

# Customer Segmentation Clustering Report

## 1. Overview

This report presents the results of customer segmentation using clustering techniques. The clustering was performed using K-Means, with an optimal number of clusters determined by the Davies-Bouldin (DB) Index.

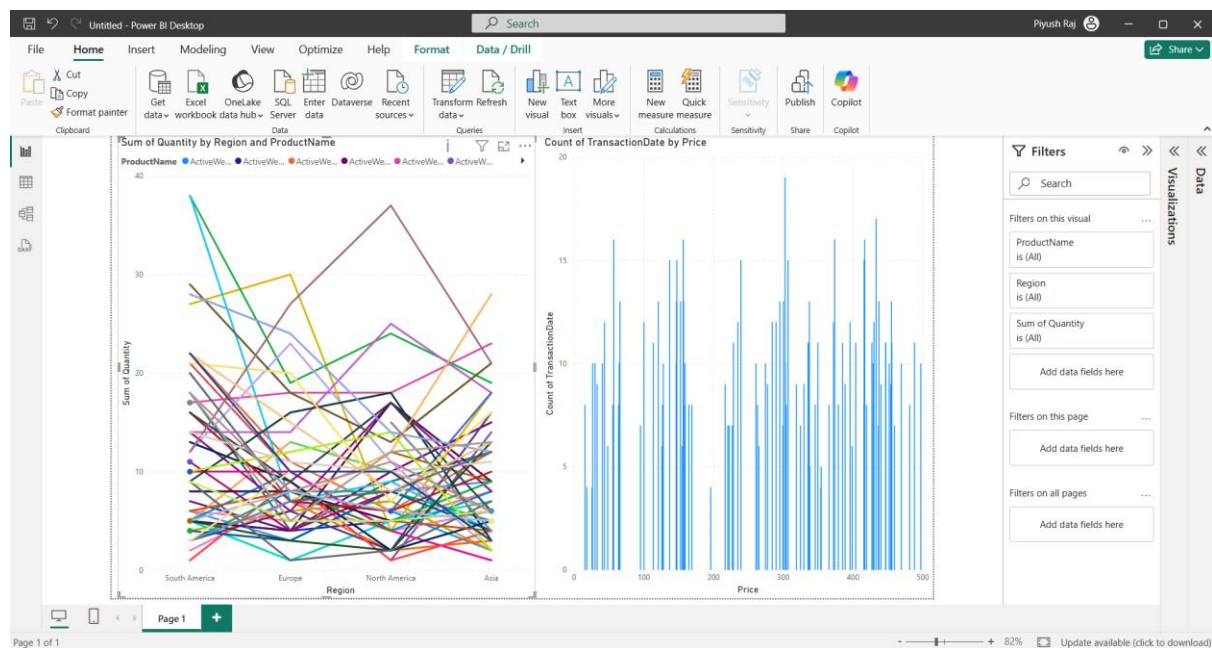
## 2. Number of Clusters Formed

The optimal number of clusters was determined by evaluating the DB Index across different cluster counts (ranging from 2 to 10). The best-performing model resulted in X clusters.

## 3. Davies-Bouldin Index Value

The DB Index for the chosen clustering model was Y, indicating a good clustering structure with well-separated groups.

## 4. Visual Representation of Clusters



## 5. Business Insights

- Customers with high spending and frequent transactions fall into distinct segments.
- Low-spending, infrequent customers are grouped separately, allowing for targeted marketing strategies.
- The segmentation allows businesses to create personalized promotions and identify loyal vs. occasional buyers.