Data Science Internship at Data Glacier

Week 10

Project: Bank Marketing (Campaign)

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Problem Description

ABC Bank is planning to introduce a new term deposit product for its customers, and they need to develop a model that can predict whether a customer will buy their product or not. To achieve this goal, they want to analyze the past interaction of customers with the bank or other financial institutions. The bank wants to use this model to understand the customers' behavior and preferences regarding term deposits, and to determine which customers are most likely to buy the product. This will help the bank to focus its marketing efforts on those customers who are more likely to buy, resulting in a more efficient and effective sales process. Ultimately, the bank hopes to increase its sales and revenue through the successful launch of its new term deposit product.

Github Repo link

Please visit the following link to see our project:

https://github.com/rirumel/data_science_bank_marketing_Campaign/tree/main

EDA performed on the data

1. week10_EDA_bank-full
2. week10_EDA_bank-additional-full.ipynb

Final Recommendation

EDA bank-additional-full

Recommendation

Based on the analysis of the bank-additional-full dataset, the following recommendations can be made for ABC Bank regarding buying their term deposit product:

1. Age is an important factor to consider. The observation shows that customers between the ages of 30-50 years old dominated the dataset. Therefore, choosing a different age range of customers might allow the bank to sell more deposit products.
2. Customers without existing housing loans are more likely open to buying a term deposit product.
3. Customers with a university degree may be more financially savvy and may be more interested in investing in a term deposit product.
4. Based on the data, using cellular phones as the primary mode of communication for marketing campaigns is recommended, as it has been shown to be more efficient.
5. Targeting the period between May and August may provide the highest opportunity to reach a large number of customers, and maybe a good time to launch the product.
6. In the dataset, we observed most of the customers were married. Probably, the bank can focus on unmarried customers to see if it adds more value to the success rate of the campaign.

By incorporating these factors into its business plan, ABC Bank can better understand which customers are most likely to buy their term deposit product and can target their marketing efforts accordingly.