

# Online Marketing Data Analysis and Visualization Report

## Abstract

In this report, I am visualizing the results of data analyses I conducted using a dataset of 8,000 entries from an online advertising campaign. Along with the usable datasets I obtained, the results of the data analyses are presented.

## Campaign Channel Analysis



**Email Channel:** All campaign types are relatively evenly distributed, with **Conversion** campaigns being slightly higher. This shows a balanced strategy, though email is commonly used for conversion-related efforts.

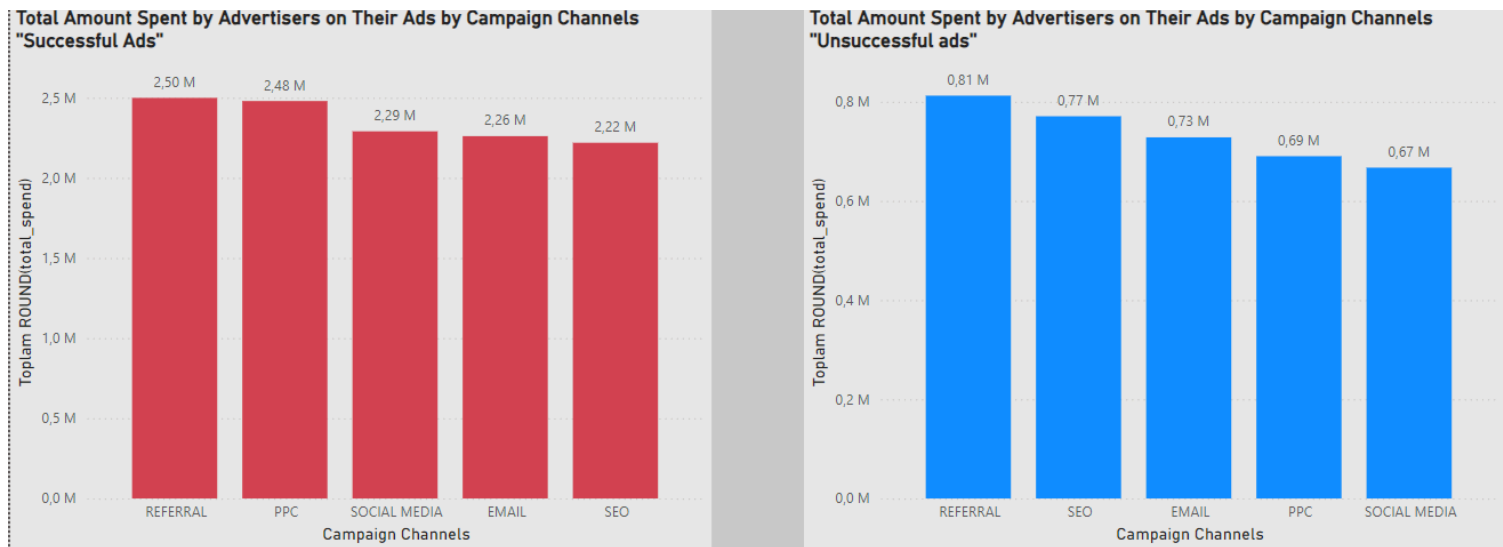
**Referral Channel:** **Consideration** and **Conversion** campaigns dominate the referral channel, indicating that referral programs are likely focused on moving customers closer to purchase decisions and converting them into paying customers.

**SEO Channel:** **Awareness** and **Retention** campaigns are the most common types in the SEO channel. This suggests SEO is being utilized effectively for brand visibility and retaining existing customers.

**PPC Channel:** The **Conversion** campaign type dominates PPC, followed by **Consideration**. This shows that PPC campaigns are primarily aimed at generating conversions and finalizing sales decisions.

