BANK MARKETING CAMPAIGN ANALYTICS

iNeuron

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PROJECT DETAILS

❖ Technology: Business Intelligence

❖ Domain: Banking & Finance

❖ Tool used: Power BI

❖ Result: Data Insights And Visualization

❖ Solution (Github Link) : https://github.com/aditya-mmmec/Bank-Marketing-Analytics

OBJECTIVE

❖ To get insights about customers who subscribed term deposits based on their demographical details and various indicators to know the customer better.

❖ To get insights about the effectiveness of the marketing campaign on the customers.

❖ These insights will help the company to take data driven decisions which will enable the bank to get more revenues by acquiring more customers as well as in cost cutting.

ARCHIETECTURE

DATA OVERVIEW

❖ The data used for analysis is in csv format with all records, ordered by date (from May 2008 to November 2010).

❖ Number of Instances: 41188.

❖ Number of Attributes: 21.

❖ The key attributes include demographic, financial and bank interaction details.

DERIVED MEASUREMENTS

❖ Total number of clients contacted during campaign

❖ Total number of clients who have bought term deposit

❖ Percentage of clients who have bought term deposit out of total number of clients contacted during campaign

❖ Percentage of clients who had bought term deposit in previous campaign

❖ Percentage of clients who were contacted in previous campaign
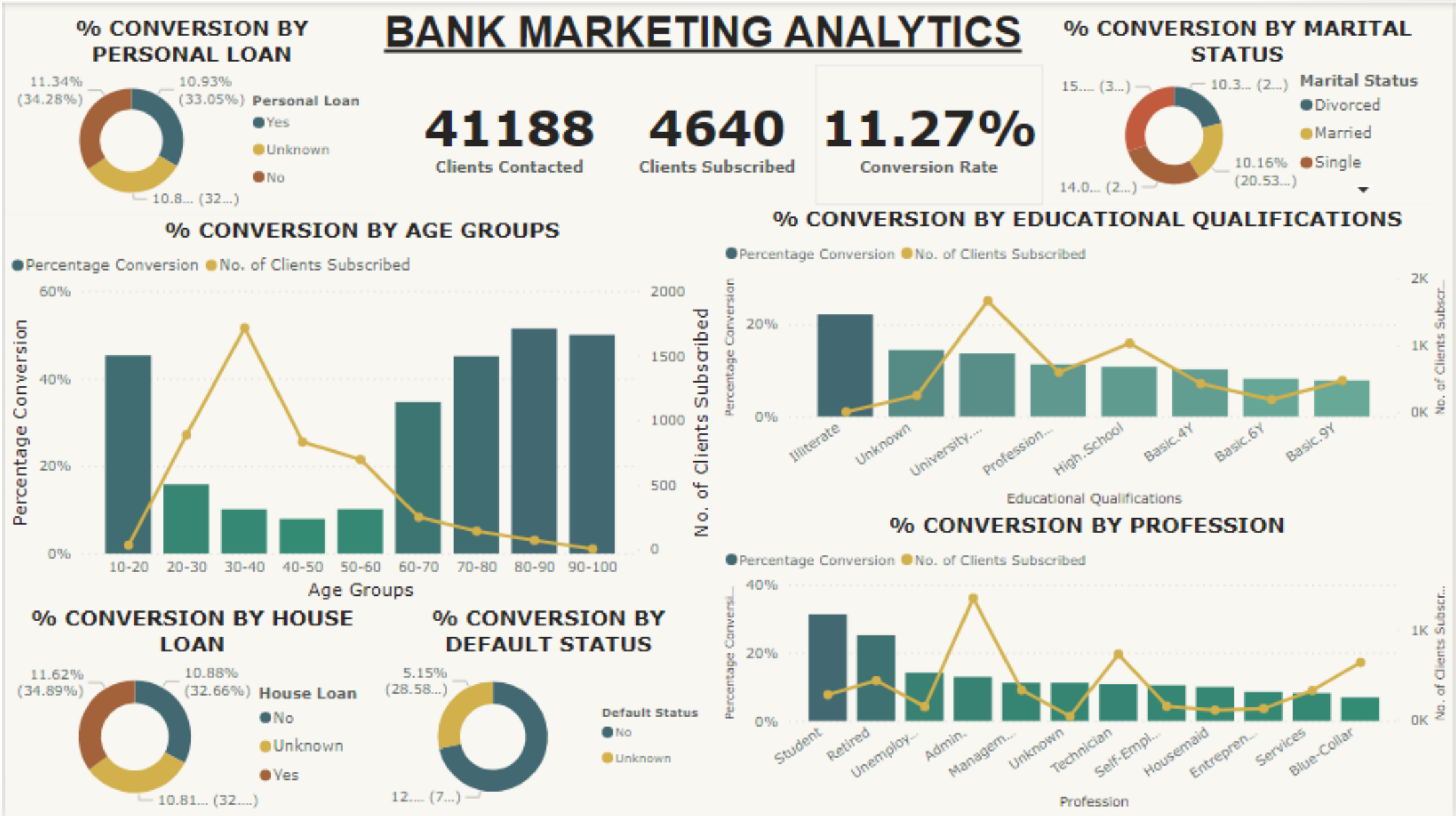
KEY PERFORMANCE INDICATORS

