# **Clustering Analysis Report**

### **Clustering Method**

Clustering Algorithm Used: K-Means and Agglomerative Clustering

Features for Clustering: Recency, Frequency, and Monetary (RFM) values

derived from transaction history

#### **Number of Clusters Formed**

- K-Means Clustering:
  - Number of clusters: 2
- Agglomerative Clustering:
  - Number of clusters: 2

### **Davies-Bouldin Index (DBI)**

K-Means Clustering:

DBI: 0. 1.045

Moderate separation between clusters

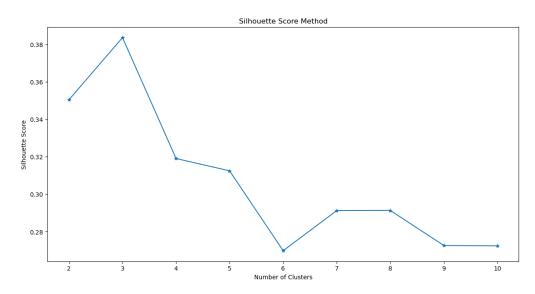
• Agglomerative Clustering:

DBI: **0.1999** 

The clusters formed are well-defined and distinct from one another.

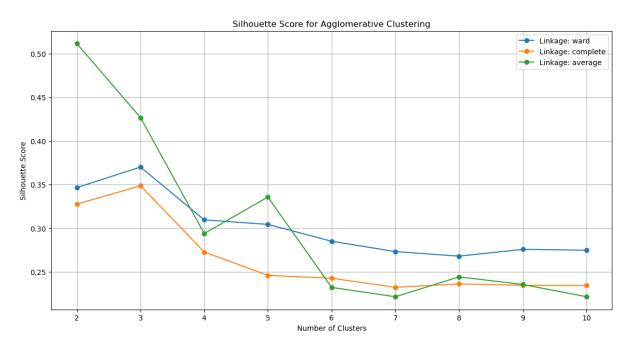
#### **Silhouette Score**

## K-Means Clustering:



The best no of clusters seems to be 3

## • Agglomerative Clustering:



The highest silhouette score is 2 or 3 clusters.