

Business Insights from Exploratory Data Analysis (EDA)

Regional Distribution of Customers:

- South America has the highest percentage of customers (29.5%), followed by Europe (25%) and North America (23%).
- Focus marketing campaigns on South America, as it represents a significant customer base. Tailor strategies for Europe and North America to increase engagement.

Product Performance:

- Electronics and Books are the top-performing categories, while clothing contribute less profit.
- While almost all the categories generate a high revenue and profits, clothing generates high revenue but has the lowest profit margin.
- Prioritize stocking high-performing categories and enhance the visibility of underperforming ones through targeted promotions or bundled offerings.

Product Pricing:

- Certain categories have a broad price range, indicating flexibility in pricing strategies.
- Introduce tiered pricing models (budget, standard, premium) to diverse customer preferences.

Seasonal Sales Patterns:

- Monthly sales trends show peaks in specific months, likely due to seasonal demand or promotions.
- Optimize inventory and resource allocation for high-demand periods and trendy products.

Diverse Customers:

- Recognizing and addressing the unique behaviors for different customers and focusing on strategies that suit each group is important.
- Invest in premium offers for high-value customers, upsell or cross sell for moderate-value customers, and re-engagement tactics for low-value or in-active customers.

High-Value Customer Focus:

- Ensure a small group of high-spending customers contributes significantly to revenue, while most customers make infrequent purchases.
- Develop loyalty program and personalized engagement for high-value customers.

Untapped Regions:

- Expand market efforts in untapped regions to capture new customers.
- Enhance product diversity and performance through strategic marketing and inventory management.