MALL CUSTOMER SEGMENTATION

Using K-means Clustering

WHAT IS CUSTOMER SEGMENTATION?

1

Customer segmentation is the process of separating the customers visited to the Mall.

2

The customer segmentation is the potent way of representing and defining the customer needs.

3

The Main agenda is companies need the customer data to know the better features of the customer.

ABSTRACT

- Customer segmentation process is a separation of the types of consumers/customers are visited to the mall/market/shopping complex. i, e., segregating multiple distinct groups of customers who shares their similar characteristics. The segmentation of mall is the potent way of representing and defining the customer needs. K-means clustering is an algorithm which is used to perform the mall basket analysis which comes under the category Unsupervised learning. This will help in the mall basket analysis to be carried out to predict the final/Target customer that who can easily converged, among all the customers visited. The main agenda is to companies need the customer data to know the better feature of the customer. Also, companies need to know the customers area of interests in their needs and shops for their buying aspects. Using K-means clustering segregating the customers with the similarities and differences of predicting the behavior, introducing better options and things to customer

APPROACH

K-Means clustering is an Algorithm which is used to perform mall basket analysis.

K Means clustering is an “Unsupervised Learning”.

Using K-means Clustering

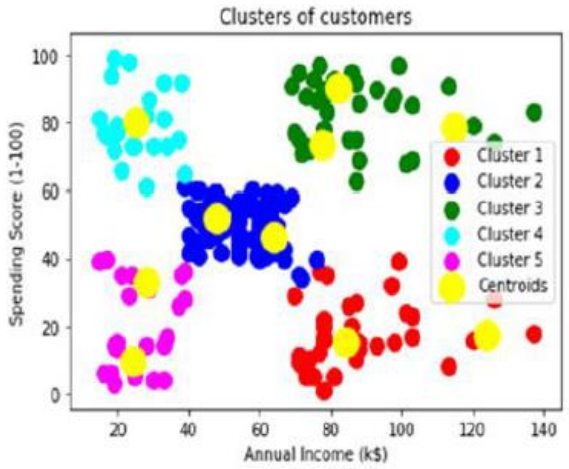
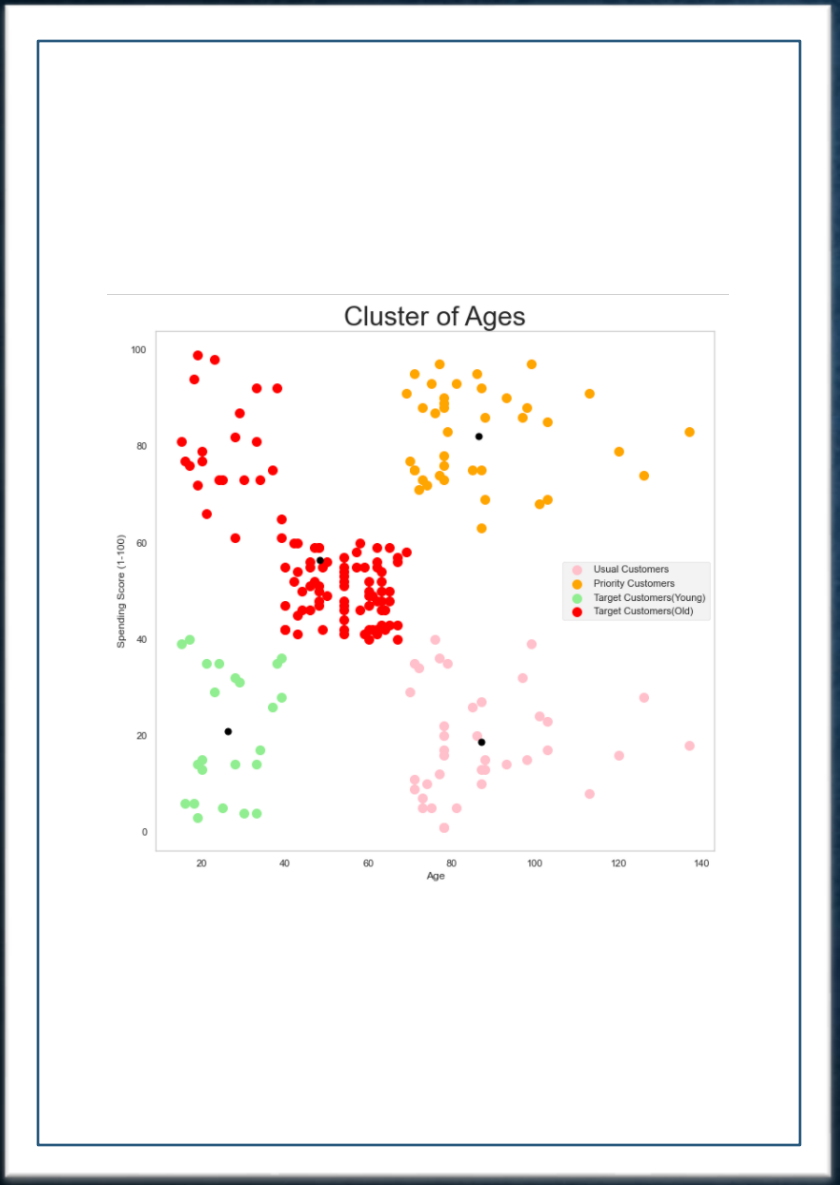


Figure-2:CS Result

VISUALIZATION MODULE:

- The visualization module returns results based on the clusters listed below. The findings are generated as a graph and saved as an image, which is then retrieved by the marketing team.
- **Customer segmentation Result:**
- Cluster 1 (Red) implies earning a lot while spending less.
- Cluster 2 (blue) reflects the mean in terms of earnings and spending.
- Cluster 3 (Green) shows both high earnings and significant spending. [Prospective customers]
- Cluster 4 (blue) denotes earning less but spending more.
- Cluster 5Earning less and spending less is represented by (magenta color).
- Stimulus: The marketing team activates the K-Means algorithm.
- Response: The findings are generated as a graph and saved as a picture. K=5 for clusters
-



CONCLUSION AND FUTURE WORK:

- As a result of this massive data volume, consumer data is growing tremendously. These clustering models must be able to process this massive amount of data properly.
- Cluster 1 denotes the customer with a high annual income as well as a high annual spend, as seen in the above visualization. Cluster 2 denotes a group with a high annual income but a low annual expenditure. Cluster 3 represents customers who have a low annual income and spend a small amount each year. Cluster 5 indicates a modest annual income but a high annual expenditure. Customers with a medium income and a medium expenditure score fall into clusters 4 and 6.