

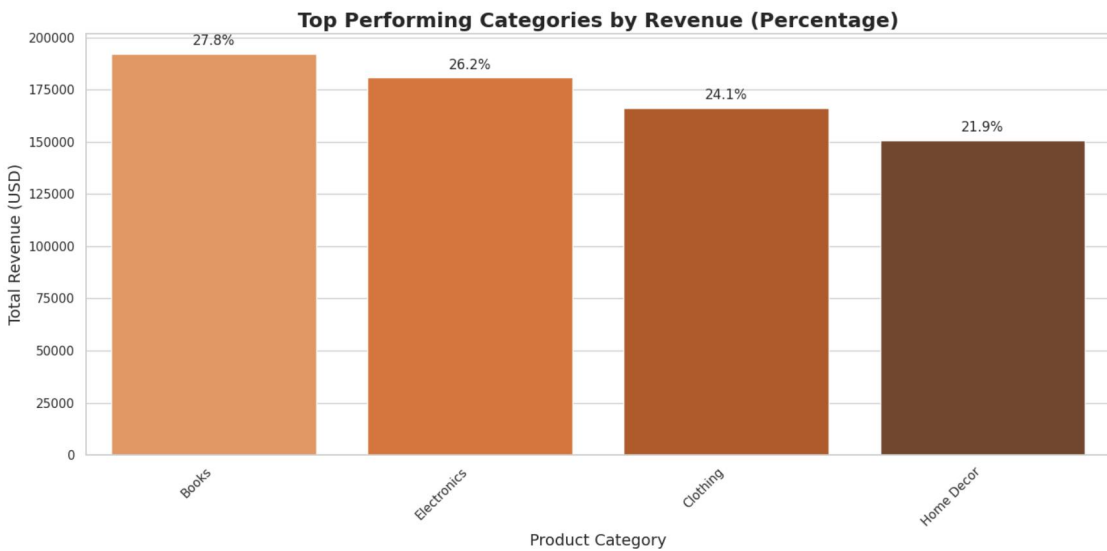
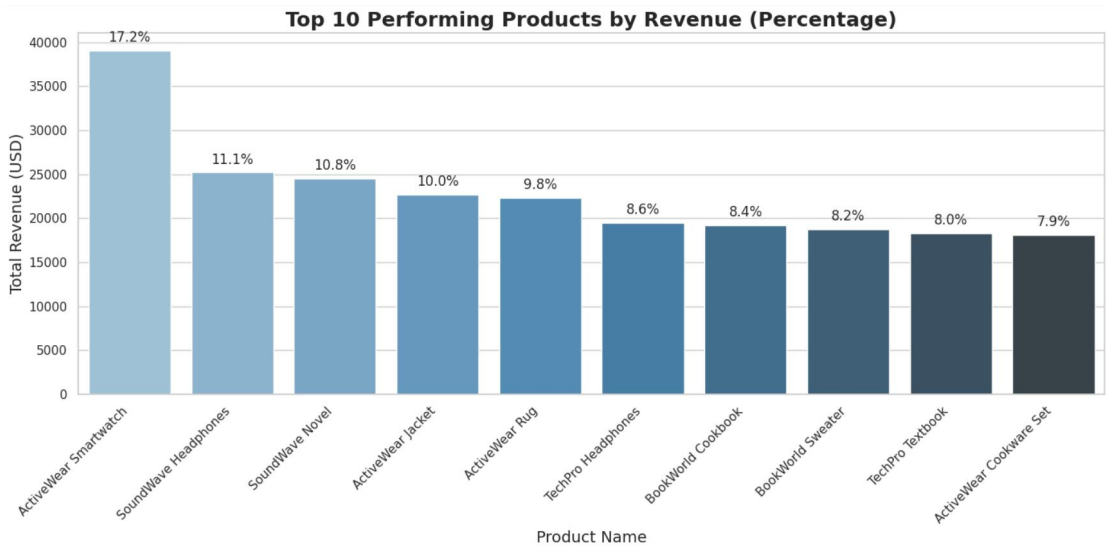
Business Insights Report: eCommerce Transactions Dataset

Purpose: This report summarizes the key insights derived from the exploratory data analysis of the eCommerce transactions dataset. It utilizes the customers, products, and transactions dataset to find trends and patterns through the means of visualization to assist with decision making.

