

Business Insights Report: E-Commerce Dataset

Overview:

This report provides actionable business insights derived from the exploratory data analysis (EDA) of an e-commerce dataset. The dataset includes customer, product, and transaction information. Below are the key findings:

1. Regional Distribution:

South America leads in customer count with 59 customers, followed by Europe (50), North America (46), and Asia (45). This highlights the regional focus for marketing campaigns and customer engagement efforts.

2. Popular Product Categories:

Books are the most popular category with 270 transactions, followed by Electronics (254) and Home Decor (248). These categories can be targeted for promotions to increase sales.

3. Revenue by Product Category:

Books generate the highest revenue, totaling \$192,147.47. Electronics (\$180,783.50) and Clothing (\$166,170.66) follow closely. Investment in these categories can yield high returns.

4. Average Transaction Value:

The average transaction value across all transactions is approximately \$690. This indicates a healthy spending pattern and can guide pricing strategies.

5. Frequently Purchased Products:

The top-performing products are identified by their purchase frequency. Notable products include:

- Product P059 with 19 purchases.
- Product P029 with 17 purchases.
- Products P062, P079, and P054 with 16 purchases each.

Conclusion:

These insights can assist in making data-driven decisions for targeted marketing, inventory management, and pricing strategies. Future analyses can focus on customer segmentation and personalized recommendations for

enhanced business outcomes.