

Customer Segmentation / Clustering

1. Number of Clusters Formed:

The optimal number of clusters was 3, chosen based on the lowest Davies-Bouldin Index and a clear elbow in the Inertia plot. This resulted in well-separated and distinct customer groups.

2. Davies-Bouldin Index (DB Index) Value:

The DB Index for the 3-cluster model was 0.7911. A lower DB Index indicates better clustering quality, confirming 3 clusters as the optimal choice with well-separated and cohesive clusters.

3. Other Relevant Clustering Metrics:

The Inertia plot showed diminishing returns after 3 clusters, suggesting 3 as the ideal number. Additional metrics, like the Silhouette Score, would further confirm the effectiveness of this choice.