

5 Key Business Insights Derived from EDA

1. Regional Customer Distribution:

- a. **Insight:** South America has the highest concentration of customers, while Asia has the lowest.
- b. **Actionable Strategy:** To optimize customer acquisition efforts, targeted marketing campaigns should focus on regions with lower customer representation (e.g., Asia). Localized promotions, partnerships, or campaigns could drive growth in these underrepresented markets.

2. Signup Trends:

- a. **Insight:** Customer signups have shown a steady upward trend, with a notable peak in December 2024.
- b. **Actionable Strategy:** The surge in signups around the holiday season suggests that promotions or seasonal campaigns are highly effective. Leveraging these peak periods with special offers or incentives could further accelerate customer engagement and drive additional signups.

3. Product Category Popularity:

- a. **Insight:** The product categories of Books and Electronics are the most popular, with 25 products each, while Home Decor is the least represented with 23 products.
- b. **Actionable Strategy:** Given the popularity of Books and Electronics, increasing the variety and availability of these products could meet growing demand. Additionally, expanding the Home Decor product line could tap into an underrepresented segment, presenting an opportunity to diversify offerings and attract new customers.

4. Price Range Concentration:

- a. **Insight:** A significant portion of products is priced between \$200 and \$300, with a noticeable peak in the \$400-\$500 range.
- b. **Actionable Strategy:** The preference for mid-to-high-priced products indicates a market appetite for premium offerings. Tailoring product pricing strategies to focus on this segment, perhaps through bundling or introducing higher-end items, could cater to this demand and boost overall revenue.

5. Regional Transaction Behavior:

- a. **Insight:** South America and Europe exhibit higher average transaction values.
- b. **Actionable Strategy:** The higher transaction values in these regions suggest the presence of more affluent customers. Targeting high-value product offerings or personalized promotions in these regions could

increase both transaction frequency and revenue per customer, further capitalizing on affluent customer bases.