Week 7 Deliverables

Group Name: Carpe-Diem group

Specialization: Data Science

Project Name: Bank Marketing (Campaign) -- Group Project

Team Members:

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Bank Marketing (Campaign)

Problem Statement:

ABC Bank wants to sell its term deposit product to customers and before launching the product they want to develop a model which help them in understanding whether a particular customer will buy their product or not (based on customer's past interaction with bank or other Financial Institution).

Problem description:

One of the most common marketing strategy In Banking sector is direct marketing campaigns through phone calls ,it is a form of advertising that allows organizations to communicate directly with customers to offer their services based on the client's existing bank profile .Here we will consider term deposit as a banking service .

Business Goal :

To build a list of target customers who are likely to subscribe a term deposit. The more targeted our campaigns, the more successful they are likely to be.

Project Objective:

By converting this problem into a machine learning classification problem we will build a model to predict whether a client will subscribe a term deposit or not so that the banks can arrange a better management of available resources by focusing on the potential customers "predicted" by the classifier .

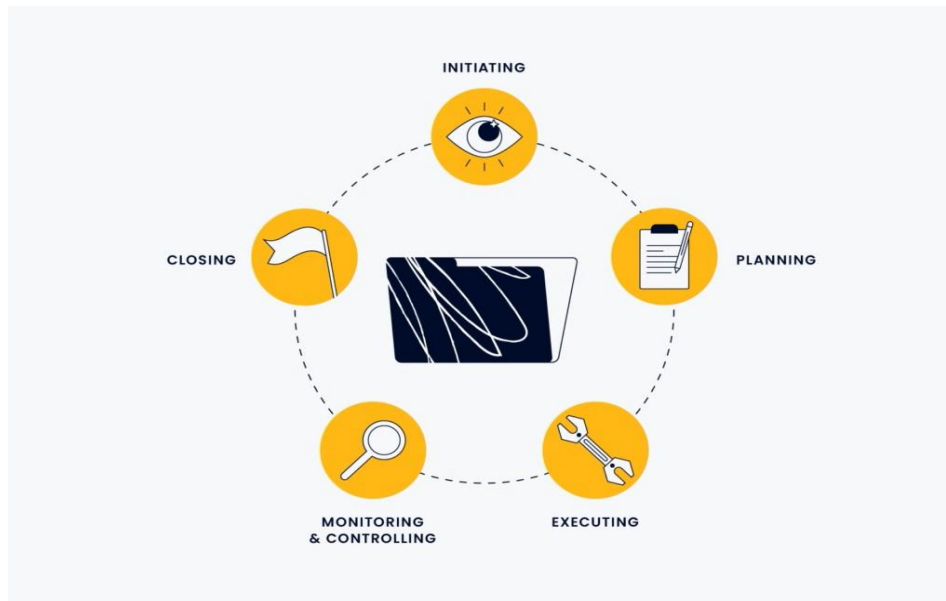**Technique to be used: Classification**

Business Scope:

● Forecasting the profit which the term deposit product brings.

● Analyzing customers interactions with ABC bank and other financial institutions.

● Use the outcome value (y/n) to track the number of customers who would subscribe to the term deposit product in order to predict its performance in the market.

● Analyze which customers would be more likely to buy the product. (eg. Married, divorced etc.)

● Help the ABC convey how the product ties with the customer's benefits.

Business understanding:

- Portuguese Bank wants to improve marketing campaign to recommend which customer is to target by analyzing their past marketing data.
- The Motivation is by devising such prediction algorithm the bank can be a better target for its customer and better channelize its customer.
- Bank of Portugal offered its customer fixed term products such as CD's. Data was collected about each client, type of contact and outcome.
- How does Predicting term deposit tie in with its mission and vision?
- How do the visual design and marketing copy of data help convey the Marketing success of this campaign?
- The Goal can be achieved by using ML algorithm will use customer records to predict future action to reduce company's time and recourses.

Project lifecycle along with deadline:

Project lifecycle is a highfalutin way of describing the life of a project. Following are the high-level process of delivering a project and the steps to take a project and conduct a team from brief through to delivery.

1. Project Initiation:

Tasks	Deadlines
o Have a research and understanding on Bank business. o Problem statement, project goal and data variables understanding. o To provide business insights and solutions to issues in the data.	**Week 7 and 8:** 19th July 2022 26th July 2022

2. Project Planning:

o Prepare data acquisition and data cleaning solution. o Create a python file with exploratory data analysis and power point presentation of the same. o Find the best solution and algorithm for data.	**Week 9, 10 and 11.** 2nd August 2022 9th August 2022 16th August 2022

3. Project Execution:

o Try to apply different possible algorithms o Test the algorithm in different categories o Compare algorithms based on their performances. o Choose the best possible algorithm for model.	**Week 12:** 23rd August 2022

4. Project Closure:

o With best possible algorithm create a final project model. o Create a power point presentation for final project.	**Week 13:** 30th August 2022

Github Repo link:

"https://github.com/amohini099/Banco-de-portugal-marketing"