### 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:

Deadlines
Week 7 and 8:
19 <sup>th</sup> July 2022

<ul> <li>Problem statement, project goal and data variables understanding.</li> </ul>	26 <sup>th</sup> July 2022
<ul> <li>To provide business insights and solutions to issues in the data.</li> </ul>	

## 2. Project Planning:

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

## **3. Project Execution:**

o Try to apply different	Week 12:
possible algorithms	
<ul> <li>Test the algorithm in</li> </ul>	23 <sup>rd</sup> August 2022
different categories	
<ul> <li>Compare algorithms</li> </ul>	
based on their	

performances.	
<ul> <li>Choose the best possible</li> </ul>	
algorithm for model.	

### 4. Project Closure:

<ul> <li>With best possible</li> </ul>	Week 13:
algorithm create a final	
project model.	30 <sup>th</sup> August 2022
<ul> <li>Create a power point</li> </ul>	
presentation for final	
project.	

## Github Repo link:

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