

Project Id: 78G0OL

Amazon Sales Report Project Report

Problem Statement:

Analyze and Provide Insights on Amazon Sales Report

Problem Description:

The provided dataset contains information about sales transactions on Amazon, including details such as order ID, date, status, fulfillment method, sales channel, product category, size, quantity, amount, shipping details, and more. The objective is to conduct a comprehensive analysis of the data and extract actionable insights to support business decision-making.

Project Objective

Using the dataset of the Amazon sales are given for the year 2022, the owner wants to derive findings and the sales trends/pattern to improve and grow his business and these insights will help him in supporting further business making decisions.

KPI's

- Top 5 most sales contributing states
- Product and its category generate high revenue
- Highest selling product
- Customers preferred channels
- Shipping status
- Month wise sales

Data analysis Process:

1. Data cleaning: is the process of removing the duplicate records, missing values from the data to obtain reliable information from the dataset.
2. Data pre-processing: is the process to make data consistent by removing the inconsistencies
3. Data Visualization: Once the data is cleaned and pre-process it is ready for further representation in the form of table or different types of graphical visualizations. Data viz. is a process of representing a large dataset in term of charts so that it can make sense for everyone.
 - ❖ The data is summarized with the help of pivot table and thereafter converted to charts to make it more meaningful.

- ❖ First of all, we have deleted all the columns containing a single entry like currency, ship country, sales channel.
- ❖ There are some records with quantity 0 and some amount entry showing in the records, are on the way (means dispatched from the seller side) they got cancelled by the customer, such amount need to be refunded from the seller side. So it doesn't impact our sales performance as well as revenue generation. Keeping this in mind we have deleted such records from the dataset.
- ❖ Database is showing one product that has no amount shown, that was shipped or in some case it was returned by the buyers. This product might be a promotional or free gift from the seller, presence of such records will not generate any revenue. Keeping such records could be useful to understand customer's acquisition strategy.
- ❖ Blanks entry removed from amount, ship city and ship state columns.
- ❖ Replace AR with ARUNACHAL PRADESH
- ❖ Rajasthan/rajasthan/RJ with RAJASTHAN
- ❖ New DELHI with DELHI

Data visualization

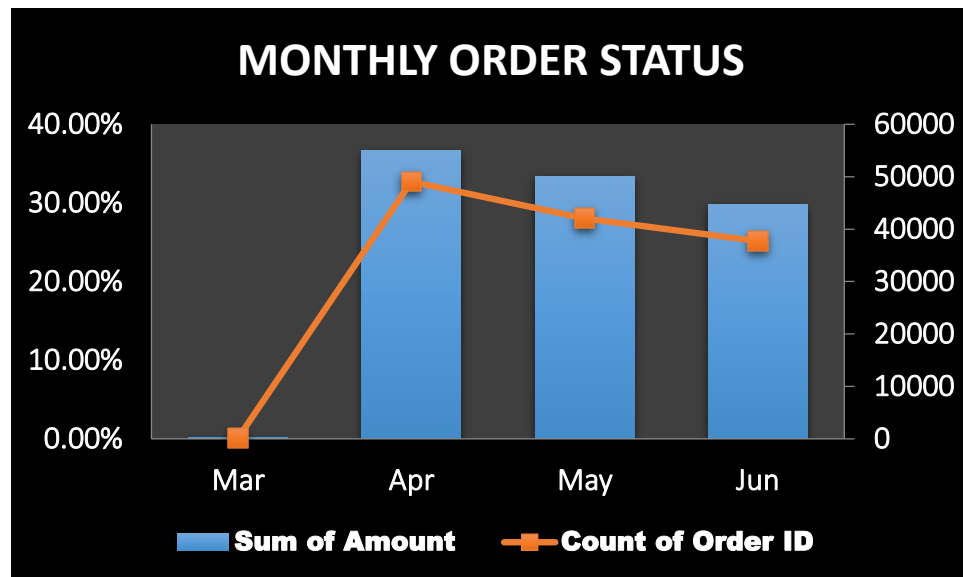


Fig. 1 Financial Performance by Month

The graph in Fig.1 indicates that the company's financial performance varies by month, with the highest total sales amount in April and May with the lowest sales in

March. This information can be used to identify trends and seasonality in sales, enabling better financial planning.

