A report on clustering results

- **Number of Clusters Formed**:
  - o The clustering process created **3 clusters** as specified in the KMeans configuration.

- **Davies-Bouldin Index (DB Index)**:
  - o The DB Index is **1.4223**.

  - o A lower DB Index indicates better-defined clusters. An index closer to 0 suggests the clusters are compact and well-separated. While this value isn't perfect, it suggests the clusters have some overlap or less distinct boundaries.

- **Silhouette Score**:
  - o The Silhouette Score is **0.2227**.
  - o The score ranges from -1 to 1:
    - ▪ A score close to 1 indicates well-separated clusters.
    - ▪ A score near 0 suggests overlapping or poorly separated clusters.
    - ▪ A negative score indicates incorrect cluster assignment.
  - o A score of 0.2227 suggests weakly defined clusters, possibly indicating the need to test alternative cluster counts or refine features.

- **Customer Cluster Assignments**:
  - o Each customer is assigned to one of the 3 clusters. A preview is shown for the first 5 customers, with cluster IDs (0, 1, or 2).