Key Business Insights

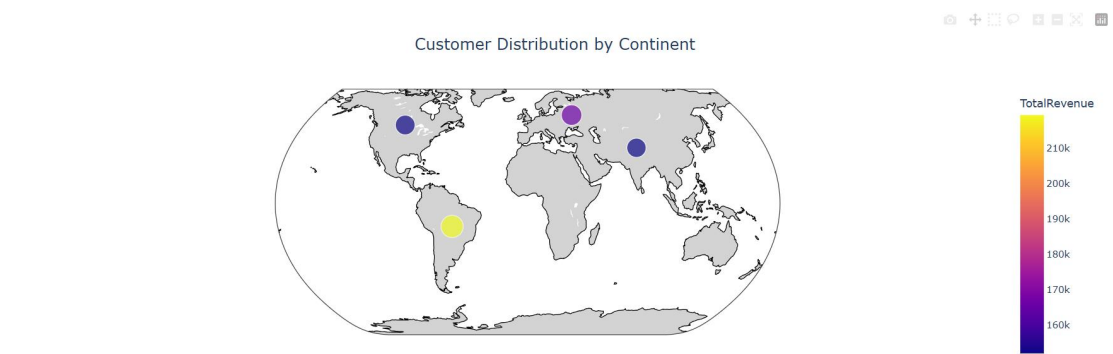
1. ActiveWear Smartwatch is the highest-performing product, contributing 17.2% of the total revenue. Other significant contributors include: SoundWave Headphones (11.1%), SoundWave Naval (10.8%), ActiveWear Jacket (10.0%) and ActiveWear Bag (9.8%). Together, these five products contribute a large portion of the revenue, indicating they are high-priority inventory items.

Books and Electronics are the leading revenue categories: Books (27.8%) & Electronics (26.2%). Combined, these categories contribute 51.0% of total revenue, suggesting the need to focus marketing and inventory management strategies on these segments.



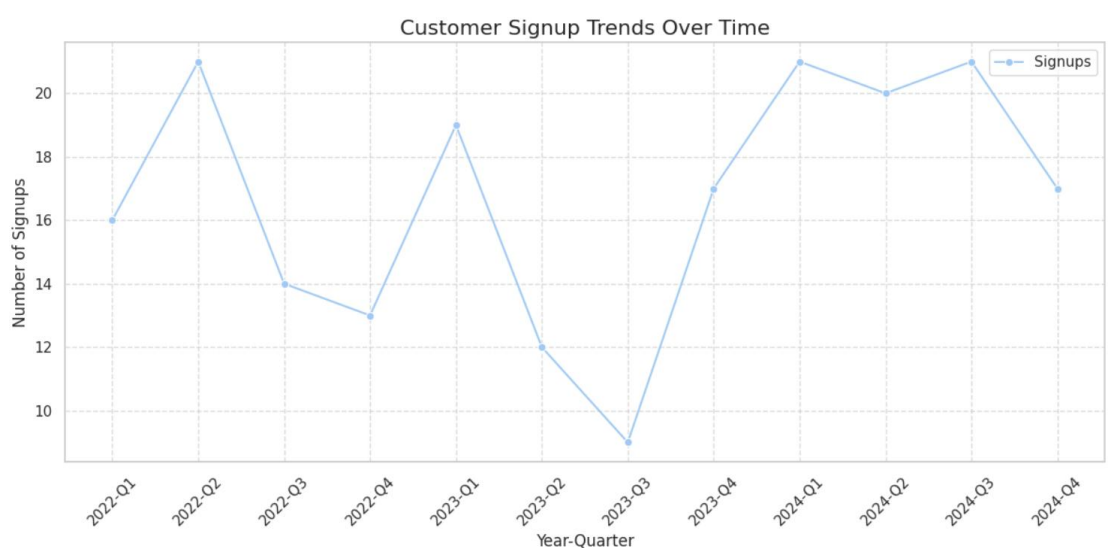
2. South America generates the highest revenue (210k, 31.79%) with 29.64% of customers, highlighting the need for region-specific strategies.

To expand, consider entering Africa and Australia after evaluating logistics and costs. Focus on localized marketing, partnerships, and tailored products. In North America and Europe, optimize e-commerce and emphasize sustainability.