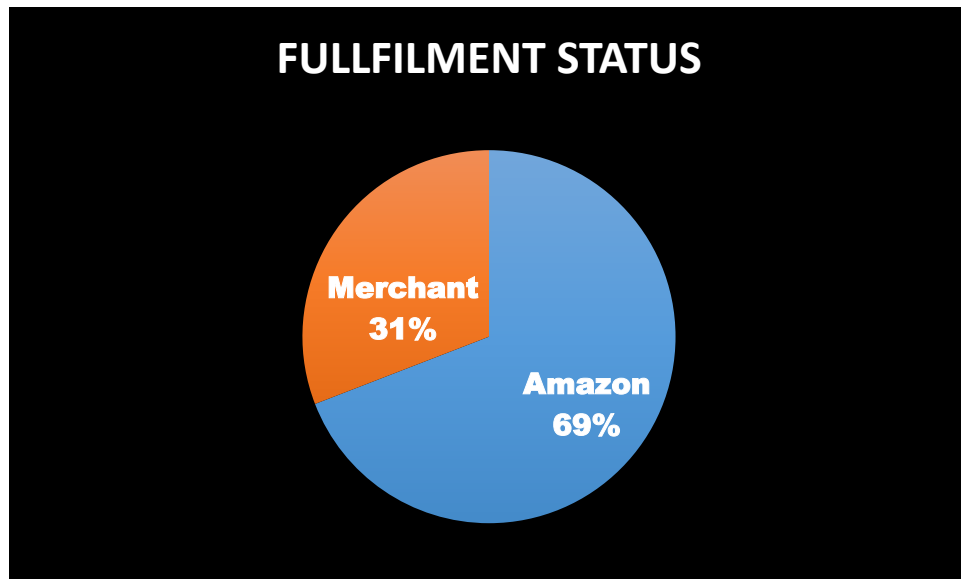


Fig. 2 Company's orders fulfilment status and amount generated by sales.

It has been observed from the plot that the Fulfilment by Amazon would be best option for the company as it meets customer satisfactions and generate more amount when compared with the fulfilment by the merchant itself.

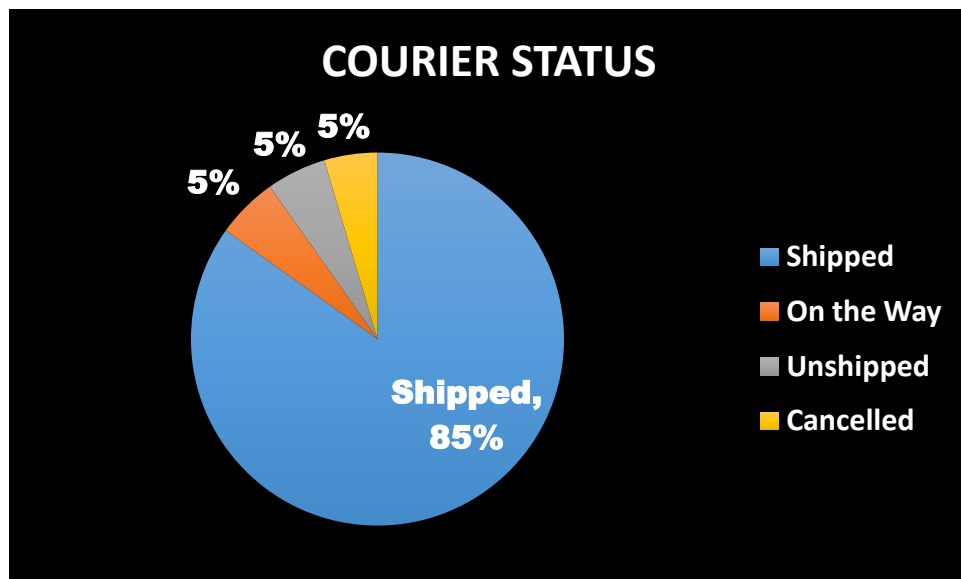


Fig. 3 Courier service status

As per the reported data, courier services are able to deliver almost 85% of goods in which 15% are showing on the way, unshipping and cancelled altogether.

