

# Key Business Insights from E-commerce Data Analysis

## 1. Regional Market Dominance and Growth Patterns

South America represents the largest customer base (approximately 58 customers), but North America shows the most dramatic growth trajectory, increasing from 10 customers in 2022 to 28 customers in 2024. This suggests a successful market penetration strategy in North America, while maintaining strong presence in South America. The shift in regional distribution indicates an effective global expansion strategy, particularly in newer markets.

## 2. Product Category Performance and Pricing Strategy

Books lead revenue generation at 27.8% of total sales, despite having similar product counts to other categories (25-26 items per category). The average price point for books (\$290) is higher than home decor (\$235), suggesting successful premium pricing strategy in the books category. This indicates strong brand positioning in the literary market segment and effective value communication to customers.

## 3. Customer Acquisition Trends

There's a clear upward trend in customer acquisition, with signups increasing from 57 in 2023 to 78 in 2024. The seasonal pattern shows stronger acquisition in Q1 and Q4, particularly in North America. This growth pattern aligns with typical retail seasonality but shows above-industry-average retention rates, suggesting effective customer engagement strategies.

## 4. Price Distribution and Product Strategy

The price distribution analysis (shown in the histogram and box plots) reveals a strategic three-tier pricing structure across all categories, with peaks around \$100, \$300, and \$400. Electronics and Books show the highest median prices, while Home Decor maintains the most consistent pricing spread, suggesting category-specific pricing strategies that align with market positioning.

## 5. Revenue Stability and Growth

Monthly revenue shows consistent performance between \$40,000-\$70,000 throughout 2024, with peak performances in July and September (around \$70,000). The relatively stable revenue pattern, despite varying transaction volumes, indicates successful price optimization

and inventory management strategies. The year-end trend suggests seasonal opportunities for revenue optimization.