Project Idea: Marketing | Leads Conversion

Team members:

Eman Ibrahim Ghabour: Dax modeling and Dashboard building

Safaa khalaf: Data Cleaning &Transformation - Data Modeling.

Maryem Hamdy Yassien: - Data Cleaning &Transformation and Dax modeling.

Mariam Yehia Zakaria: - Determine Data Analysis Questions and Dashboard building

Project Plan:

- **Week 1 -2: Data Cleaning and preprocessing**

  - **Tasks:**
    - **Data Cleaning:** Clean and preprocess the data using Power BI.
      Tools: Power BI.
    - **Data preprocessing:** search about similar data and give explanation in details.
      Tools: internet browser and Microsoft word.
  - **Deliverables:**
    - Cleaned dataset (.pbix)
    - detailed dataset description (.PDF)

- **Week 3: Model & Analysis Questions Phase**
  - **Tasks:**
    - **Data Modeling:** Build the relationships between tables in the data using Power BI.
      Tools: Power BI.
    - **Determine Data Analysis Questions:** Determine all possible analysis questions that can be deducted from the given dataset and would be of interest to the organization's decision makers, e.g., what is the impact on products category and regions on sales performance?
      Tools: Power BI.
  - **Deliverables:**
    - Set of analysis questions that can be answered via the dataset(.docx)
    - Dataset ready for analysis(.pbix)

- **Week 4-5: DAX Modeling & Dashboard Phase**
  - **Tasks:**
    - **Build Dashboard:** Build a Power BI dashboard that visualize the answers to the asked questions.
    - Tools: Power BI.

- **Deliverables:**
  - Power BI dashboard.

- **Week 6: Final Presentation: by all the team**
  - **Tasks:**
    - **Final Presentation:** Prepare a report and presentation summarizing the project work, including data analysis, model development, and deployment.
  - **Deliverables:**
    - Final report and presentation.

The dataset

Dataset scope:

A digital team of a bank have challenges with lead conversions (Turning the Potential or interested customers into buying /actual customers). They have provided a partial data set for customers loan history from the last 3 months. They also collect basic details about customers.

Objective:

- identify the Leads having a higher conversion ratio (Customers with most probability of getting loans) **so that they can specifically target these potential customers through additional channels and re-marketing.**

The Main Questions to Answer:

- The relationship between Leads and monthly income in each city.
- how many leads are generated in each Year, Quarter, month and day.
- the loan amounts according to leads age, Gender and monthly income.
- the most leads generated with age, monthly income and city.
- the total loans, Total Leads, Average rate of Interest, the Bank customers with no loans and Bank customers with Loans.
- Determine the relationship between Monthly income and loan Amount.
- Calculate the approval rate based on Employee categories, city categories and source categories.

Domain Specific Knowledge:

A marketing lead: is a person who shows interest in a brand's products or services, which makes the person a potential customer. The primary goal of any company is to generate as

many leads as possible. A company must guide prospects down the sales funnel with relevant content and offers towards their purchase.

The dataset explanation:

The dataset contains the following columns:

1. **ID:** A unique identifier for each individual or record in the dataset.
2. **Gender:** Indicates the gender of the individual (e.g., Male, Female).
3. **DOB:** The date of birth of the individual, in DD/MM/YY format.
4. **Lead_Creation_Date:** The date when the lead was created, in DD/MM/YY format.
5. **City_Code:** A code representing the city where the individual resides.
6. **City_Category:** The category of the city (e.g., A, B, C), possibly indicating the city size or type.
7. **Employer_Code:** A unique code representing the employer of the individual.
8. **Employer_Category1:** A categorical classification of the employer (e.g., A, B, C).
9. **Employer_Category2:** A numeric classification of the employer.
10. **Monthly_Income:** The monthly income of the individual, in numeric format.
11. **Customer_Existing_Primary_Bank_Code:** A code representing the individual's primary bank.
12. **Primary_Bank_Type**: Indicates the type of primary bank (e.g., government, private).
13. **Contacted:** Specifies whether the individual was contacted (Y for Yes, N for No).
14. **Source:** The source through which the lead was generated (e.g., S122, S143).
15. **Source_Category:** The category of the source (e.g., G, B).
16. **Existing_EMI**: The amount of any existing EMI (Equated Monthly Installment) being paid by the individual.
17. **Loan_Amount:** The amount of the loan applied for by the individual.
18. **Loan_Period:** The duration of the loan in years.
19. **Interest_Rate:** The interest rate applied to the loan.

20. **EMI:** The calculated EMI(Equated Monthly Installment) for the loan applied for by the individual.

21. **Approved:** A binary indicator (0 or 1) showing whether the loan application was approved.

More explanation for the dataset in this PDF

https://drive.google.com/file/d/1_7CMEu0RDUd5voLZ63KVkMRqHMuq10Jz/view?usp=sharing