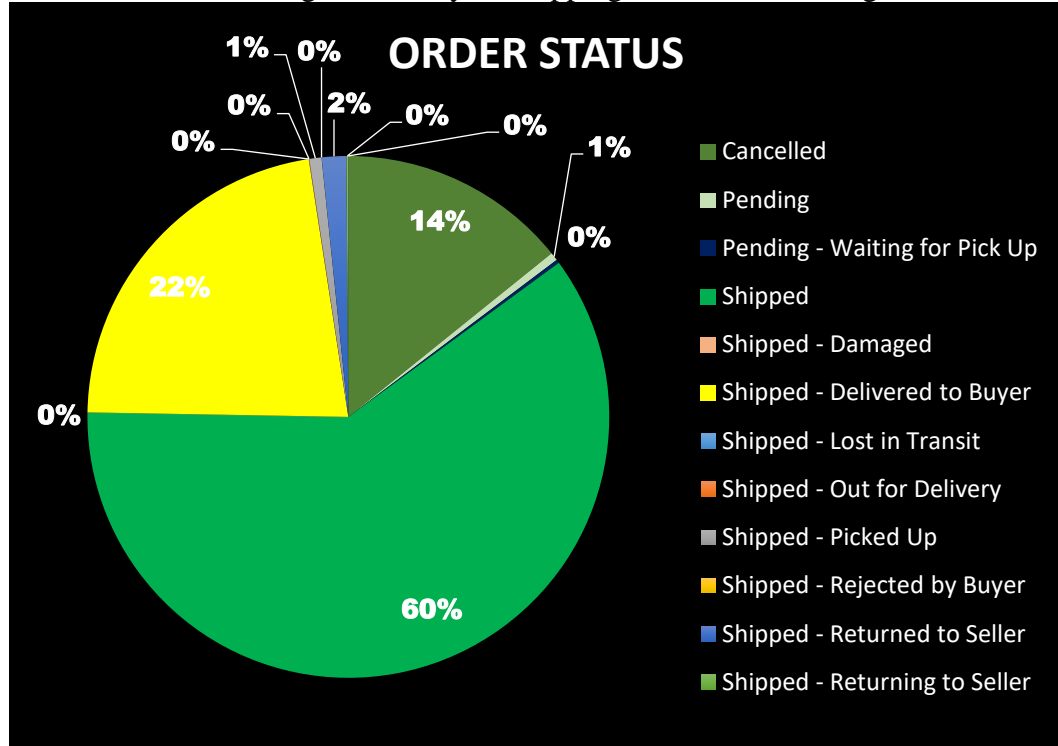


Fig. 4 Customers order status on the Amazon portal

Fig. 4 reveals that the majority of the goods are shipped from the seller end, some are shipped and delivered to the buyer, with 14% got cancelled. This information can help in improving order management processes and customer satisfaction.

