An InternPulse Project

A Bank Marketing Campaign Analysis Report

By

Data Analyst Track – Group 3

Group Members: Oluoma Ilobah, Iyanu Adeleye, Mary Edeh

Project Overview

The bank marketing campaign was launched to promote term deposit subscriptions to existing and potential customers. The initiative primarily relied on direct marketing techniques, particularly phone calls, to reach out to clients and encourage them to subscribe to the deposit products. By analyzing customer demographics, behavior, and campaign performance, the bank aims to better understand which customer segments are most responsive and how to improve future marketing strategies.

Key Objectives:

To carry out Exploratory Data Analysis to uncover key trends in order to:

- ❖ **Increase Term Deposit Subscriptions:**
  Drive more customers to subscribe to term deposit products, thereby increasing customer retention and bank revenue.
- ❖ **Identify Key Customer Segments:**
  Understand which age groups, occupations, or other demographics are more likely to respond positively to marketing efforts.
- ❖ **Optimize Campaign Strategy:** Using insights from the Exploratory Data Analysis to reach target audience for more effective campaigns.

Project Methodology:

1. Methodology

- Data source & collection: **InternPulse**
- Pre-processing steps: Table creation, Data inspection & Data Cleaning in MySQL
- Tool used: MySQL - for Data transformation & analysis and PowerBI - for visualization

Data Column description:

- Age: Clients age segments
- Job: Clients job
- Marital: Clients marital status
- Education: Clients Educational status
- Default: Clients loan default status
- Balance: Clients account balance
- Housing: Clients housing loan status
- Contact: medium if contact
- Day: Day of the month of contact
- Month: Month of contact
- Duration: duration of contact
- Campaign: Number of campaigns
- Pdays: previous days of contact
- Previous: number of previous contacts
- Poutcome: Status of previous outcomes of campaigns
- Y: Subscription status of the clients

Age Group Segmentation:

We categorized the Age groups into the following:

- Under 25
- 25 - 34
- 35 - 44
- 45 - 54
- 55 +

Key Findings:

- Overall marketing campaign ran within the period under review was 4,521, out of which about 4000 were unsuccessful and only 521, which accounts for 11% were successful.

- There were two major modes of contact to the customers for the campaign, and they were: Cellular and Telephone. Findings reveal that 2,896(64%) were contacted through cellular, which could have been a more preferred medium of contact for majority.

- Campaigns ran showed more success in the months of October, followed by December, however, there was decline in subscription rates in May, July and Nov.

- Customers under 25 had the highest subscription rates, followed by customers within the ages of 55+. While on the other hand, customers within 35 - 44 and 45 - 54 had the highest non-subscription rates.

- Furthermore, Singles subscribed more than other sub-group within the marital category.

- For the Education category, customers at Tertiary level recorded the most subscription rate, following closely, were those at Secondary level and the least subscribed were those in Primary. This shows that those at the Primary level may not be the bank's target audience.

- Job Status: while the Retired and Students recorded the highest subscription rates, those of Blue-collar, Services and Entrepreneur were the least subscribed.

- Our findings also revealed that there were some level of effect on subscription rate on those with housing loan. Thus, housing loan had effect on subscription rate, as they were less eager to subscribe within the period under review.

- Customers with higher account balances subscribed more than those with lower account balances.

Subscription rate as per balance group:

balance_group	total_clients	subscribers	conversion_rate
Negative	366	31	8.5
1-1k	2317	240	10.4
Zero	357	29	8.1
1k+	1481	221	14.9

**The table below shows the outcome of the previous campaigns carried out:-**

poutcome	total	subscribed	not_subscribed	success_rate
unknown	3705	337	3368	9
failure	490	63	427	13
other	197	38	159	19
success	129	83	46	64

From the table above, we deduced that a total of 129 of the campaigns previously carried out were successful, and about 83 customers subscribed, which accounts for 64% success rate.

Consequently, 427 failed to subscribe, and with just 13% success rate.

It is also worthy to note that, quite a significant percentage of the customers were not contacted during the previous campaign, which further buttresses proportion of unknown in the outcome of previous campaign as seen in the table above.

