# **Business Insights**

### **Customer Insights**

#### 1. Customer Distribution by Region:

 South America has the highest number of customers (59), followed by Europe (50), North America (46), and Asia (45).

#### 2. Customer Signup Trends:

• The number of customer signups has been increasing over the years, with the highest number of signups in 2024 (79).

#### 3. Top 100 Customers:

• The top 100 customers are predominantly from South America (36), followed by Europe (23), North America (21), and Asia (20).

### **Product Insights**

#### 1. Popular Product Categories:

 The most popular product categories are Books and Electronics, each with 26 products, followed by Clothing (25) and Home Decor (23).

#### 2. Product Price Distribution:

 The prices of products vary widely, with a significant number of products priced between \$100 and \$400.

#### 3. Top Product Categories by Spend:

The top 100 customers spend the most on Books (\$138,928.97), followed by Electronics (\$131,348.05), Clothing (\$121,722.95), and Home Decor (\$99,538.45).

### **Transaction Insights**

#### 1. Monthly Transaction Trends:

 The total transaction value fluctuates monthly, with peaks observed in January, July, and September 2024.

#### 2. Top Customers by Total Spend:

 The top 10 customers have a total spend ranging from \$6,708.10 to \$10,673.87.

#### 3. Product Categories Sold in Each Region:

 South America leads in the number of products sold across all categories, followed by North America, Europe, and Asia.

## **Correlation Insights**

#### 1. Category Correlation:

 There is a weak positive correlation between the sales of Books and Clothing (0.06), indicating a slight tendency for customers who buy Books to also buy Clothing.  $^{\circ}$  Electronics and Home Decor have a weak negative correlation (-0.04), suggesting that customers who buy Electronics are less likely to buy Home Decor.