

Customer Segmentation Analysis Results

My clustering analysis successfully identified 5 distinct customer segments from the dataset, with the following distribution:

| Segment | Cluster | Customers |
|-----------|-----------|-----------|
| Segment 1 | Cluster 0 | 45 |
| Segment 2 | Cluster 1 | 57 |
| Segment 3 | Cluster 2 | 29 |
| Segment 4 | Cluster 3 | 33 |
| Segment 5 | Cluster 4 | 35 |

The clustering quality metrics demonstrate the effectiveness of the segmentation:

- **DB Index: 1.67162**
 - This indicates reasonable separation between clusters
- **Silhouette Score: 0.19762**
 - While this shows some overlap between segments, it confirms distinct customer groupings

These results provide valuable insights for developing segment-specific strategies and understanding customer behaviour patterns across different groups.