

AMAZON SALES REPORTAND INSIGHTS

15 JAN, 2025 AKASH PARLEY





This report provides an in-depth analysis of Amazon sales data, offering insights into revenue trends, category performance, geographical analysis, and customer behavior. The findings are presented using Tableau dashboards for clarity and actionable insights.



OBJECTIVES

- Sales Overview: Understand the overall sales performance, trends, and paterns over time
- Product Analysis: Analyze the distribution of product categories, sizes, and quantities sold to identify popular products.
- Fulfillment Analysis: Investigate the fulfillment methods used and their effectiveness in delivering orders.

- Customer Segmentation: Segment customers based on their buying behaviour, location, and other relevant factors
- Geographical Analysis: Explore the geographical distribution of sales, focusing on states and cities
- Business Insights: Provide actionable insights and recommendations based on the analysis to optimize sales strategies, improve customer satisfaction, and enhance overall business performance.



METHODOLOGY

1. <u>Data Cleaning</u>

The data cleaning process involved utilizing Python, a versatile and efficient programming language, to prepare the dataset for analysis. Below are the steps followed:

- Removed Duplicates and Null Values:
- Python's pandas library was used to eliminate duplicate records and handle missing values. Missing data were either removed or imputed based on the nature of the dataset and the significance of the missing attributes.
 - Standardized City Names and Categories:

Inconsistent naming conventions across cities and categorical variables were corrected using Python.



• <u>Data Transformation</u>:

Certain columns were transformed for better analysis. This included creatingderived columns, converting date formats, and normalizing data ranges.

• Error Detection

Anomalies such as outliers were identified using statistical methods like the IQR rule or z-scores.

• Visualization Tool: Tableau

After data cleaning, the dataset was imported into Tableau, a powerful visualization tool, to build an interactive dashboard. The Tableau process involved the following steps:

1. Data Import and Connection:

The cleaned dataset was uploaded to Tableau Desktop, where connections to files or databases were configured.



2. Data Source Management:

- Ensured that the data structure was well-defined with relationships and joins configured as needed.
- Fields were renamed and aliases applied for clarity.

3. Creating Dashboards:

- Interactive Visuals: Created charts like bar graphs, line charts, heatmaps, and pie charts. Filters, parameters, and calculated fields were added to enhance interactivity.
- Layout Design: Designed intuitive layouts for dashboards, ensuring clarity in storytelling.
- Geographical Analysis: Leveraged Tableau's mapping capabilities to visualize city-specific metrics.

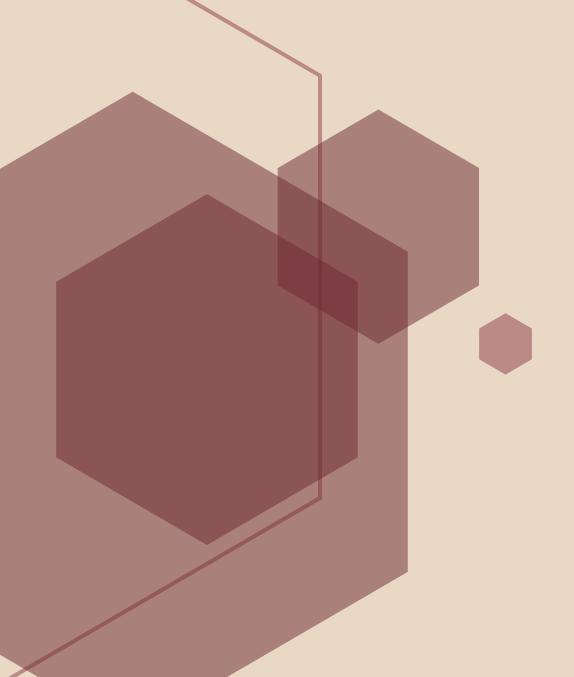
For example, a heatmap was created to compare sales across cities with filters allowing users to drill down by category and date.

4. Publishing the Dashboard:

The dashboard was published on Tableau Public or Tableau Server to make it accessible to stakeholders. It was designed to be user-friendly and mobile-optimized.



KEY INSIGHTS & ANALYSIS



KPI Dashboard

"The total revenue generated was \$78,496,786.39, with 120,229 total orders. The average order value was \$652.89, indicating high-value transactions."

Revenue by Region

"Bengaluru, Hyderabad, and Mumbai contributed the highest revenue. Pune and Chennai also showed significant sales figures."

Fulfillment Analysis

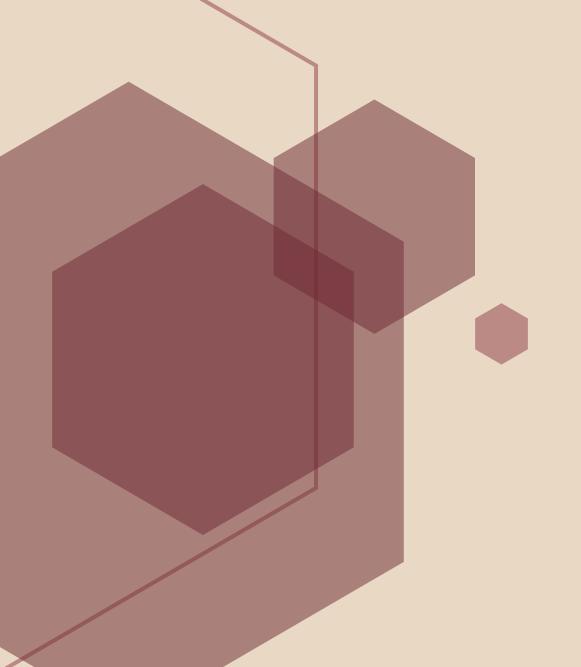
The majority of orders (84.89%) were shipped successfully, while 5.18% remained unshipped.
Canceled orders accounted for 4.60%, indicating room for fulfillment process improvement.

