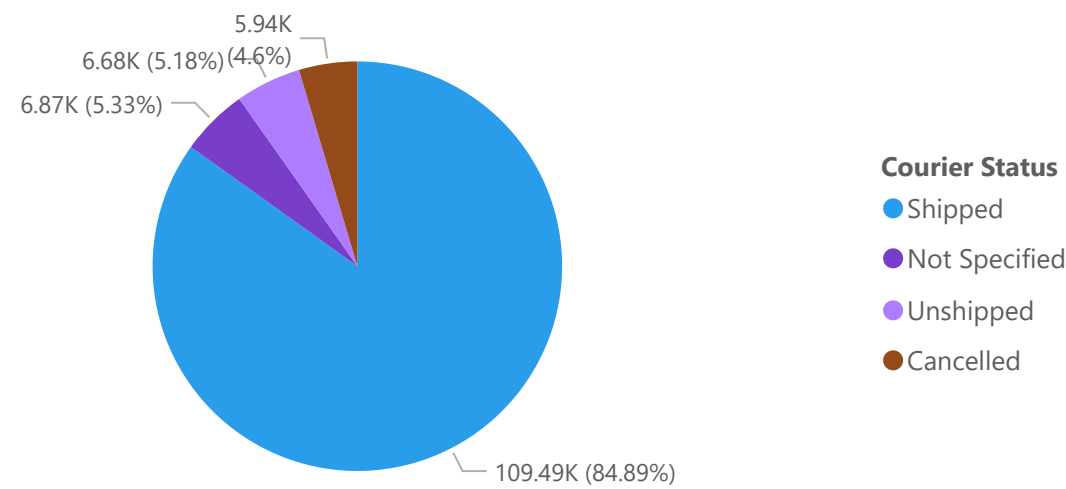


Top 10 States by no. of orders

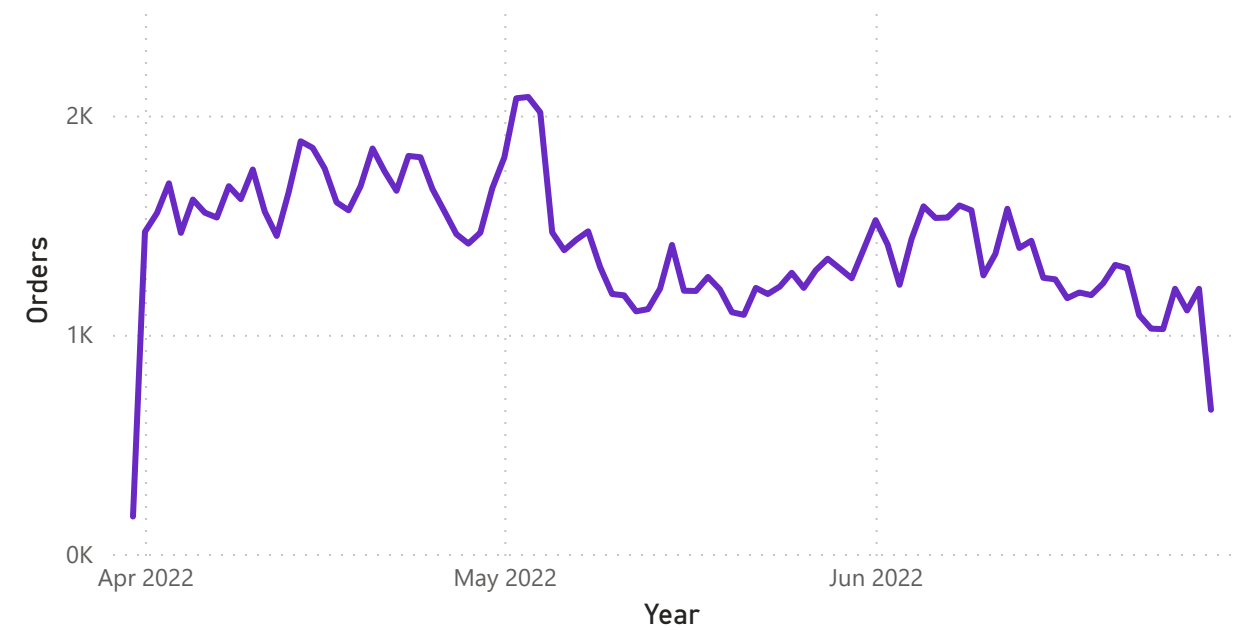


Service

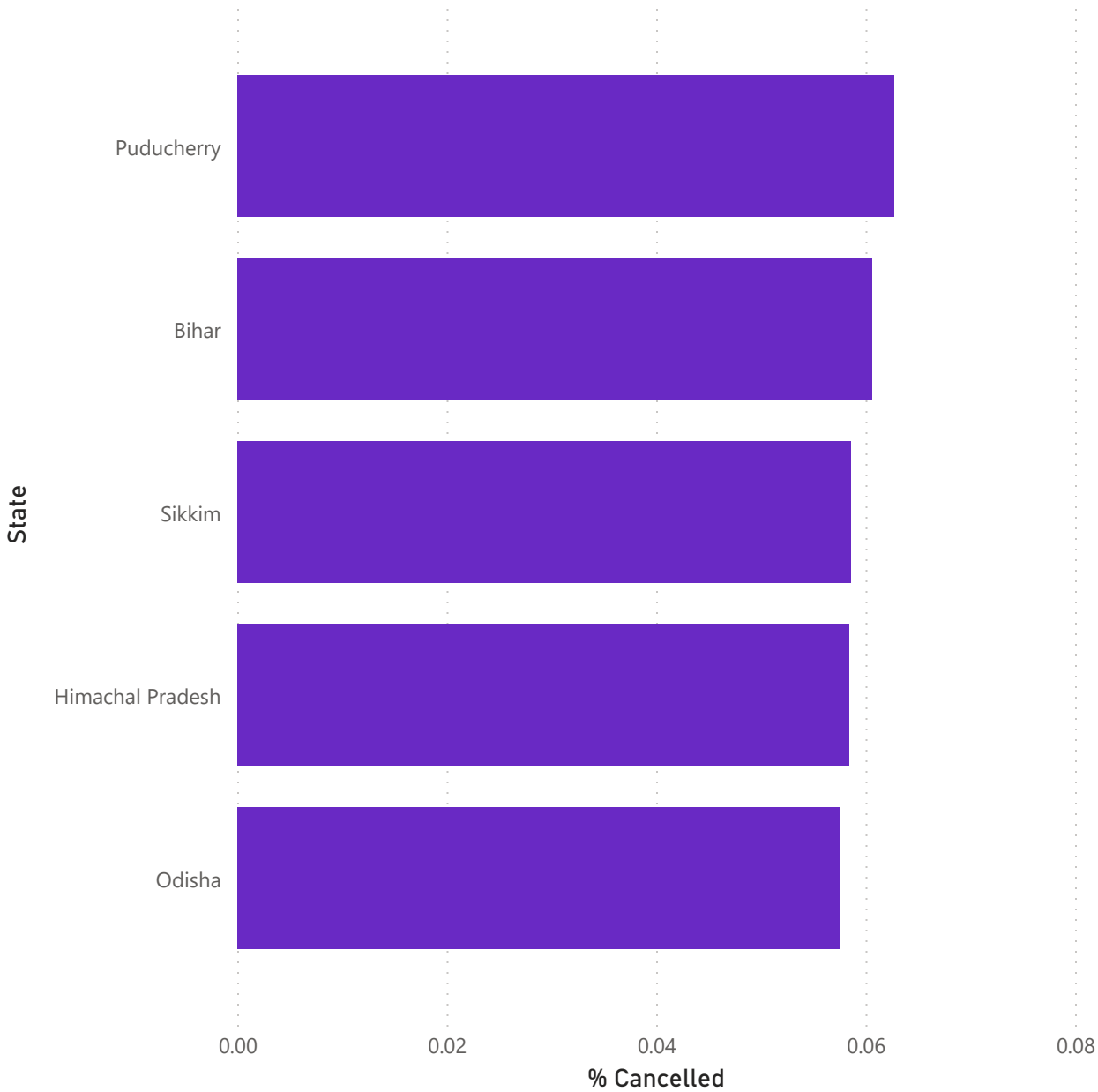
Courier Status



Orders over Time



Top 5 States with highest % of cancelled couriers



Dataset Description

- Source: 'Amazon Sales Data'
- Link: [Amazon Sales Data](#)

Additional References

This subsection lists any additional references or resources used in the report.

- **Resources Used:**
 - Excel for data cleaning and standardisation and Power BI for creating dashboards.