Key indicators displaying a summary of the Bank Marketing Campaign's results and subscribers' information based on various parameters :

- ❖ Total percentage of clients who subscribed to term deposit.

- ❖ Percentage conversion of clients based on their demographics such as age, profession, qualification and marital status.

- ❖ Percentage conversion of clients based on their credit default information, personal loan, house loan.

- ❖ Call duration of clients when contacted by bank for marketing & any history of calls.

- ❖ Percentage of clients who bought term deposit from bank based on their demographics such as age, profession and qualification.
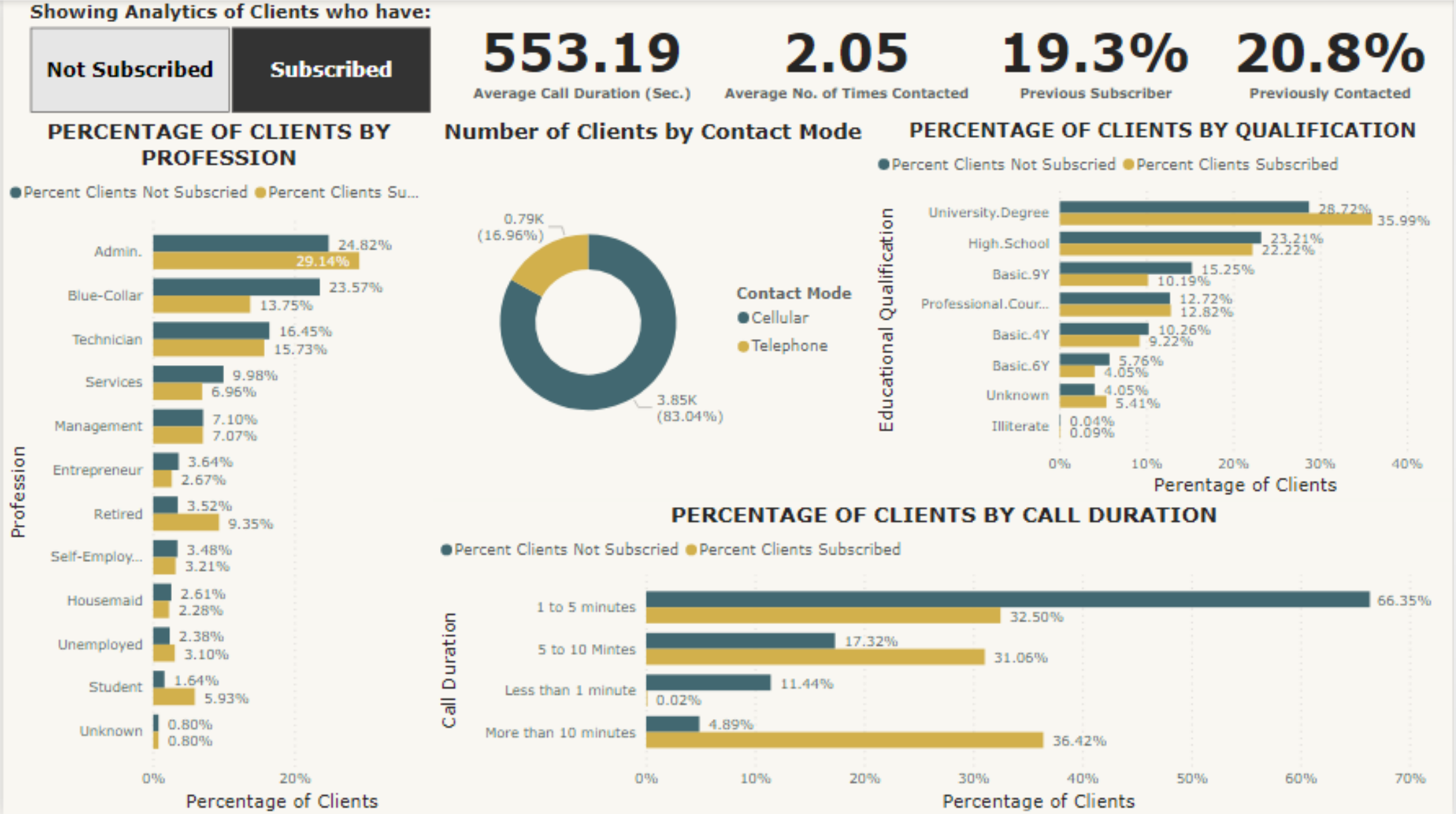
INSIGHTS SUMMARY

