

Business Insights from Task 1 (EDA):

1.

Customer Distribution by Region:

- South America accounts for the largest share of customers (29.5%), followed by Europe (25%), North America (23%), and Asia (22.5%). This indicates that South America is a key market, warranting targeted campaigns to retain and expand the customer base.

2.

Top-Selling Products:

- The most sold products include **TechPro Headphones** (Electronics) and **SoundWave Cookbook** (Books). These products have a strong demand and could be used in promotions, upselling strategies, or bundled offers to increase revenue.

3.

Revenue by Product Category:

- The **Books** category generates the highest revenue (~\$192,147), followed by Electronics, Clothing, and Home Decor. To maximize profits, the company could introduce premium book collections or run targeted marketing campaigns for the Books category.

4.

Seasonal Trends in Customer Signups:

- Customer signups show spikes in **April 2024** and **November 2024**, indicating seasonal interest in the platform. Aligning major marketing

campaigns, discounts, or new product launches with these periods can capitalize on the heightened customer activity.

5.

Regional Spending Insights:

- Customers from **South America** have the highest average transaction value (\$721), followed by Europe (\$710), Asia (\$698), and North America (\$624). This suggests prioritizing high-value products and services for South American customers.