Marketing Campaigns Result: Data Analytics Case Study

Problems and Background

Problem: Maven Marketing is analysing the performance of its recent marketing campaigns to understand customer behaviour, improve campaign effectiveness, and enhance overall sales. The goal is to identify factors contributing to campaign success and determine underperforming channels to inform future strategies.

Background: This report reviews data from 2,240 customers, focusing on customer profiles, product preferences, and the performance of various marketing campaigns. Data was collected and organized in Excel format for analysis.

Solution

To address the challenges and improve marketing outcomes, we propose a comprehensive approach that integrates data analysis, actionable insights, and stakeholder collaboration.

- 1. **Data Analysis:** Conduct an in-depth analysis of the marketing data to identify trends in customer demographics, campaign effectiveness, product preferences, and channel performance.
- 2. **Data-Driven Insights:** Extract actionable insights from the analysis to refine marketing strategies, optimize product offerings, and enhance customer engagement.
- 3. **Stakeholder Engagement:** Involve key stakeholders throughout the analysis process to ensure alignment and support for proposed changes, fostering collaboration for effective implementation.

Project Scope

Project Objectives:

- Analyse customer demographics and their relationship to campaign responses.
- Evaluate the success of different marketing campaigns.
- Identify underperforming channels and recommend improvements.
- Understand customer product preferences to inform future campaigns.

Key Areas of Focus:

- 1. **Customer Profile Analysis:** Explore demographic trends that influence customer responses to marketing campaigns.
- 2. **Campaign Effectiveness:** Assess the acceptance and purchase rates of various campaigns to identify the most successful.
- 3. **Product Performance:** Analyse sales data to determine best-performing products and areas for enhancement.
- 4. **Channel Performance:** Review the performance of sales channels to identify those that require optimization.

Timeline

- **Week 1:** Define project goals and objectives; initiate data collection.
- **Week 2:** Complete data collection; begin data preparation in Excel.
- Week 3: Conduct data analysis and create visualizations.
- **Week 4:** Draft the report summarizing findings; internal review.
- **Week 5:** Finalize the report and prepare for presentation; present findings to stakeholders.

Deliverables

- Comprehensive analysis report (including visualizations).
- Presentation summarizing key findings and recommendations.

Limitations

• Acknowledge constraints such as data availability, sample size, and time restrictions that may impact the analysis.

Methodology

- 1. **Data Collection:** Gather data on customer interactions with marketing campaigns and their product preferences.
- 2. **Data Preparation:** Clean and organize the dataset using Excel to ensure consistency and accuracy.

3. Data Analysis:

- Perform descriptive analysis to uncover trends in demographics and preferences.
- Use pivot tables to evaluate campaign performance and identify sales trends.

- 4. **Visualization and Reporting:** Create charts and graphs to visually represent key findings.
- 5. **Review and Presentation:** Share insights with stakeholders and prepare a concise summary presentation.

Goals and KPIs

Goal 1: Increase the total number of web purchases by 10% within 6 months.

• **KPI:** Total number of web purchases (NumWebPurchases).

Goal 2: Improve the effectiveness of marketing campaigns by increasing acceptance rates by 15% within 3 months.

• **KPI:** Average acceptance rate of marketing campaigns (AcceptedCmp1, AcceptedCmp2, AcceptedCmp3, AcceptedCmp4, AcceptedCmp5).

Goal 3: Understand customer demographics and preferences to inform future marketing strategies.

• **KPI:** Number of key demographic segments identified (e.g., Marital Status, Income, Country).

Goal 4: Enhance product sales performance across categories by identifying best-selling products.

• **KPI:** Total expenditure on products (MntWines, MntFruits, MntMeatProducts, MntFishProducts, MntSweetProducts, MntGoldProds).

Goal 5: Increase customer engagement with the brand by boosting the frequency of web visits.

• **KPI:** Average number of web visits per month (NumWebVisitsMonth).

Recommended Analysis

- 1. **Handling Null Values:** The dataset contains 24 null values in the income column, which will be addressed by imputing values using the mean.
- 2. **Factors Related to Web Purchases:** Key factors influencing web purchases include marital status, education level, income bracket, country, and age group.
- 3. **Most Successful Marketing Campaign:** The most successful campaign is Campaign 4, with 167 accepted responses.
- 4. Average Customer Profile:
 - o **Age:** Middle-aged customers (born between 1953 and 1982).

- o **Country:** Predominantly from Spain.
- Education: Majority have a graduation degree.
- o **Income:** Falls within the 26,730 51,729 income bracket.
- o **Marital Status:** Mostly married or in a committed relationship.
- 5. **Best-Performing Products:** Wines and Meat Products show the highest sales.
- 6. **Underperforming Channels:** Catalog Purchases and Deals Purchases are underperforming compared to Store Purchases and Web Purchases.

Project Owner

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Date: 1 December 2024

Do you have any questions?

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