❖ Out of total 41188 clients contacted, 4640 (11.27%) clients are subscribed.

❖ Conversion rate of single people is higher than the married and divorced people.

❖ Personal loans & house loans are not affecting the conversion rate.

❖ All of the Customers who have subscribed term deposit have not defaulted on credit.

❖ In the age range of 80-90 the conversion rate is maximum despite the fact that very few of them are subscribed.

❖ People in the age range of (30-40) are targeted maximum.

❖ Conversion rate of illiterate people is highest among all categories of qualifications.

❖ Students, retired and unemployed are easiest to get whereas entrepreneur, blue-collar and services people are difficult to get subscribed.

❖ 83% subscribers were contacted on cellular phones.

❖ The average call duration of subscribers are more than non subscribers.

❖ Subscribers were contacted lesser number of times than non subscribers during marketing campaign.

❖ 19.3% subscribers and 1% non subscribers have also subscribed in previous campaign.

❖ Most of the subscribers are Admins and university degree holders.

DASHBOARD

COMPARATIVE ANALYSIS OF CLIENTS

Showing Analytics of Clients who have:

Not Subscribed	Subscribed

553.19 — Average Call Duration (Sec.)

2.05 — Average No. of Times Contacted

19.3% — Previous Subscriber

20.8% — Previously Contacted

PERCENTAGE OF CLIENTS BY PROFESSION

- Percent Clients Not Subscried
- Percent Clients Su...

Profession	Not Subscribed	Subscribed
Admin.	24.82%	29.14%
Blue-Collar	23.57%	13.75%
Technician	16.45%	15.73%
Services	9.98%	6.96%
Management	7.10%	7.07%
Entrepreneur	3.64%	2.67%
Retired	3.52%	9.35%
Self-Employ...	3.48%	3.21%
Housemaid	2.61%	2.28%
Unemployed	2.38%	3.10%
Student	1.64%	5.93%
Unknown	0.80%	0.80%

Percentage of Clients

Number of Clients by Contact Mode

0.79K (16.96%)

3.85K (83.04%)

Contact Mode
- Cellular
- Telephone

PERCENTAGE OF CLIENTS BY QUALIFICATION

- Percent Clients Not Subscried
- Percent Clients Subscribed

Educational Qualification	Not Subscribed	Subscribed
University.Degree	28.72%	35.99%
High.School	23.21%	22.22%
Basic.9Y	15.25%	10.19%
Professional.Cour...	12.72%	12.82%
Basic.4Y	10.26%	9.22%
Basic.6Y	5.76%	4.05%
Unknown	4.05%	5.41%
Illiterate	0.04%	0.09%

Perentage of Clients

PERCENTAGE OF CLIENTS BY CALL DURATION

- Percent Clients Not Subscried
- Percent Clients Subscribed

Call Duration	Not Subscribed	Subscribed
1 to 5 minutes	66.35%	32.50%
5 to 10 Mintes	17.32%	31.06%
Less than 1 minute	11.44%	0.02%
More than 10 minutes	4.89%	36.42%

Percentage of Clients

Q & A

Q1) What's the source of data?

This dataset is publicly available for research. Available at: http://dx.doi.org/10.1016/j.dss.2014.03.001 titled "Bank Marketing (with social/economic context)"

Q 2) What was the type of data?

The data was contained in the zip folder in csv format.

Q 3) What's the complete flow you followed in this Project?

Refer all slides in sequence for better Understanding.