**Project Proposal – Group 5**

**Context:**

A company XYZ Ltd. (anonymized) is a large company operating primarily in the Food & Beverage industry. It operates both retail stores as well as an e-commerce website. Recently, the company ran a few marketing campaigns, with varying success rates. Overall, however, management feels that the campaign was not entirely successful and would like to explore the causes for this, along with possible recommended actions for future campaigns.

**Objective:**

To analyze the data obtained through the marketing campaign and segment the customers better to understand which campaigns worked for which customers. Additionally, we will create models that can predict whether the customers will react positively to similar campaigns in the future.

**Dataset:**

The dataset is available on Kaggle [here](https://www.kaggle.com/jackdaoud/marketing-data). The dataset contains information about 2240 customers, including their profiles, their purchased products, their channel preference, and the campaign’s success. There are a total of 2240 rows with 28 columns that contain the expanded version of the above details. Some of the features of the dataset are represented below. Full details are available on the link to the dataset.

|  |
| --- |
| **ID**=Customer's unique identifier |
| **Year\_Birth**=Customer's birth year |
| **Education**=Customer's education level |
| **Marital\_Status**=Customer's marital status |
| **Income**=Customer's yearly household income |
| **Kidhome**=Number of children in customer's household |
| **Recency**=Number of days since customer's last purchase |
| **…** |
| **MntMeatProducts**=Amount spent on meat in the last 2 years |
| **MntFishProducts**=Amount spent on fish in the last 2 years |
| **NumWebPurchases**=Number of purchases made through the company's web site |
| **NumWebVisitsMonth**=Number of visits to company's web site in the last month |
| **AcceptedCmp3**=1 if customer accepted the offer in the 3rd campaign, 0 otherwise |
| **AcceptedCmp4**=1 if customer accepted the offer in the 4th campaign, 0 otherwise |
| **Response**=1 if customer accepted the offer in the last campaign, 0 otherwise |
| **Complain**=1 if customer complained in the last 2 years, 0 otherwise |

**Expected Outcomes:**

The expected outcomes of this project will be an understanding of the effectiveness of the campaigns across customer segments and a model to predict whether the customer is likely to respond positively to similar campaigns in the future. Additionally, the profile of the customers that responded to different campaigns could be helpful in designing the new campaigns more efficiently.