**Amazon Sales Dashboard Analysis**

**Overview**

The provided Power BI dashboards visualize various sales metrics for Amazon products, including total sales, sales by cities and states, and sales trends over time. Key metrics and insights are summarized below:

**Key Metrics**

1. **Total Sales**: 115.32K
2. **Sales Count**: 104.00
3. **Seller Count**: 20.00

**Sales Analysis**

* **Top Cities**:
  + Bangalore leads in sales.
  + Pune and Hyderabad follow.
  + Other cities contributing to sales include Ahmedabad, Ghaziabad, Rewa, Tumakuru, Visakhapatnam, Kochi, and Secunderabad.
* **Top States**:
  + Karnataka leads with 15 sales.
  + Maharashtra and Telangana follow with 8 sales each.
  + Other states include Andhra Pradesh, Gujarat, Madhya Pradesh, Uttar Pradesh, and Kerala.
* **Temporal Sales Analysis**:
  + Sales trends show fluctuations, with peaks and troughs indicating varying customer behavior.
  + Highest sales peak: 3 units; lowest points: 0 units.

**Data Cleaning and Preprocessing**

* **Data Cleaning**:
  + Address missing values through imputation or deletion.
  + Remove duplicate records.
  + Ensure data consistency in categorical variables.
  + Identify and manage outliers.
* **Data Transformation**:
  + Normalize numerical data.
  + Encode categorical variables.
  + Convert date fields and create additional time-based features.
  + Aggregate data at different levels for granular insights.
  + Create derived metrics (e.g., average sales per day).

**Detailed Analysis**

* **Sales by City**:
  + Bangalore's high sales suggest strong customer base or demand.
  + Pune and Hyderabad also show significant sales.
* **Sales by State**:
  + Karnataka's dominance aligns with Bangalore's high sales.
  + Balanced demand across Maharashtra and Telangana.
* **Temporal Sales**:
  + Fluctuating trends highlight potential seasonality or promotional effects.

**Recommendations**

* **Targeted Marketing**:
  + Focus on top-performing cities and states.
* **Inventory Management**:
  + Adjust inventory based on sales trends.
* **Promotional Campaigns**:
  + Coordinate campaigns to maximize high-demand periods.
* **Customer Feedback**:
  + Analyze feedback from top cities for product enhancements.
* **Expand Reach**:
  + Boost sales in lower-performing areas through targeted promotions.

**Additional Insights from the Second Dashboard**

**Key Metrics**

1. **Best Seller Categories**:

* Women's T-Shirts, Sarees, and Tops dominate.

1. **Sales Units by City**:

* Concentrated in Surat areas like Patel Nagar, Katargam, and Singanpor.

1. **Average Rating**: 3.97 (total reviews: 13K)
2. **Courier Status**: 100% Unshipped
3. **Amazon Prime Customers**: 52 Prime members, 73 non-Prime customers.
4. **Sale Amount by Time and Category**:

* Significant peaks in May 2022; Set category dominates.

1. **Quantity by Size and Category**:

* Large (L) size has the highest quantity sold.

**Detailed Analysis**

* **Best Seller Categories**:
  + High demand for Women's T-Shirts, Sarees, and Tops.
* **Sales Units by City**:
  + Inform targeted marketing and inventory stocking.
* **Average Rating and Reviews**:
  + General customer satisfaction; focus on common complaints for improvement.
* **Courier Status**:
  + Ensure timely shipment and accurate tracking.
* **Amazon Prime Customers**:
  + Opportunities to convert non-Prime customers.
* **Sale Amount by Time and Category**:
  + Align future campaigns with peak periods.
* **Quantity by Size and Category**:
  + Ensure adequate stock for popular sizes.

**Recommendations**

* **Enhance Marketing Efforts**:
  + Focus on top-performing categories and high-demand areas.
* **Improve Customer Experience**:
  + Address common complaints and improve product ratings.
* **Optimize Logistics**:
  + Ensure timely shipment and accurate tracking.
* **Leverage Customer Data**:
  + Tailor marketing strategies based on customer behavior.
* **Expand Product Range**:
  + Expand product lines in popular categories and sizes.