**Data Glacier Project**

**Data Science: Bank Marketing (Campaign)**

# **Team members:**

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| --- | --- | --- | --- | --- |
| **Group** | **Names** | **E-mail** | **Country** | **College** |
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# **Problem Description:**

The problem at hand is that ABC Bank wants to sell its term deposit product to customers. However, before launching the product, they want to develop a model that can predict whether a particular customer is likely to buy the product based on their past interactions with the bank or other financial institutions. The goal is to assist the bank's marketing efforts by targeting customers who are more likely to purchase the product. By focusing their marketing channels, such as telemarketing, SMS, or email marketing, on these potential customers, the bank can save resources, time, and costs associated with marketing to customers who are less likely to subscribe to the term deposit.

**GitHub Repo link:**

<https://github.com/ShivaRamezani/Capstone/tree/shiva/week10>

**Date:**

07/02/2023

**Cleansing and transformation:**

Steps taken:

-checking for NULL value: No Null value was found

-distribution visualization

-checking skewness & visualization

-checking the correlation

-checking for outliers

-checking if the dataset is balanced

-using SMOTE approach to overcome the imbalance

-OneHotEncoding the dataset

-Using SMOTE to balance the dataset

-Separating X & y

These steps were taken on both full datasets to see if the result would be different.