

# Credit Card Customer Segmentation using K-Means Clustering

## **Team Members -**

Srushti Sanjay Kharat (skharat)

Niharika Dhapola (ndhapola)

Atharva Janardan Rajadhyaksha (atharvaj)

# Purpose

- Customer segmentation is the process of dividing customers into groups based on their purchase patterns.
- This is crucial to businesses as it helps them to understand their customers and target audience in a better way.
- This can help them to provide a more personalized client service experience.

## Benefits

- 1) Improved customer experience
- 2) Improved advertisement
- 3) Improved product development
- 4) Increased customer loyalty

## What has been done

- We have used K-Means Clustering to perform credit card customer segmentation so that the company can define its marketing strategy.
- We have also used PCA for dimensionality reduction and visualization.

## Activities Performed

- 1) Data preprocessing
- 2) Perform data normalization
- 3) Dimensionality reduction using PCA
- 4) K-means clustering
- 5) Visualization

## Link to the datasource

<https://www.kaggle.com/datasets/arjunbhasin2013/ccdata>

The sample Dataset summarizes the usage behavior of about 9000 active credit card holders during the last 6 months.

The file is at a customer level with 18 behavioral variables.