

# Bank Marketing (Campaign)

*Team Member's Details: Team Me, Francisco Lopez, [panch.lopez.21.1998@icloud.com](mailto:panch.lopez.21.1998@icloud.com), United States, Eastern University, Data Science*

*Problem Description:* ABC Bank wants to sell its term deposit product to customers and before launching the product they want to develop a model which helps 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).

*Business Understanding:* The business understanding revolves around aligning the predictive model's development with ABC Bank's strategic goals, customer preferences, regulatory compliance, and risk management. The primary objective is to enhance marketing strategies and boost the term deposit product's sales success rate.

*Project Life Cycle along with Deadline:*

- **Week1:Deliverables, Due date 19 Apr 2024**
- **Week2:Deliverables, Due date 26 Apr 2024**
- **Week3:Deliverables, Due date 2 May 2024**
- **Week4:Deliverables, Due date 9 May 2024**
- **Week5:EDA Presentation and proposed modeling technique, Due date 16 May 2024**
- **Week6:Model Selection & Model Building/Dashboard, Due date 23 May 2024**
- **Week7:Final Project Report & Code, Due date 29 May 2024**

*Data Intake Report:*

**# 1. Data Source**

**data\_source = "Portuguese banking institution marketing campaigns"**

**# 2. Data Collection Period**

# Bank Marketing (Campaign)

*data\_collection\_period = "Multiple marketing campaigns conducted by the bank"*

## *# 3. Data Format*

*data\_format = "Structured format provided as a CSV file"*

## *# 4. Data Size*

*data\_size = f"Number of records: {len(X)}"*

## *# 5. Data Quality*

*# Perform initial data quality assessment*

*missing\_values = X.isnull().sum().sum() # Total number of missing values*

*inconsistencies = 0 # Placeholder for inconsistencies assessment*

*if missing\_values == 0 and inconsistencies == 0:*

*data\_quality = "The data appears to be relatively clean."*

*else:*

*data\_quality = "Data quality issues detected. Further investigation required."*

## *# 6. Data Relevance*

*data\_relevance = "The dataset contains pertinent information for building predictive models."*

## *# 7. Data Privacy*

*data\_privacy = "Measures have been taken to ensure data privacy and compliance with regulations."*

## *# 8. Data Access*

*data\_access = "Access to the dataset is restricted to authorized project team members."*

# Bank Marketing (Campaign)

*# 9. Data Exploration (EDA)*

*# Perform exploratory data analysis here (e.g., summary statistics, visualizations)*

*# 10. Data Preprocessing*

*# Perform preprocessing steps such as handling missing values, encoding categorical variables, and scaling numerical features*

*# 11. Data Documentation*

*# Create detailed documentation including variable descriptions, transformations, and preprocessing steps*

*# 12. Data Storage*

*# Store the dataset securely on designated servers or cloud platforms with appropriate backup mechanisms*

*# 13. Data Usage*

*data\_usage = "The dataset will be used exclusively for model development and evaluation as outlined in the project scope."*

*# Print the data intake report*

*print("### Data Intake Report ###")*

*print(f"1. Data Source: {data\_source}")*

*print(f"2. Data Collection Period: {data\_collection\_period}")*

*print(f"3. Data Format: {data\_format}")*

*print(f"4. Data Size: {data\_size}")*

*print(f"5. Data Quality: {data\_quality}")*

*print(f"6. Data Relevance: {data\_relevance}")*

*print(f"7. Data Privacy: {data\_privacy}")*

*print(f"8. Data Access: {data\_access}")*

*print("9. Data Exploration (EDA): Perform exploratory data analysis")*

*print("10. Data Preprocessing: Perform preprocessing steps")*

# Bank Marketing (Campaign)

```
print("11. Data Documentation: Create detailed documentation")  
print("12. Data Storage: Store the dataset securely")  
print(f"13. Data Usage: {data_usage}")
```

Github Repo Link: <https://github.com/Panch2/Bank-Marketing-Campaign-.git>