**Bank Marketing Campaign Analysis Report**

# 1. Introduction

This report analyzes a bank's marketing campaign data to identify factors influencing customer subscriptions to term deposits.

# 2. Dataset Overview

- **Total Records:** 41,188

- **Features:** 21

- **Target Variable (y) Distribution:**

    - No: 36,548 (89%)

    - Yes: 4,640 (11%)

- **No Missing Values**

# 3. Key Insights

### 3.1 Correlation Analysis

- `duration` of the last call is the most influential factor.

- `euribor3m`, `nr.employed`, and `emp.var.rate` are highly correlated.

### 3.2 Categorical Feature Impact

- **Job Type:** Students and retirees have a higher subscription rate.

- **Marital Status:** Singles show a slightly higher tendency to subscribe.

- **Contact Method:** Cell phone contact results in higher conversions than telephone.

# 4. Visual Analysis

- The dataset is imbalanced, with significantly more "no" responses.

- Customers contacted in **March, September, and December** show a higher subscription rate.

## 5. Business Recommendations

- Focus marketing efforts on retirees and students.

- Optimize call durations for better engagement.

- Prefer cell phone contact over telephone calls.

- Target customers in months with higher conversion rates.

## 6. Conclusion

This analysis helps the bank refine its marketing strategies to improve customer conversion rates effectively.