

REPORT ON CLUSTERING RESULTS

Overview

This report outlines the results of customer segmentation performed using clustering techniques on both profile and transaction data.

1. Number of Clusters Formed

- **Number of Clusters: 2**

2. Clustering Metrics

- **Davies-Bouldin Index (DB Index): 0.93**
 - The DB Index is used to evaluate clustering performance, where a lower value indicates better-defined clusters. The achieved value of 0.93 suggests reasonably well-separated clusters.
- **Cluster Summary:**
 - **Cluster 0:**
 - Total Spending (Normalized): 0.93
 - Total Quantity (Normalized): 0.98
 - Transaction Count (Normalized): 0.95
 - **Cluster 1:**
 - Total Spending (Normalized): -0.61
 - Total Quantity (Normalized): -0.64
 - Transaction Count (Normalized): -0.62

3. Observations

- Cluster 0 represents customers with higher spending, more frequent transactions, and larger quantities purchased. These may represent premium or high-value customers.
- Cluster 1 contains customers with lower spending and infrequent transactions, likely representing budget-conscious or occasional buyers.

4. Visualization

