

Clustering Airline Passengers

Some clusters have less than 30 people. Given the business context of segmenting customers, I merged these clusters (clusters with less than 30 people) with similar clusters (based on cluster centers).

Cluster 0 & Cluster 5 - The Business/Affluent travelers (Most profitable to company) - Tier 1

These are the customers who have extremely high number of miles. Also, these people earned the highest miles in 12 months. Hence, it is important for the company to retain these customers, as they constitute only 9% in the data. On an average these travelers made 11 trips in the past 12 months.

Cluster 1 - The Economy travelers - Tier 4

These travelers constitute 56% of the data. The aggregated numbers for this cluster are very basic. These travelers made 1.3 trips on an average in the past 12 months. However, the airlines company should focus on these customers as well as they constitute the majority.

Cluster 2 - The First Class travelers - Tier 2

This cluster comprises of people who have reasonably high number of miles and transactions in the past 12 months. Also, these customers earned lot of miles using their credit card in the last 12 months. Hence, I placed them next to business class (Tier 1).

Cluster 3 and Cluster 4 - The Premium economy travelers - Tier 3

These customers have accumulated a decent number of miles in the last 12 months using their credit card, although their average frequency of travel is less than 1. Thereby, we can say that these customers should have travelled in a premium class which enables them to earn more miles.

Cluster 6 and Cluster 7 - The basic travelers - Tier 5

These travelers have the least number of miles and they have 0 miles counted towards their top flying status. And these customers have the least award ratio, which is somewhat obvious. The company can reduce their promotional campaigns for this class as they are very frequent and less in number.