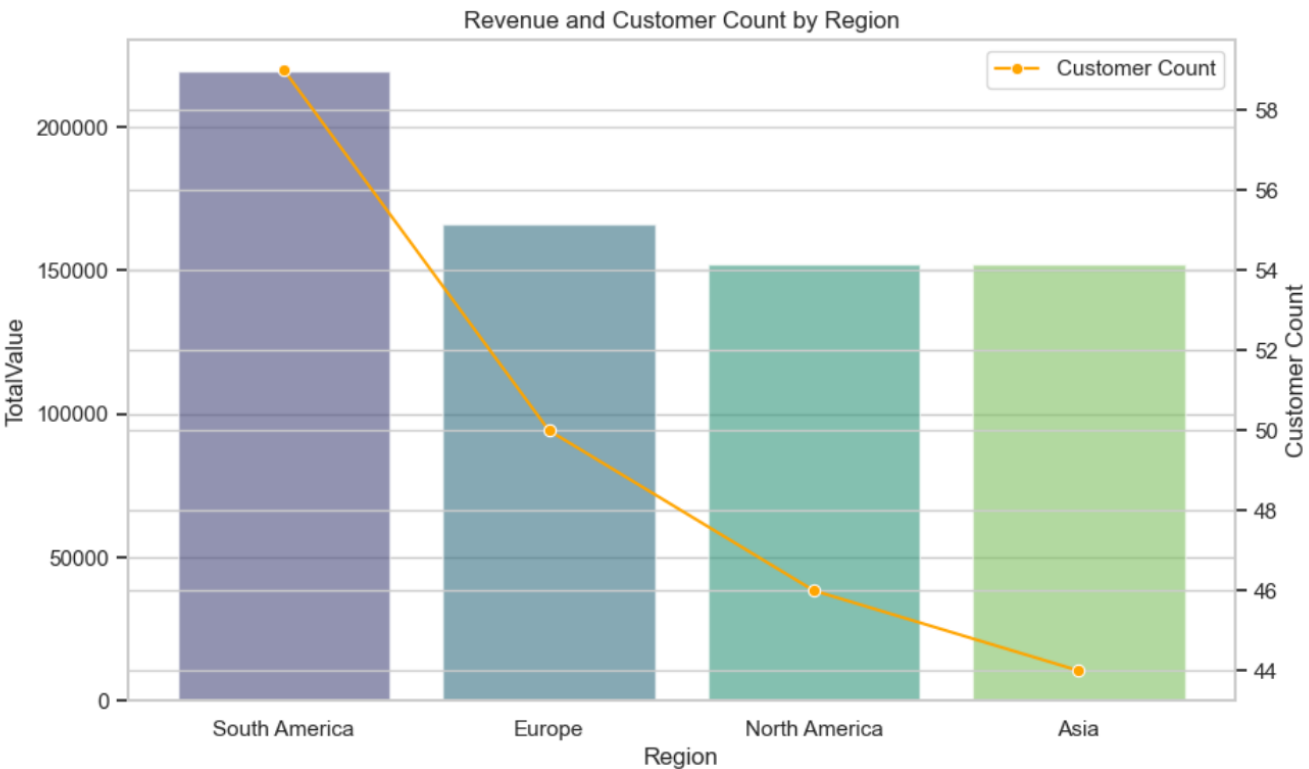


Ecommerce Transactions Dataset - Business Insights

1. Regional Insights

Region	Total Revenue	Transaction Count	Customer Count
South America	219352.56	304	59
Europe	166254.63	234	50
North America	152313.40	244	46
Asia	152074.97	218	44

- **South America** leads in revenue, indicating strong market engagement and effective sales strategies.
- **Europe** and **North America** show substantial transaction activity, suggesting growth potential with targeted marketing.
- South America's high transaction count relative to its customer base suggests strong customer retention or repeat purchases.
- **Asia** has fewer transactions despite a customer base comparable to North America, highlighting an opportunity to enhance marketing and user experience.
- Low customer counts in Asia and North America indicate potential growth areas through localized campaigns and promotional offers.
- Increasing customer engagement via loyalty programs or personalized shopping could boost repeat purchases.



2. Top 33% Orders Insights

- **Threshold for Top 33% Orders:** \$894.68
- **Revenue Contribution:** \$427,317.47 (61.93% of total revenue)
- **Mean Order Value:** \$689.99 | **Std. Deviation:** \$493.14
- **Order Value Range:** \$16.08 – \$1,991.04

The top 33% of orders contribute over 61% of revenue, indicating revenue concentration in higher-value transactions. The wide range in order values suggests a diverse product mix

Strategies:

- **Product Bundling:** Encourage higher spending from lower-value customers.
- **Market Research:** Identify drivers of high-value purchases for product line expansion.

3. Monthly Sales Trends

Month	Transaction Count	Total Revenue
1	107	\$66,376.39
2	77	\$51,459.27
3	80	\$47,828.73
4	86	\$57,519.06
5	86	\$64,527.74
6	69	\$48,771.18
7	96	\$71,366.39
8	94	\$63,436.74
9	96	\$70,603.75
10	70	\$47,063.22
11	57	\$38,224.37
12	82	\$62,818.72

Revenue dips in **February** and **November** suggest a need for targeted campaigns or promotions to boost sales during these periods.



