

Zeotap Assignment Task 1

Business Insights Report

Overview: This report presents actionable insights derived from exploratory data analysis (EDA) on the provided eCommerce dataset, which includes customer, product, and transaction data. The findings aim to highlight key business opportunities and areas for strategic focus.

1. Customer Distribution by Region

- Observation: The customer base is spread across four regions:
 - South America: 59 customers (29.5%)
 - Europe: 50 customers (25.0%)
 - North America: 46 customers (23.0%)
 - Asia: 45 customers (22.5%)
- Insight: South America leads in customer count, accounting for nearly 30% of the customer base. This suggests that South America is a significant market and should be prioritized for targeted marketing campaigns and product availability.
- Recommendation: Invest in region-specific promotions and logistics enhancements to maximize South America's revenue potential while exploring growth opportunities in other regions.

2. Most Popular Product Categories

- Observation: Based on transaction counts:
 - Books: 270 transactions (27%)
 - Electronics: 254 transactions (25.4%)
 - Home Decor: 248 transactions (24.8%)
 - Clothing: 228 transactions (22.8%)

- **Insight:** Books are the most popular category, closely followed by Electronics and Home Decor. These three categories dominate nearly 80% of all transactions.
- **Recommendation:** Expand inventory and introduce promotional bundles in these categories to capitalize on customer preferences. Additionally, consider targeted upselling strategies for these products.

3. Revenue Contribution by Region

- **Observation:** Revenue contributions by region are as follows:
 - South America: \$219,352.56 (31.8%)
 - Europe: \$166,254.63 (24.1%)
 - North America: \$152,313.40 (22.1%)
 - Asia: \$152,074.97 (22.0%)
- **Insight:** South America not only leads in customer count but also contributes the highest revenue. However, revenue from Europe, North America, and Asia is comparable, indicating balanced market performance in these regions.
- **Recommendation:** While maintaining South America's lead, focus on diversifying product offerings in other regions to boost revenue. Conduct market research to identify product-specific demand in Europe, North America, and Asia.

4. Customer Signup Trends

- **Observation:** Customer signups by year:
 - 2024: 79 customers (39.5%)
 - 2023: 57 customers (28.5%)
 - 2022: 64 customers (32.0%)
- **Insight:** There has been steady growth in customer acquisition, with the highest signup rate in 2024. This suggests effective recent marketing campaigns or improved product offerings.

- Recommendation: Analyse and replicate successful marketing strategies from 2024. Additionally, maintain momentum by offering referral bonuses and seasonal discounts to attract new customers.

5. Top 5 Customers by Spending

- Observation: The top 5 customers and their total spending are:
 - Customer C0141: \$10,673.87
 - Customer C0054: \$8,040.39
 - Customer C0065: \$7,663.70
 - Customer C0156: \$7,634.45
 - Customer C0082: \$7,572.91
 - Insight: These customers are high-value contributors to the company's revenue. Their combined spending accounts for a significant portion of overall sales.
 - Recommendation: Implement loyalty programs, exclusive offers, or early access to new products for these high-value customers to enhance retention and lifetime value. Additionally, analyze their purchasing behaviour to identify potential lookalikes for targeted marketing.
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Conclusion

The insights derived from the dataset highlight South America as the most valuable region, Books and Electronics as dominant categories, and steady customer acquisition trends. High-value customers play a crucial role in revenue generation, underscoring the need for retention strategies. By leveraging these findings, the company can optimize its marketing efforts, inventory management, and customer engagement to drive growth and profitability.
