

Report on CustomerSegmentation/Clustering

Analyze Customer Total Spend, transaction count, purchase start date, last purchase date.

Standardize the data for balancing the data.

Cluster Ranges given from 2 to 11

Using **KMeans Clustering** Algorithm, **Davies Bouldin Score** & Finding **Silhouette Score**

Silhouette Scores are ranges between - 0.148 to 0.1949

Db Scores ranges between - 1.652 to 1.843

Implement **PCA** (Principal Component Analysis)

Given **Db Index** for different Clusters & Silhouette Scores for different clusters.

Optimal No. of Cluster form is 10 & Davies Bouldin index is 1.66

Db Index peak on Cluster 3 & lower on cluster 10

Silhouette Score Peak on Cluster no. 2 & Lowest on Cluster no. 9

Showing Difference between **DBSCAN** & **KMeans** use