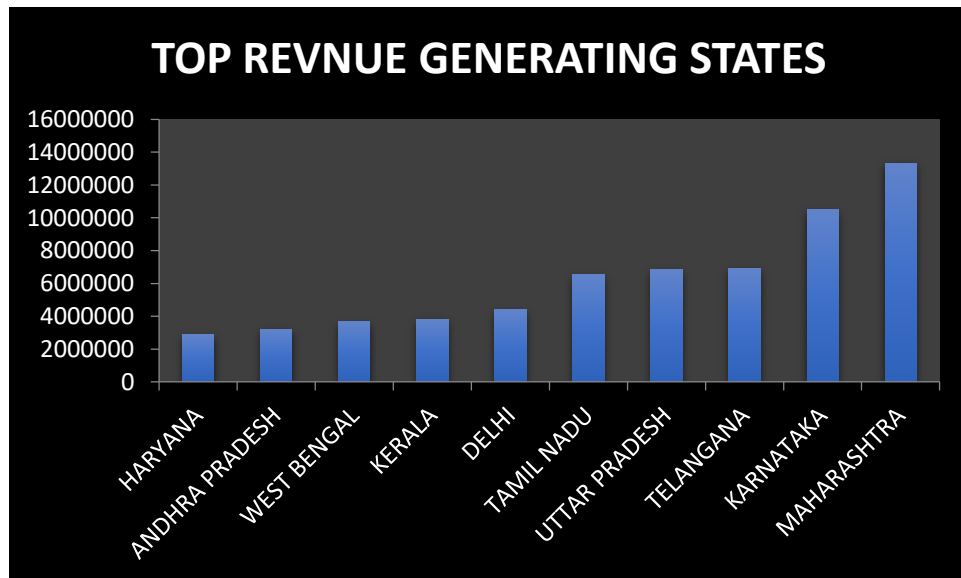


Fig. 5 Geographical Regional Sales

Regional data highlights variations in sales by geographic regions, with "Maharashtra" and "Karnataka" being the top contributors. This information can assist in regional marketing and distribution strategies.



Fig. 6 City wise Sales

Bengaluru, and Hyderabad are the top two cities with maximum buyers reported followed by Mumbai and New Delhi.

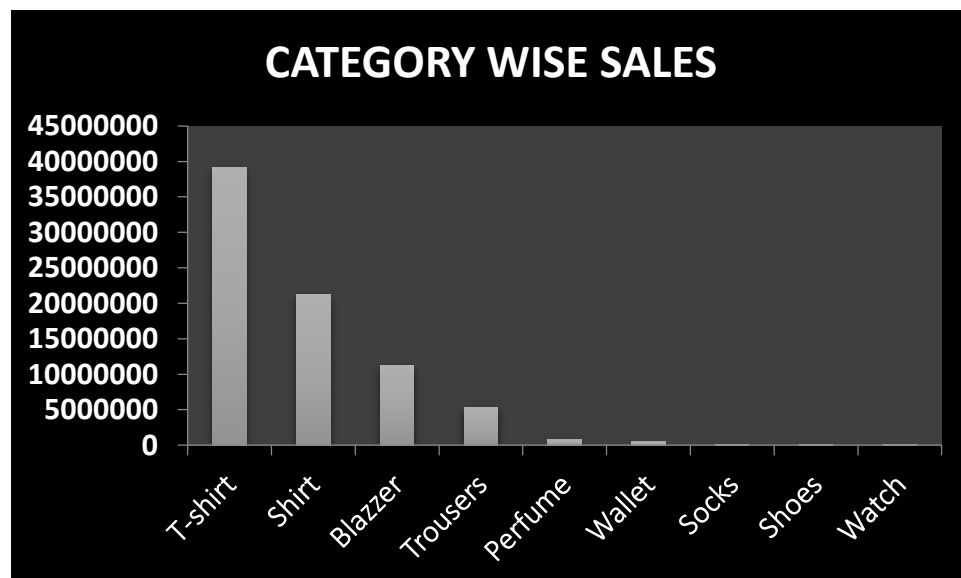


Fig. 7 Sales based on product category

It has been found from the above figure that, T-shirt, shirts, blazers and trousers are more ordered by customers from the portal compared to other products. This information assists in managing inventory allocation strategy.

Insights

- ❖ Highest sales reported in the month of April, followed by May and June with almost no sales in the March month.
- ❖ Since shirts, trousers and blazers are high demand, inventory should be increased for such products with more variety can be added simultaneously it is advised to reduce the inventory for less demanding products to free up space as well as reduce the holding and maintenance cost.
- ❖ Merchant should opt for fulfilment by Amazon to grow further sales and revenue.
- ❖ Maharashtra, Karnataka, Telangana, Uttar Pradesh and Tamilnadu come are the top states contributing to maximum overall sale for the merchant. Therefore regional marketing campaign should be done to further grow the business. In this regard,
- ❖ Marketing campaigns need to be tailored in a way to target customers in these top-performing states.
- ❖ Use region-specific promotions, discounts, and advertisements to attract more customers from these areas.
- ❖ Customers living in these top states must be targeted by showing ads/offers/coupons available on Amazon.

The data-driven findings can be leveraged to optimize operations, marketing, and customer targeting. These insights are vital for making informed decisions to enhance the company's overall performance and profitability.