

Customer Segmentation / Clustering

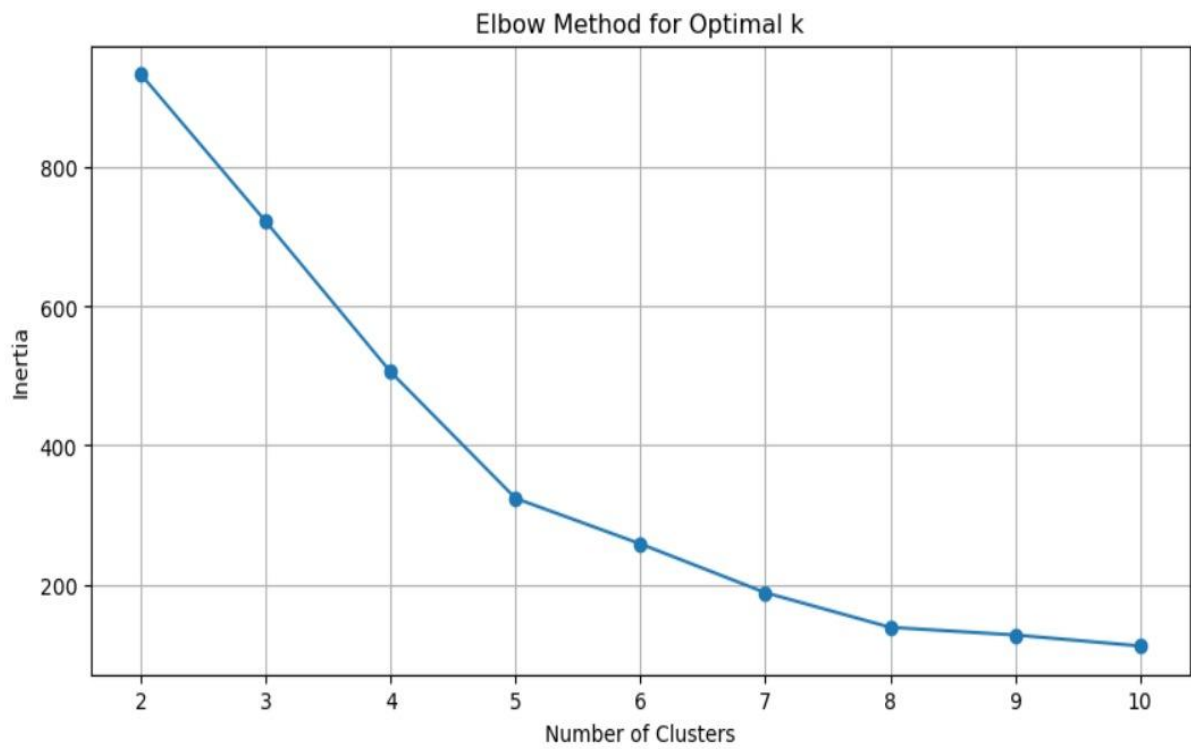


Figure-1

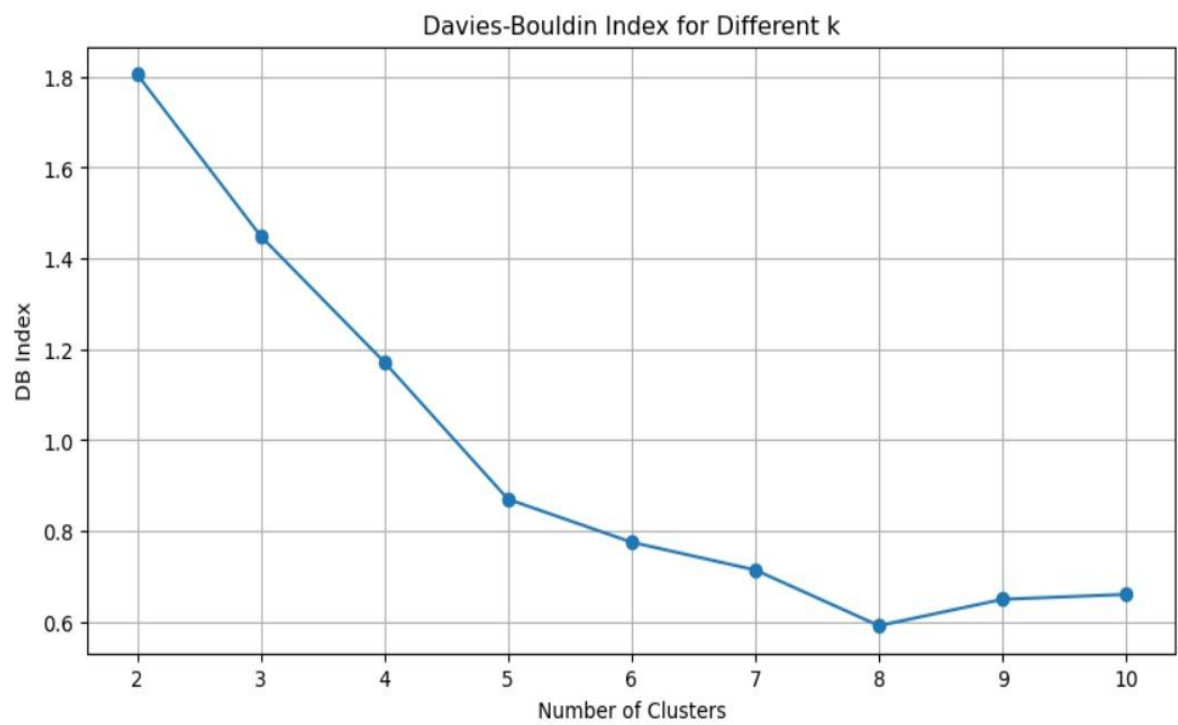


Figure -2

Customer Segmentation / Clustering

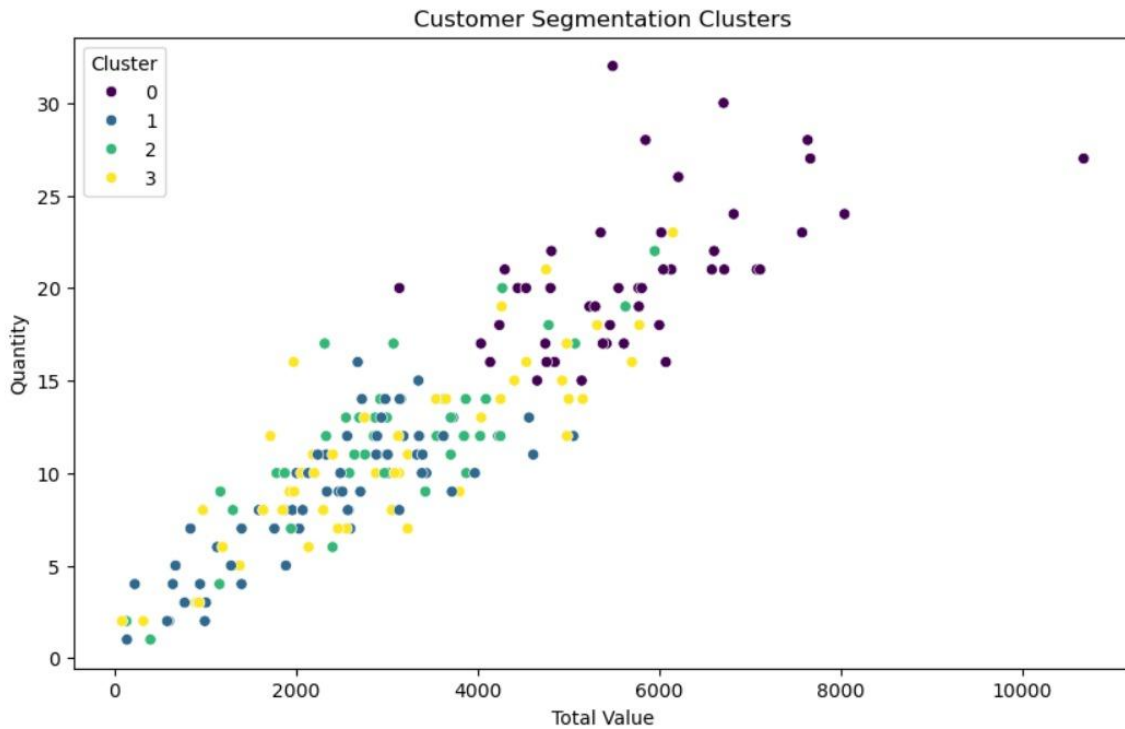


Figure - 3

Clustering Results Report:

Number of clusters formed: 4

Davies-Bouldin Index: 1.1715584997331832

Other relevant clustering metrics:

- **Inertia:** The inertia value is not explicitly provided in the report, but the elbow method plot suggests a relatively low inertia for 4 clusters.

Analysis:

The scatter plot shows a clear separation of the data points into four distinct clusters.

The Davies-Bouldin index, which measures the ratio of within-cluster distances to between-cluster distances, also supports the choice of four clusters as the optimal number.

The elbow method plot shows a significant decrease in inertia as the number of clusters increases from 2 to 4, with a smaller decrease beyond that point, suggesting that the optimal number of clusters is likely around 4.

Interpretation:

The four clusters suggest that the customer base can be segmented into four distinct groups based on their total value and quantity.

Further analysis of the characteristics of each cluster can be used to develop targeted marketing strategies for each segment.