BANK MARKETING CAMPAIGN ANALYSIS DASHBOARD
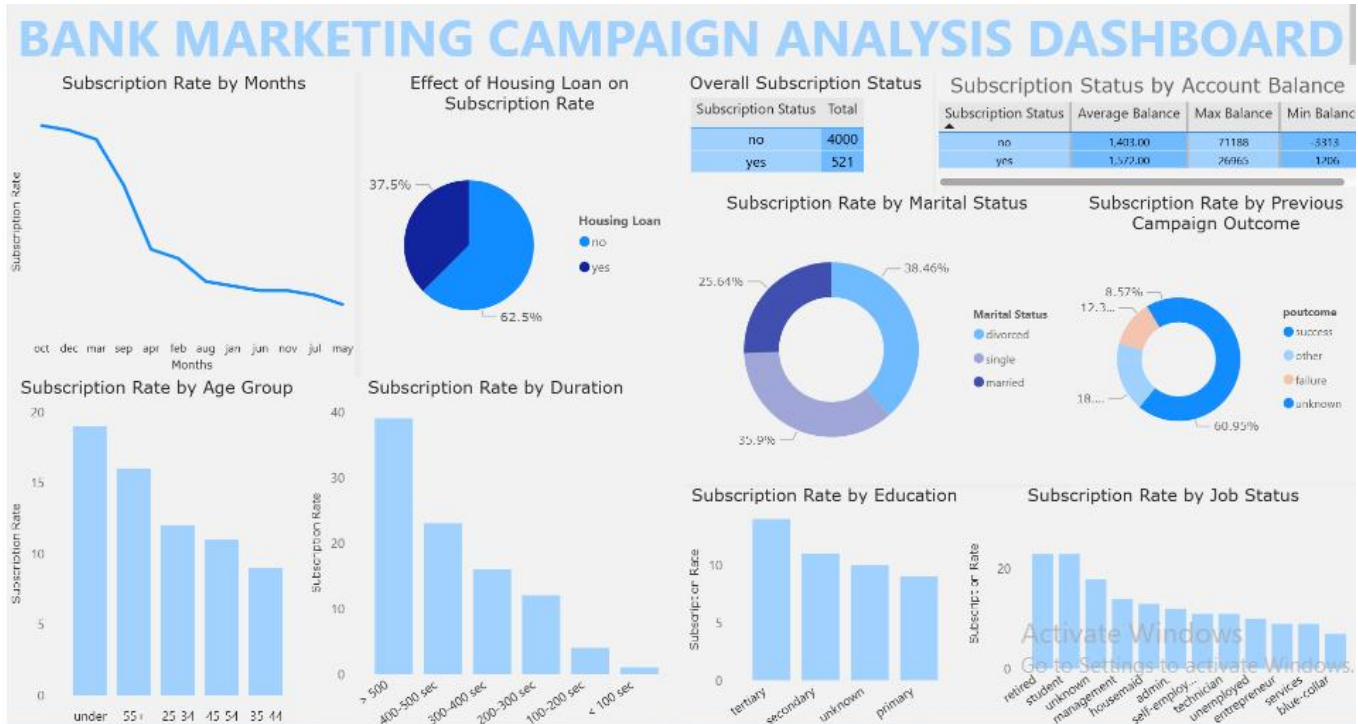
In Conclusion:

Sequel to the result of our findings, the bank's marketing campaign yielded low subscription rates across most customer segments and demographics, indicating a lack of alignment between the marketing strategy and customer preferences. Though it targeted a broad base, the approach did not effectively engage or convert customers. Key contributing factors may include inadequate customer segmentation, inability to contact most of the customers, generic messaging, poor timing, and an over-reliance on cold calls as the primary outreach channel. These findings suggest a critical need to refine the bank's marketing approach using data-driven strategies tailored to specific customer behaviors and needs.

Recommendations:

We therefore recommend the following:

1. **Implement Data-Driven Customer Segmentation**

   - Use existing customer data (e.g., age, occupation, marital status, account activity) to build more refined segments.
   - Develop targeted campaigns for each segment based on their financial goals and behavior patterns.

2. **Personalize Campaign Messaging**

   - Craft tailored messages that speak to each segment's needs—e.g., promoting savings security to older customers or wealth growth to younger ones.
   - Use customer names, past interaction history, or financial product usage to personalize communications.

3. **Diversify Marketing Channels**

   - Analyze previous successful campaigns to identify optimal periods for engagement (e.g., salary days, tax seasons, year-end bonuses).
   - Avoid high-call-volume periods when customer receptiveness may be low.

4. **Enhance Agent Training and Call Scripts**

   - Train agents to identify cues and adjust pitches dynamically based on customer reactions.
   - Equip them with objection-handling techniques and deeper product knowledge.

5. **Gather Feedback from Non-Subscribers**

   - Conduct brief follow-up surveys with those who declined to subscribe to understand pain points or hesitations.
   - Use insights to improve product offerings or marketing messages.