Data Analysis of Amazon Sales Report

Aim

To analyze sales data from an Amazon report, examining key metrics such as sales volume, fulfillment method, and product categories. The objective is to draw meaningful insights for business decisions based on customer preferences, sales channels, and regions.

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Theory

1. Data Cleaning: Raw data often contains null values or inconsistencies, and the first step involves cleaning the data by removing or handling null values and converting data types. For instance, removing irrelevant columns and transforming categorical data into a usable format.

2. Data Grouping and Visualization: After cleaning the data, we use various group-by operations and visualizations like bar plots, histograms, and pie charts to summarize sales patterns. Grouping by size, state, and product categories helps identify trends and preferences.

3. Descriptive Statistics: This includes measures like mean, standard deviation, and frequency counts to give a summary of the dataset and to understand the distribution of key attributes like sales amount and quantity.

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Inference

The analysis shows that:

- Size Preferences: The most common size purchased is M.

- Category: T-shirts are the most popular category.

- State Distribution: Maharashtra is the state with the highest number of orders.

- B2B and Retail: 99.3% of the buyers are retailers, and only 0.7% are B2B customers.

- Fulfillment: Most of the orders are fulfilled by Amazon, indicating trust in their logistics.

These insights can be used to target marketing campaigns, optimize inventory for popular sizes and categories, and focus on regions with high demand.