

Customer Segmentation Report

Summary

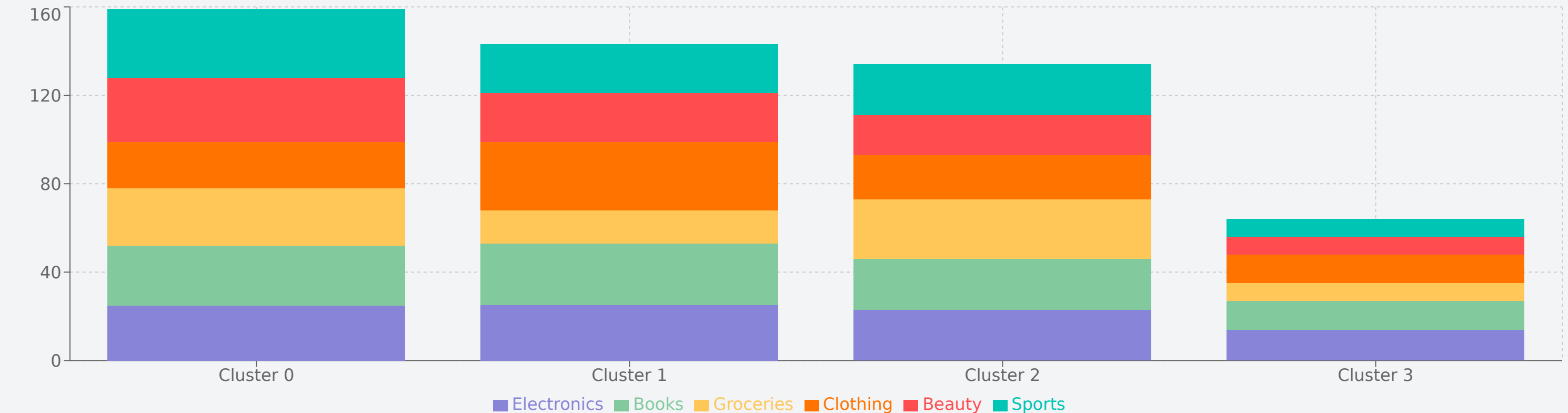
This report analyzes customer purchasing behavior using K-means clustering on Frequency, Monetary Value, and Recency. Customers are grouped into four segments, revealing distinct patterns in spending and shopping habits across product categories (Electronics, Books, Groceries, Clothing, Beauty, Sports).

Interesting Fact: 2 customers in the Sports category are high-frequency buyers (more than 15 purchases) with high spending (over \$500), indicating a niche group of loyal, high-value sports enthusiasts.

Cluster Distribution (Frequency vs Monetary Value)



Category Distribution by Cluster



Cluster Summary Table

Cluster	Avg Frequency	Avg Monetary Value (\$)	Avg Recency (days)	Customer Count
Cluster 0	9.31	217.91	293.12	159
Cluster 1	8.27	302.14	65.73	143
Cluster 2	12.48	246.86	138.69	134
Cluster 3	9.67	696.47	243.70	64

Conclusion

The K-means clustering revealed four distinct customer segments based on purchasing behavior. High-frequency, high-value customers (especially in Sports) represent a key target for loyalty programs, while low-frequency, low-value customers may benefit from targeted promotions. The category distribution highlights preferences within clusters, aiding in personalized marketing strategies.