Geographical Analysis

Northern and Southern regions dominated sales, with Bengaluru and Hyderabad as top contributors. Sales in smaller cities like Guwahati and Chandigarh show growth potential



KEY INSIGHTS & ANALYSIS



Top-Selling Categories

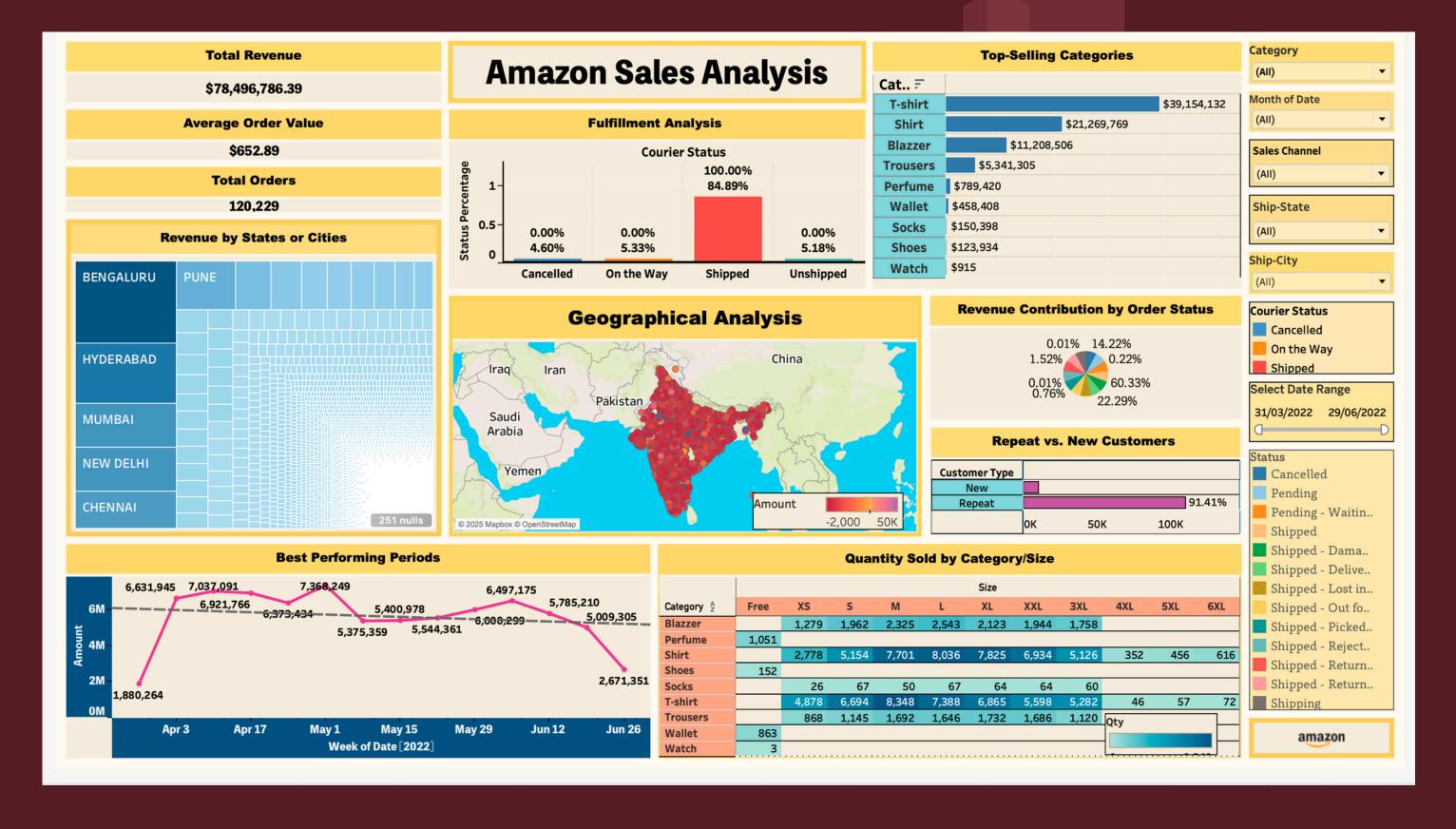
T-shirts and shirts dominated sales, contributing over 50% of the total revenue. Perfume and wallets were less popular but still contributed to niche segments.

Customer Behavior

91.41% of customers were repeat buyers, indicating high brand loyalty. However, targeting new customers could expand revenue



DASHBOARD





RECOMMENDATIONS



Expand in High-Revenue Regions:

Focus marketing efforts in
Bengaluru and Hyderabad.
Introduce loyalty programs for
frequent buyers



Promote Low-Selling Categories

Launch targeted campaigns for perfumes and wallets



Boost Repeat Customer Engagement

Introduce loyalty programs for frequent buyers
Reduce canceled orders by improving courier processes



THANK YOU