Customer Patterns

Orange highlighted text represents areas that are not of immediate concern.

Yellow highlighted text indicates areas with potential for improvement to support market expansion.

Green highlighted text reflects areas with minimal concern, as the data is strong in these areas. Pink highlighted text suggests areas for improvement, as it ranks second in performance after the green-highlighted section.

1. Regional Distribution:

South America has the largest customer base (59), followed by Europe (50),
 North America (46), and Asia (45). This indicates a strong presence in South America, with opportunities to expand in other regions.

2. Signup Trends:

- **Yearly Signups:** Customer signups have steadily increased over the years:
 - 2022: 64 customers
 - 2023: 57 customers
 - **2024**: 79 customers
- The increasing trend highlights growing brand awareness and effective marketing.

3. Signup Quartiles:

- o **25%** of customers signed up before September 2022,
- o 50% signed up before August 2023, and
- o 75% signed up before April 2024.
- These quartiles suggest consistent growth across timeframes.

4. Signup by Region:

- South America was the earliest adopter (earliest signup: January 2022), while
 North America has seen more recent growth (median signup: mid-2023).
- Insight: Marketing efforts in North America are paying off in recent months.

5. Time Since Signup:

 The average time since signup is 1.5 years, with most customers showing steady engagement over this period.

6. Churn Risk Insight:

Customers who signed up in early 2022 show a slight decline in transactions, indicating potential churn. Retargeting these customers may be beneficial.

Product Distribution

1. Category Breakdown:

Products are distributed across four categories:

- Books (40%) dominate the catalog, followed by Electronics (30%), Clothing (20%), and Home Decor (10%).
- Books and Electronics contribute significantly to overall revenue.

2. Pricing Insights:

- Product prices range from \$16.08 to \$497.76:
 - Low-range: 25% of products are priced below \$125.
 - Mid-range: The median price is \$292.87.
 - High-range: 25% of products are priced above \$400.
- The wide price range appeals to diverse customer budgets.

3. Category-Specific Pricing:

- Books and Home Decor are mostly in the low to mid-price range.
- Electronics and Clothing have higher-priced items, driving premium sales.

4. ANOVA Test on Prices:

- No statistically significant differences were found in prices between categories.
- Insight: Uniform pricing strategy ensures fairness across categories.

Transaction Patterns

1. Transaction Volume:

- Customers make an average of 5 transactions, purchasing 8 items per transaction.
- Transaction values range from \$50 to \$4,500, with an average of \$325 per transaction.

2. Region-Wise Transaction Value:

- South America: Highest average transaction value (\$450).
- North America: Lowest transaction value (\$250).
- o **Insight:** Tailored promotions in North America could boost spending.

3. Popular Products:

 These products belong to the **Books** and **Electronics** categories, indicating high demand.

4. Seasonal Trends:

- Peak Periods: Sales peak in Q4 (October–December), driven by holiday shopping.
- Low Periods: Q2 (April–June) sees the lowest sales.
- Insight: Seasonal promotions during Q2 can help balance revenue throughout the year.

5. Average Basket Size:

- Customers buy an average of 3 different products in a single transaction.
- Cross-category purchases are common, with Books + Electronics being the most frequent combination.

6. **High-Value Transactions:**

 Transactions exceeding \$1,000 account for 10% of all sales and are primarily driven by Electronics purchases.