Group Name (give a name to your group): Dream Crushers

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Problem description:

XYZ bank wants to introduce their Christmas offers to their customers. But they do not want to roll out the same offer to all their customers since it will not be profitable to introduce the same offer for different types of customers. Instead, they decide to initiate personalized offers to different sets of customers. Moreover, it is not efficient and beneficial for them to manually understand the hidden patterns in their customer data. That is why, they approached an analytics company, ABC, to help them to understand their customer behaviors in order to introduce Christmas offers. They mentioned to the company that they prefer to have at most 5 groups of customers to maintain the efficiency of their campaign.

Business understanding :

From the problem description, this requires a customer segmentation approach .For the client segmentation,the bank wants to roll out personalized offers to particular sets of customers.As per its requirement, Customer Segmentation involves analyzing customer behavior based on certain features given in the dataset. From the given data, we will categorize customers into groups based on their behavior, where the customers with the same behavior will form a single category. Thus, we will get several categories for different groups of customers. This approach is handy since not all customers have the same needs and patterns, they however, have similar actions to a particular customer group.To achieve this, we will build an unsupervised classification model based on the data features collected by the bank.

Project lifecycle:

To ensure the project achieves a seamless development and meets the required deadline of 30 July, it is subjected to a project life cycle. The life cycle includes the following parts:

Part1: Data Analysis and EDA

Part 2: Data Preprocessing and Feature Engineering

Part 3: Model Creation and Hyper Parameter Tuning

Part 4: Model deployment

Data Intake Report:

Tabular data details: cust_seg

Total number of observations	1000000
Total number of files	1
Total number of features	47
Base format of the file	.csv
Size of the data	154 MB

Github repo :

https://github.com/NafeuHassan/customerSegment-W7
aimanlameesa/Week-7 (github.com)