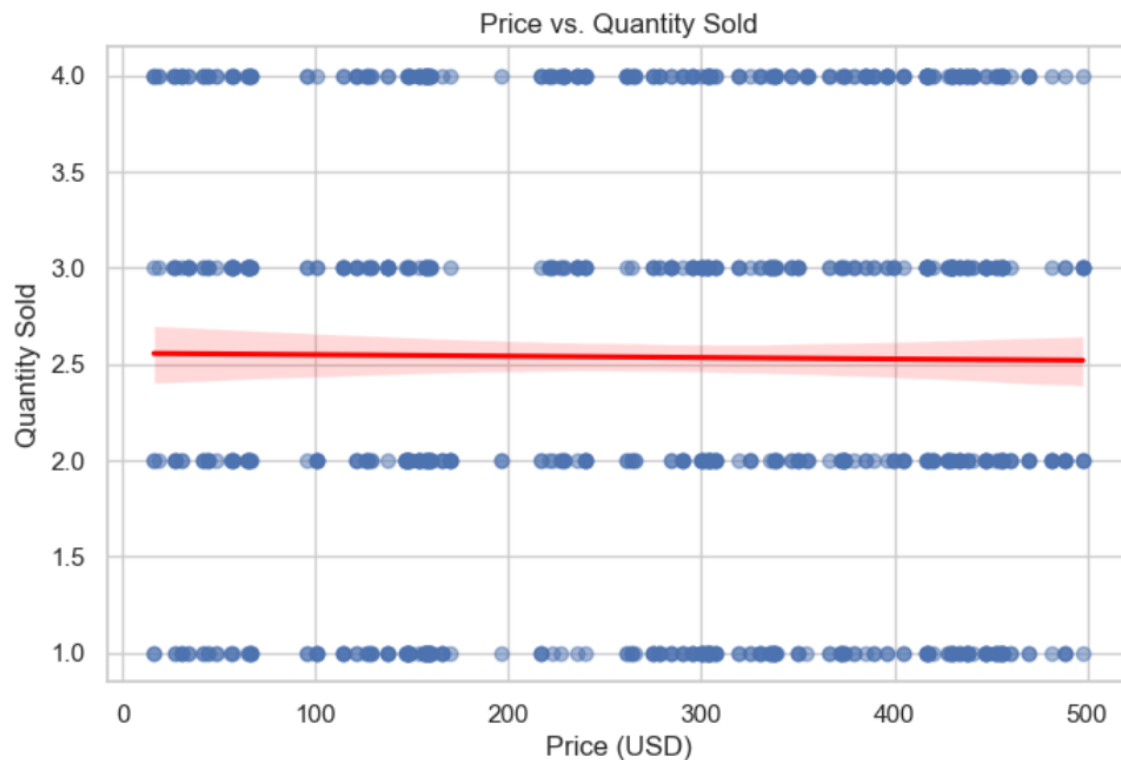
4. Weekly Sales Trends

- **Wednesday** is the top sales day (\$119,203.15), ideal for mid-week promotions.
- **Friday** and **Saturday** have the lowest sales (\$87,032.09 and \$81,399.74), suggesting less online activity, possibly due to in-store shopping or other weekend activities.

Day of week	Total Value
Monday	\$101,984.33
Tuesday	\$108,567.61
Wednesday	\$119,203.15
Thursday	\$99,202.71
Friday	\$87,032.09
Saturday	\$81,399.74
Sunday	\$92,605.93

5. Price vs Quantity Sold

- **Pearson Correlation:** -0.01 (very weak negative correlation)
- This suggests **inelastic demand**, meaning consumers are largely insensitive to price changes.



6. Repeat Purchases & Lifetime Value (LTV)

- Repeat Purchase Rate: 93.50%, indicating high customer loyalty.
- Average LTV:
 - Early Signups (< Jan 1, 2023): \$3,528.75
 - Recent Signups (\geq Jan 1, 2023): \$3,438.19

The slight LTV difference suggests earlier customers tend to spend more over time.

7. High-Value Customers (Top 33%)

- **Mean Recency:** 90.94 days since last transaction, indicating a 3-month gap. Retention strategies should focus on re-engaging these customers.

8. Basket Size Trends

- **Weekly Baskets with >1 Product:** 36
Few multi-product purchases suggest opportunities for **cross-selling** or **bundling** strategies. Understanding barriers to multi-item purchases could help boost basket sizes.

9. Churn Rate

- **Current Rate:** 6.50%, relatively low, indicating strong customer retention. Ongoing monitoring is needed to maintain customer satisfaction and market competitiveness.

10. Top Product

- **ActiveWear Smartwatch:** \$39,096.97 in revenue (5.67% of total), highlighting smartwatches as a key driver in the ActiveWear category.

11. High-Value Customer Focus by Region

- **South America:** Continue leveraging successful strategies and deepen engagement.
- **Asia:** Identify drivers of high spending and replicate successful tactics in other regions.
- **North America:** Use targeted marketing to convert more customers into high-value segments.
- **Europe:** Conduct market research to overcome barriers to higher spending and create tailored promotions.

Region	Total Value
Asia	\$33,136.92
Europe	\$16,823.65
North America	\$28,321.85
South America	\$59,497.22