

E-commerce Business Insights Report

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1. Customer Lifecycle Value Analysis

Customer spending patterns show peak activity between days 150 and 180 after signup. This represents the optimal engagement window for targeted marketing campaigns and customer retention efforts. The average transaction value during this peak period is \$1055.38, suggesting a prime opportunity for maximizing customer lifetime value.

2. Regional Category Preferences

Regional analysis reveals distinct category preferences across different markets. The strongest affinity is in South America for Books (Affinity Score: 0.30), followed by Asia for Clothing. This suggests opportunities for region-specific marketing and inventory optimization.

3. Product Category Relationships

Analysis of purchase patterns reveals strong relationships between product categories. The strongest correlation (1.00) exists between Books and Books, indicating a significant cross-selling opportunity. This insight can be leveraged for product bundling, recommendation systems, and strategic product placement.

4. Customer Purchase Velocity

Customer purchase velocity analysis shows an average velocity score of 0.01 with a consistency rating of 0.33. This indicates the typical purchase frequency and repurchase patterns across the customer base. Understanding these patterns enables better inventory planning and targeted retention campaigns.

5. Customer Value Distribution

Customer value analysis reveals distinct spending tiers. The top 20% of customers spend more than \$5061.32, while the bottom 20% spend less than \$1953.23. This significant variation in customer value suggests opportunities for tier-specific marketing strategies and personalized engagement programs.

