

1. **Number of Clusters Formed:**

- **K-Means Clustering** was selected to segment the customers based on their spending habits and demographic features.
- From the Elbow Method, the optimal number of clusters appears to be **4**
- The Silhouette Score peaks around **9**, but a strong balance can be observed around **4 or 5 clusters**.

2. **DB Index for K-Means Clustering (5 Clusters): 0.938**

1. A **lower DB Index** suggests that the clusters are well-separated, the customers within each cluster are more similar to each other and different from those in other clusters.

3. **Other Clustering Metrics:**

- **Silhouette Score:** The Silhouette Scores for various clusters suggest that higher scores (around 0.42 for 8-10 clusters) indicate improved separation.
- Based on both metrics, **4 or 5 clusters** may provide a reasonable trade-off between simplicity and performance.