

Customer Segmentation Report

Datasets Used:

- Customers.csv
- Transactions.csv

Methodology:

- Data Preparation
- Feature Selection
- Clustering Algorithm(K Means)

Clustering Results:

Number of Clusters Formed

- **Optimal Number of Clusters:** 4

DB Index Value

- **Davies-Bouldin Index:** 0.67 (lower values indicate better clustering)

Conclusion

The K-means clustering analysis effectively segmented customers into four distinct groups based on their transaction history and profile information. The low DB Index value indicates that the clustering is of good quality. Future work could explore additional metrics