



Customer Segmentation

KMEANS Model by Google Big Query





SQL Script Creation & Execution

- Using KMEANS Model with 3 clustering groups (only member customers are selected)

The screenshot displays the Google Cloud Platform BigQuery console interface. At the top, the header shows 'Google Cloud Platform' and 'customer segmentation' with a search bar. Below the header, there are tabs for 'FEATURES & INFO', 'SHORTCUT', and 'DISABLE EDITOR TABS'. The main interface is divided into two panels. The left panel, titled 'Explorer', shows a tree view of the project 'supermarket-sirirate'. Under the 'supermarket' folder, there is a 'Models (1)' folder containing a 'kmean_clusters' model. The right panel, titled 'SQL SCR...', shows a SQL script editor with the following code:

```
1 CREATE OR REPLACE MODEL `supermarket-sirirate.supermarket.kmean_clusters`  
2 OPTIONS(model_type='kmeans', num_clusters=3)  
3 AS (  
4   SELECT  
5     COUNT(DISTINCT BASKET_ID) AS TOTAL_VISIT,  
6     SUM(SPEND) AS TOTAL_SPEND  
7   FROM `supermarket-sirirate.supermarket.kmean`  
8   WHERE CUST_CODE IS NOT NULL  
9   GROUP BY CUST_CODE  
10  )
```

Below the code editor, there are buttons for 'RUN', 'SAVE', 'SCHEDULE', and 'MORE'.



KMEANS Clustering Results

kmean_clusters

DETAILS

TRAINING

EVALUATION

SCHEMA

Metrics

Davies-Bouldin index	0.9008
Mean squared distance	0.4652

Numeric features

This table shows the centroid value for each feature. Use the select menu to view more numeric features.

Selected Features

TOTAL_SPEND, TOTAL_VISIT

Centroid Id	Count	TOTAL_SPEND	TOTAL_VISIT
1	155	<div><div></div></div> 3,437.7218	<div><div></div></div> 249.3273
2	502	<div><div></div></div> 1,166.2099	<div><div></div></div> 92.3704
3	5,443	<div><div></div></div> 61.8487	<div><div></div></div> 6.2068



KMEANS Clustering Results (Cont'd)

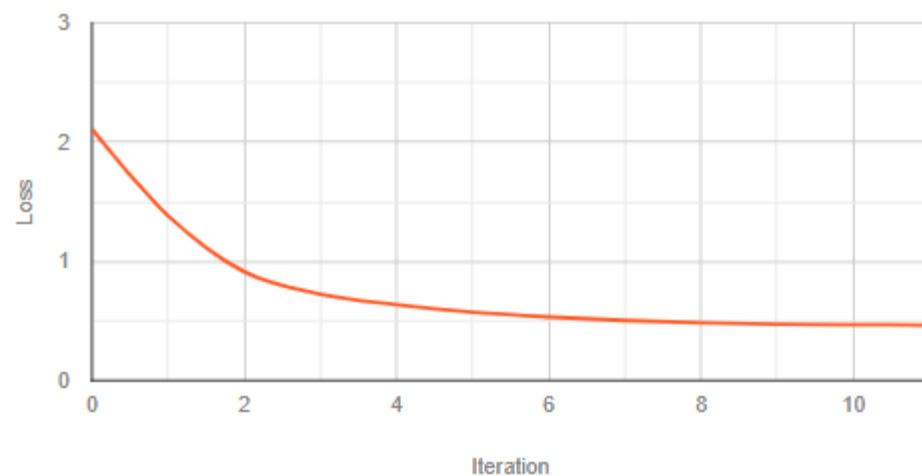
DETAILS

TRAINING

EVALUATION

SCHEMA

Loss



Duration (seconds)

