

# E-commerce Business Performance Analysis

## Executive Summary

Based on the analysis of customer, product, and transaction data, this report presents key business insights and recommendations for strategic decision-making.

## Customer Base Analysis

The business has 200 unique customers distributed across four geographical regions, with South America being the dominant market (59 customers). Customer acquisition appears active, with multiple sign-ups occurring on the same dates (up to 3 customers per day in November 2024), indicating successful marketing campaigns or seasonal promotions.

## Product Portfolio

The company maintains a diverse product catalog of 100 items with prices ranging from \$16.08 to \$497.76. The average product price is \$267.55, with a significant standard deviation of \$143.22, suggesting a broad range of product categories and price points. This pricing strategy allows the business to cater to different customer segments.

Key observations:

- 75% of products are priced below \$397.09
- The median price point is \$292.88
- There's a balanced distribution between budget and premium offerings

## Transaction Analysis

Analysis of 1,000 transactions reveals healthy purchasing patterns:

1. Purchase Quantity
  - Average quantity per transaction: 2.54 items
  - Maximum quantity: 4 items
  - Most common purchase size: 3 items (median)
  - Limited bulk purchases suggest B2C focus
2. Transaction Values
  - Average transaction value: \$689.99
  - Highest transaction value: \$1,991.04
  - 75% of transactions fall below \$1,011.66
  - Minimum transaction value: \$16.08

The relationship between quantity and total value indicates customers are comfortable making substantial purchases, with many opting for higher-priced items even in smaller quantities.

## Key Business Insights

1. Strong Market Position in South America
  - The high concentration of customers in South America suggests successful market penetration
  - Opportunity exists for geographic expansion in other regions
2. Healthy Average Transaction Value
  - The average transaction value of \$689.99 indicates strong purchasing power
  - Premium product strategy appears successful
3. Consistent Purchase Patterns
  - The narrow range of quantity per transaction (1-4 items) suggests a stable and predictable demand
  - Inventory management can be optimized around these patterns
4. Price Point Strategy
  - The wide price range (\$16.08 - \$497.76) successfully caters to different customer segments
  - Mid-range products (\$147-\$397) form the core offering

## Recommendations

1. Geographic Expansion
  - Investigate success factors in South America
  - Develop targeted strategies for other regions to balance market presence
2. Product Portfolio Optimization
  - Focus on mid-range products (\$147-\$397) where most transactions occur
  - Maintain premium offerings to preserve high average transaction values
3. Purchase Pattern Leverage
  - Design promotions around typical purchase quantities (2-3 items)
  - Implement bundle pricing to encourage slightly larger purchases
4. Customer Engagement
  - Analyze recent sign-up patterns to optimize customer acquisition strategies
  - Develop retention programs for the existing customer base

## **Conclusion**

The business demonstrates strong fundamentals with healthy transaction values, stable purchase patterns, and a well-distributed product portfolio. The concentration in South America presents both a strength to build upon and an opportunity for geographic diversification. Focus should be placed on strategic expansion while maintaining the successful elements of the current business model.