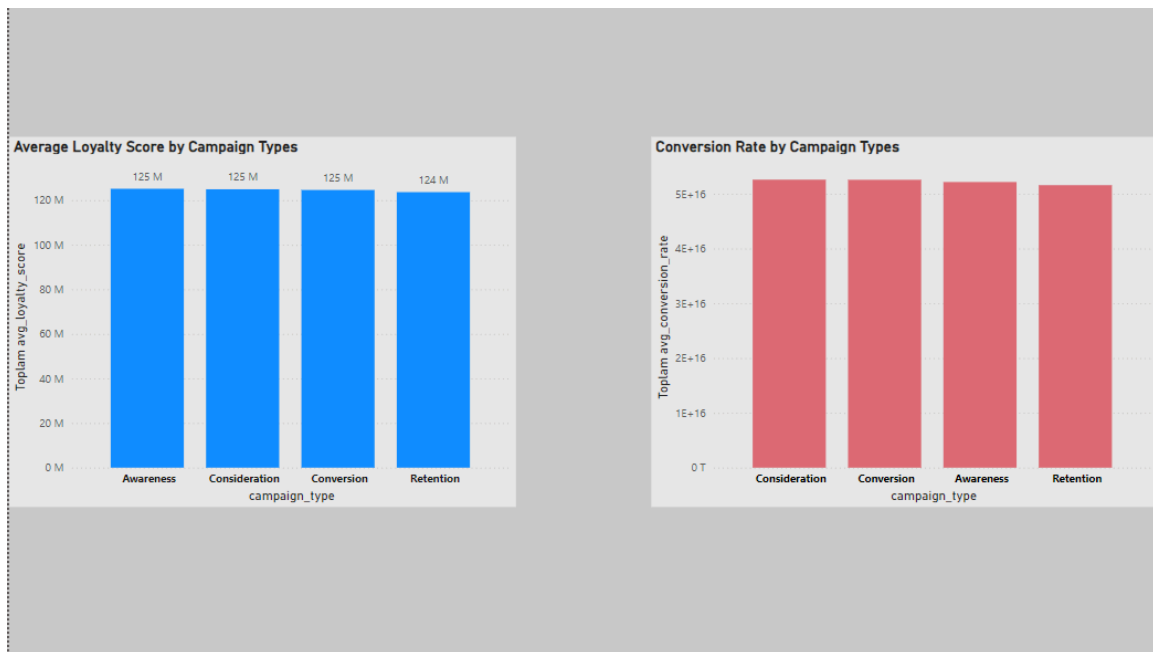
**Social Media Channel:** There's a slight emphasis on **Consideration** and **Awareness** campaigns, indicating that social media is used more for educating potential customers and nurturing them before conversion efforts.

