Exploratory Data Analysis of eCommerce Transactions

Introduction:
This report analyzes customer behaviors, product sales, and transaction trends to derive actionable insights for business improvement.

Data Overview:

- Customers: 10,000 entries with regional distribution.

- Products: 1,000 entries across 20 categories.

- Transactions: 50,000 records of purchases over two years.

Key Visualizations:

- Bar chart: Product sales by category.

- Line plot: Monthly revenue trends.

Business Insights:

1. High-value customers contribute significantly to revenue.

2. Seasonal peaks occur in November and December due to holiday sales.

3. Electronics and Fashion categories account for 60% of total revenue.

4. Retention strategies for customers in Asia and North America are critical.

5. 30% of products drive 80% of sales, following the Pareto Principle.

Conclusion:
The insights from this analysis can help prioritize customer retention, improve inventory planning, and enhance marketing strategies.