

Project Overview

Problem Statement:

A Phantom Firm, a leading marketing agency, manages campaigns for multiple clients across various channels and strategies. In an effort to enhance customer satisfaction and financial efficiency, the firm aims to prioritise quality over quantity by streamlining campaigns for its top 5 clients. The primary objective is to identify and continue funding the most profitable campaigns while defunding the less successful ones. This initiative requires a comprehensive analysis of the return on investment (ROI) for the different marketing campaigns launched in 2021, assessing their financial impact and effectiveness to make informed decisions about resource allocation.

Solution:

To address this problem, a detailed financial and marketing analysis of the campaign data is performed. The dataset includes key financial and marketing metrics and campaign key performance indicators such as ROI, acquisition cost, conversion rate, clicks, and total revenue. These metrics are accurately computed and calculated to provide insights into the profitability and effectiveness of each campaign. The goal is to optimize marketing expenditures by focusing on high-ROI campaigns and reallocating resources from less effective ones.

Objectives:

1. **Financial Metrics and KPI Definition:** Define and track financial and marketing metrics (Total Revenue, Acquisition Cost, Total Clicks) and KPIs (Conversion Rate, ROI) to measure campaign success.
2. **Comprehensive ROI Evaluation:** Analyze the ROI for different marketing campaigns across Phantom Firm's top 5 clients to determine profitability.
3. **Campaign Effectiveness Comparison:** Compare the effectiveness of campaigns in driving conversions and engagement, identifying the most impactful strategies.
4. **Optimizing Resource Allocation:** Identifying high-ROI campaigns and reallocating resources from less effective ones.
5. **Supporting Strategic Decisions:** Providing actionable insights through comprehensive data analysis.

Minimum Viable Product (MVP):

1. **Statistical Analysis:** Conduct a comprehensive statistical analysis of the dataset.
2. **Data Visualization:** Create visualizations to illustrate key insights and trends.
3. **Documentation:** Document the analysis process, findings, and recommendations.

Outcome:

The project's outcome is a comprehensive ROI analysis that helps Phantom Firm:

1. **Identify Effective Campaigns:** Determine which campaigns are most and least effective.
2. **Make Funding Decisions:** Decide which campaigns to continue funding and which to defund.

3. **Understand Success Factors:** Highlight factors contributing to the success or failure of each campaign.
4. **Optimize Future Campaigns:** Provide insights and recommendations for future marketing strategies.

Areas of Focus (Epics):

1. **Data Validation and Augmentation:**

- Identify, collect campaign data and preprocess the dataset.
- Clean and validate data to ensure accuracy and consistency.
- Ensure data quality and enhance the dataset with additional information.

2. **Descriptive Analysis:**

- Perform exploratory data analysis (EDA) to understand data distribution and relationships.
- Recalculate ROI and compute key metrics and KPIs such as ROI, conversion rate, and acquisition cost.
- Conduct a detailed analysis of the data to understand past campaign performance.

3. **SQL Analysis and Computation:**

- Create structured SQL database and populate tables.
- Use SQL to calculate key metrics and derive insights.
- Use advanced SQL to compute, validate ROI and create new tables. Create a view.

4. **Attribution Analysis:**

- Determine the contribution of different campaign channels and types to overall success.

5. **Dashboard Design:**

- Create interactive dashboards using Tableau visualise data.
- Develop visualizations and dashboards using tools like Tableau/Mode to present findings.
- Create interactive reports for easy data exploration.

6. **Reporting and Documentation:**

- Develop comprehensive reports to present findings and strategic insights
- Provide actionable recommendations for optimizing marketing expenditures.
- Document the data analysis process, findings, and recommendations.
- Include instructions for using the dashboards and reports.