3. Customer signups peak during Q1 and Q2, indicating the success of seasonal marketing campaigns.

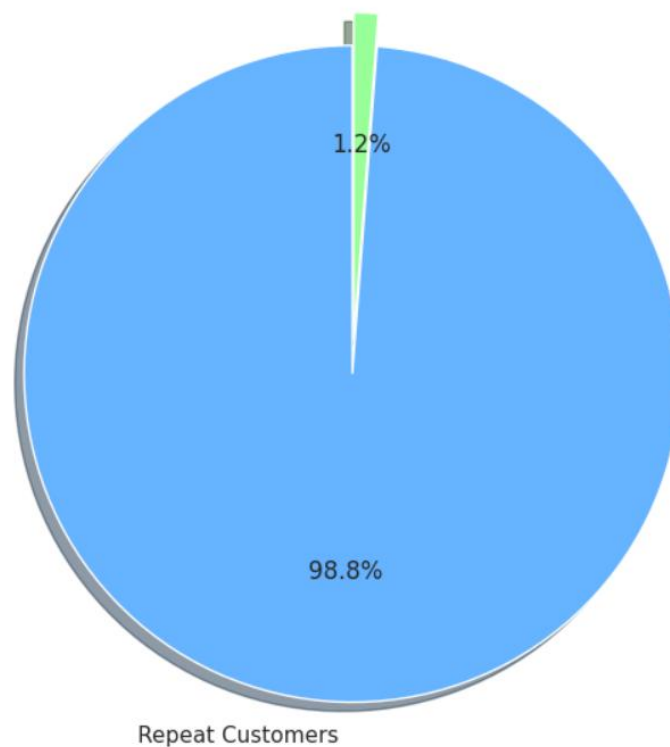
To capitalize on this trend, consider intensifying marketing efforts during these quarters with targeted promotions and personalized offers. Analyze the factors driving this success, such as holiday sales or new product launches, and replicate these strategies in other quarters to maintain consistent growth.



4. 98.8% of customers account for repeated transactions, emphasizing the value of loyalty programs to retain high-value customers.

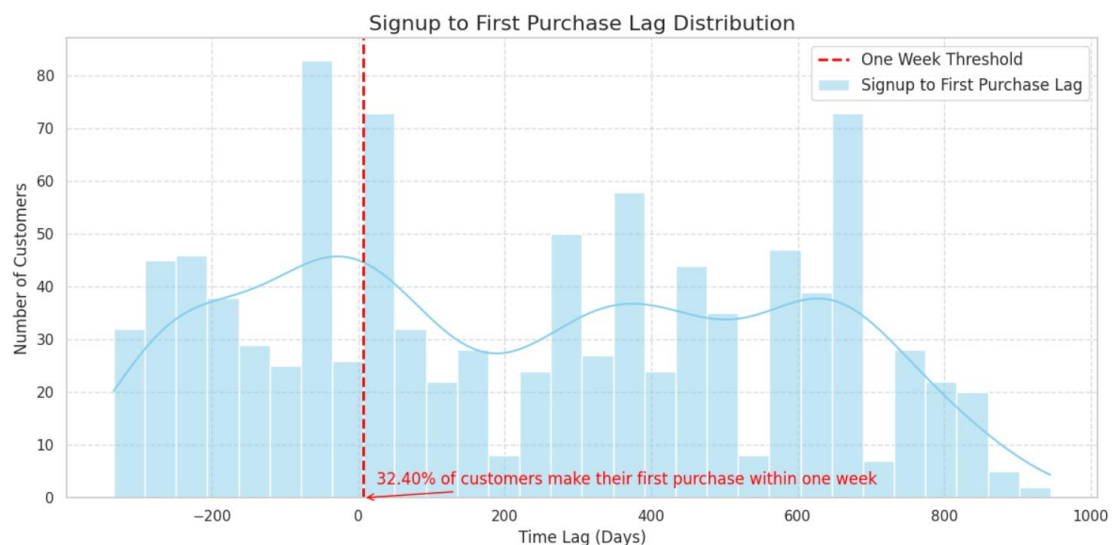
Enhance loyalty programs with rewards and personalized offers to maintain high retention. Optimize marketing campaigns to improve new customer acquisition by leveraging testimonials and targeted promotions. Balancing retention and acquisition will drive sustainable growth.

Distribution of Transactions: Repeat vs Non-Repeat Customers



5. Average time from signup to first purchase: 228.15 days. However, the percentage of customers who make their first purchase within one week: 32.40%. The chart shows a distribution of time lags, with a significant peak around the one-week threshold, indicating a group of highly engaged customers. There are also instances of negative time lags, where purchases occur before signup, suggesting immediate interest or pre-existing engagement.

To improve customer retention, focus on converting the 32.40% who purchase quickly into repeat buyers by offering loyalty rewards or personalized follow-ups. For the majority with longer lags, implement targeted re-engagement campaigns, such as email reminders or exclusive discounts, to shorten the purchase cycle. Analyzing the reasons behind negative lags can also help refine the signup process to capture these customers earlier. By leveraging these insights, you can enhance the overall customer journey and boost retention rates.



Conclusion

The analysis provides actionable insights for optimizing marketing strategies, inventory planning, and revenue management. Leveraging these insights can enhance customer engagement and profitability.