### Money Spent on Successful and Unsuccessful Advertising Campaigns



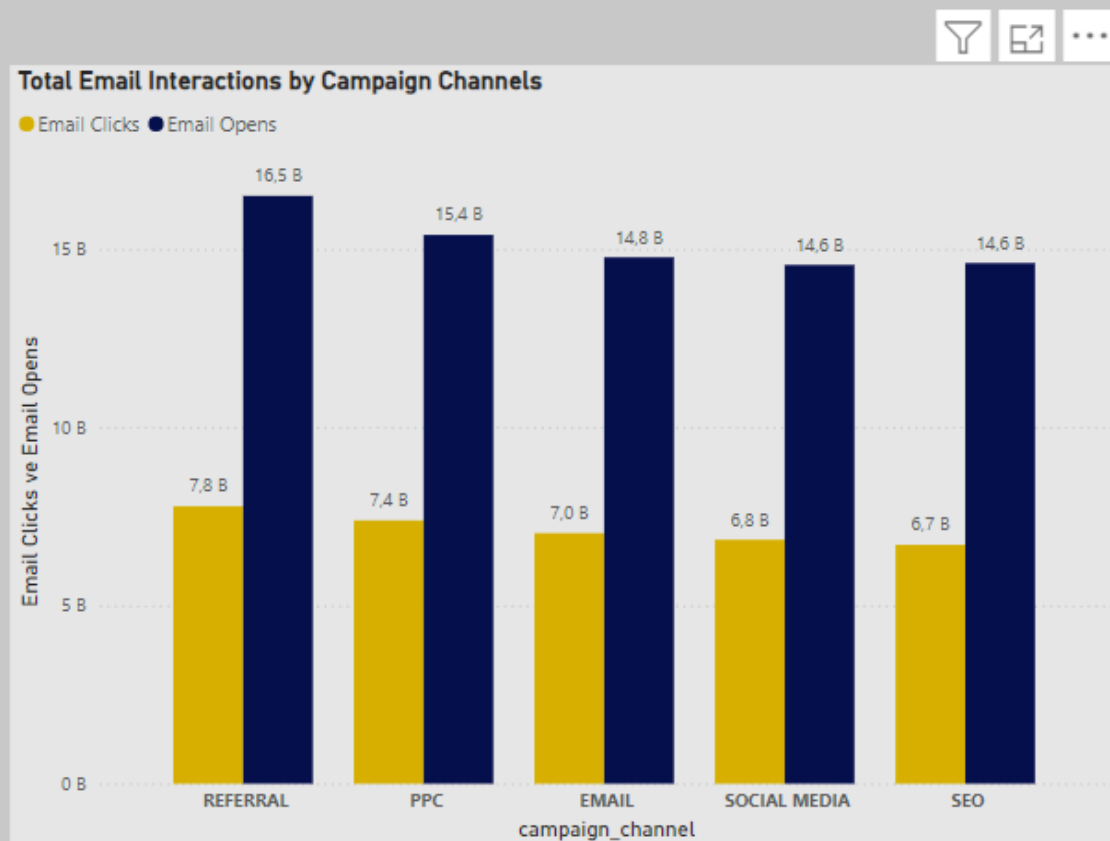
As seen, the main issue with unsuccessful advertising campaigns is the low level of spending. This result shows that advertising success is proportional to the amount of money spent in this dataset. Successful ads, with the least total spending, are in the SEO field, whereas unsuccessful ads show the opposite trend. Expenditures outside of referral have experienced opposite changes.

### The Impact of Campaign Types on Loyalty and Conversion



Consideration campaigns exhibit the highest performance in both loyalty score and conversion rate. This indicates that users show more commitment and achieve higher conversions when they are in the decision-making phase. Retention campaigns, while having similar levels of conversion rates, show a slight decrease in loyalty scores compared to other campaign types. This suggests that strategies targeting existing customers may need to be reviewed. Email interactions in campaign channels

Email Interactions in Campaign Channels



- **Referral** channel stands out as the highest performer in terms of email opens, reaching 16.5 billion while email clicks are also the highest at 7.9 billion. This indicates a strong overall performance in terms of both engagement metrics.
- **PPC** and **SEO** channels show almost identical performance, with email opens at around 15.4 billion and 14.6 billion, respectively. However, their email clicks slightly differ, with **PPC** leading at 7.4 billion compared to **SEO**'s 6.7 billion. This suggests **PPC** is more effective in converting opens into clicks than **SEO**.
- **Email channel**, despite being an internal email-related campaign, shows 14.8 billion opens and 7.0 Billion clicks, ranking lower than **Referral** but still maintaining solid engagement.
- **Social Media** has the lowest email clicks at 6.8 billion, while email opens are slightly higher at 14.6 billion, suggesting that email campaigns through social media generate a

moderate number of clicks relative to the other channels.

### **Conclusion**

The **Referral** channel appears to be the most successful in driving both email opens and clicks.

**PPC** and **SEO** channels are effective, but **SEO** could improve its click-through rate relative to its number of opens.

**Social Media** shows the lowest email interaction rates in terms of clicks, indicating it might need better optimization or targeting strategies to increase engagement.