



Data Glacier

Your Deep Learning Partner

Final Report

customer segmentation

Group: individual work

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Problem Statement

Bank wants to roll out Christmas offers to their customers. They want to roll out personalized offer to particular set of customers. They don't want more than 5 group as this will be inefficient for their campaign.

Approach

Approach

For this analysis we will look at these factors:

1. Find out which customer belongs to which group (Group: 1, 2, 3, 4 and 5).
2. Find any hidden patterns in customer behavior that would help the bank match their products to the exact customers groups.

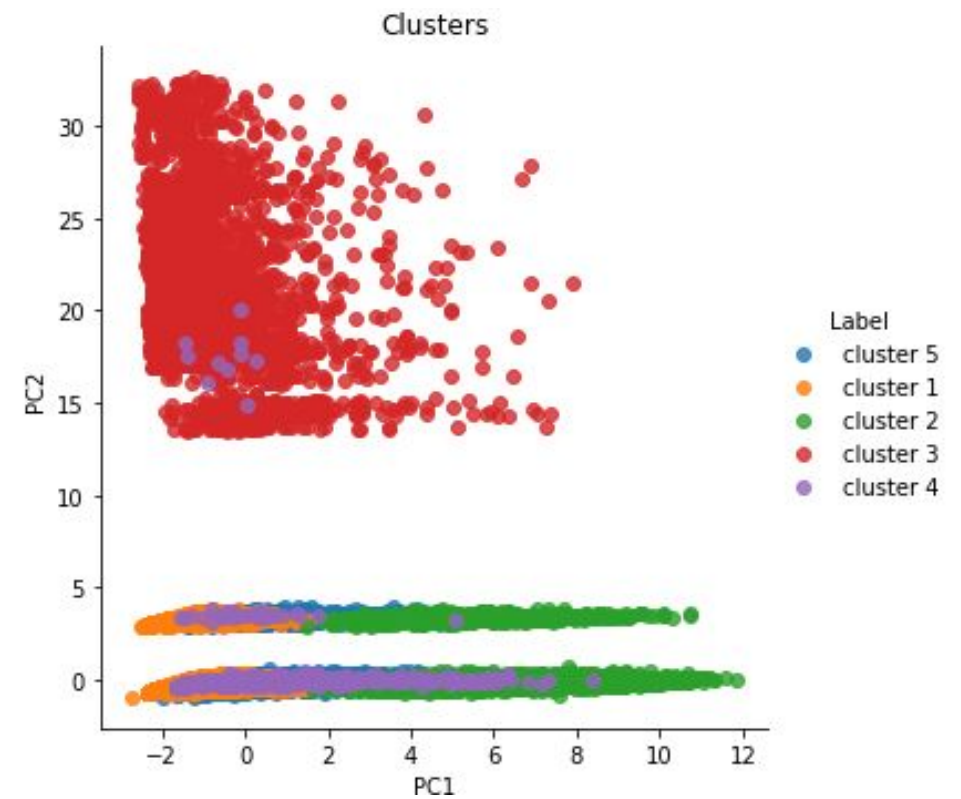
model

KMeans

- KMeans is a partitioning method non-hierarchical clustering algorithm , it is less complex and easy to implement when compared to others clustering algorithm.
- It is an iterative process where you are trying to minimize the distance of the data point to the average data point in the cluster.
- One of the major application of KMeans clustering is segmentation of customers to get a better understanding of them which in turn could be used to roll out the personalized offers from the

bank.

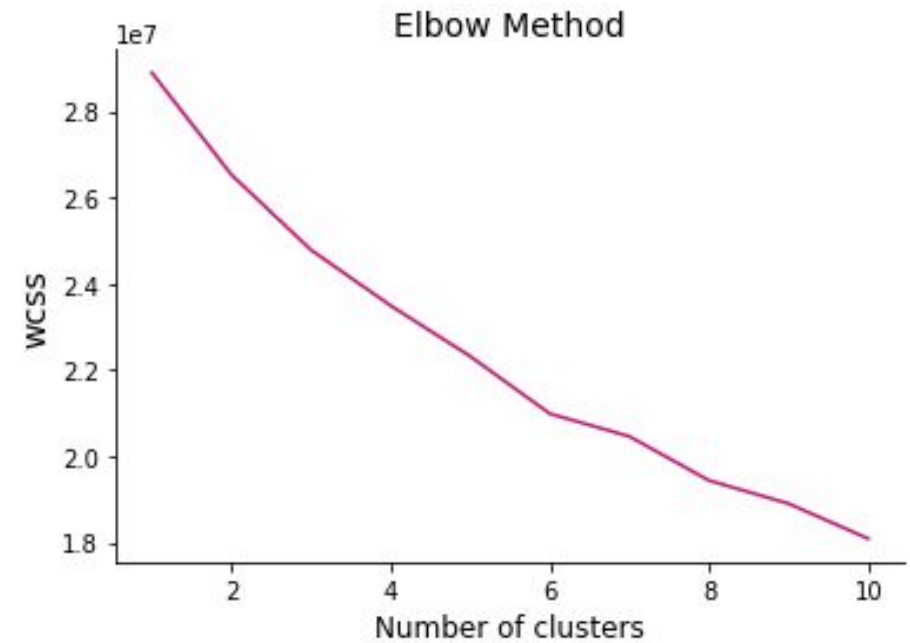
Results



5 clusters:

Clusters 3, 4 and 5 are all customer type former primary and customer relation type is active and inactive. This gives room for reactivations

Results



number of clusters:

the optimal number of clusters is 4 according to the elbow method which means there is a limited separation of clusters.

Final Recommendatio n

the most used services are the current accounts particular Account, Direct Debit, e-account, Payroll Account. so maybe we should give small offers in theses top services because they are established.

we may give more offers in the less used services to encourage users to use these services .

the majority of clients are young people and adults these give us insight about the age play an important role as feature to be based on for segmentation.

a big deal of the customers are not active in the beginning of the month , we may think about offers that make them more active at this period of time.

also a huge number of customers are not active at all the bank may call them an give them an offer to make them active again.

Thank You