**Optimizing Customer Response Prediction in Bank Marketing Campaigns**

Business Context

A leading financial institution runs periodic marketing campaigns to promote term deposit subscriptions. While the campaigns generate leads, the conversion rate remains a challenge. Many customers do not respond positively, leading to inefficiencies in resource allocation and missed revenue opportunities.

Business Challenge

The bank's marketing team wants to improve targeting strategies by identifying key factors influencing customer responses. Understanding why certain customers do not respond will enable better campaign personalization and higher conversion rates.

Data Overview

The dataset contains key features that influence customer responses, including:

• Customer Profile: Age, job, marital status, education, default history.

• Financial Information: Account balance, housing loan, personal loan.

• Campaign Interaction: Contact method, last contact day/month, number of contacts made.

• Historical Engagement: Previous campaign outcomes, number of past contacts.

<https://archive.ics.uci.edu/dataset/222/bank+marketing>

<https://www.kaggle.com/code/codestudiods/eda-and-model-building-bank-marketing-dataset#Introduction>

<https://www.kaggle.com/datasets/janiobachmann/bank-marketing-dataset/data>