MRKT 675 Artea

So, they targeted visitors which have high spent time and who came through referral

DS team picked 5000 users from last month visits and made control and treatment group by providing discount coupons (20%)

They used email marketing tools to target potential customers which is cost effective and more accurate compared to other tools

A/B test was done to analyze transactions and revenue after discount campaign

Data analysis,

Good mkrt website and resource/ infrastructure but poor marketing strategy to increase sales/ trans, attract potential customers.

Good in awareness but bad at making people choose their products

evidence:

87% of visitors didn’t buy any product which motivated artea to run campaign

Many visitors but fewer transactions and revenue

1. Why did Artea run this experiment? (‘Identify the Problem’) Senan

Artea observed from their past customer dashboard that 87% of those who visited their website were not making any transactions; even though their engagement metrics rate on their website seemed to be good enough. Their main concern was to identify what kind of marketing strategy they can use to get people to buy and generate more revenue for the firm. To solve this issue, they decided to run an A/B experiment test by randomly selecting 5000 users who had visited the website the last 2 months and didn’t end up making a transaction. From this pool of users, they randomly selected half of those customers and sent them 20% discount on their next purchase.

As the results from the experiment were coming through, Artea was also trying to understand behavioral patterns among customers who received the coupons, to identify potential group of customers they should target and send coupons to and also decide further strategies for future campaign.

2. Do you think the discount coupons work? Why? (‘Analyze the Situation’) Senan & Andi

-Distribution/Hypothesis test (Senan)

Before running any analysis, we thought it would be important to do a randomization check, as it mentioned in the case that coupons had been randomly sent to half of the customers selected for the experiment. To achieve this, we used the “Wilcoxon test” to determine if the control group (test\_coupon=0) and the treatment group (test\_coupon=1) are different from one another in a statistically manner. Observing the p-values from our test results, p-value for each variable is greater than 0.05. This indicated weak evidence against the null hypothesis (Ho: test\_coupon=0 = test\_coupon=1). Therefore, there is no significant difference between the two groups.

-regression analysis to check if coupons are effective (Senan)

In order to understand if the discount coupons effectively work, we ran two simple linear regressions with dependent variables respectively ‘trans\_after’ & ‘revenue\_after’ and used others variables as independent variables (‘test\_coupon’, ‘num\_past\_purch’, ect..). The goal was to observe the coefficient and p-value of ‘test\_coupon’ in both regressions and see if discount coupons improve number of transactions or sales revenues.

In the ‘trans\_after’ regression, the p-value of ‘test\_coupon’ is less than 0.05, which is statistically significant; meaning there is a possibility that discount coupons increase the number of transactions on the website. However, for ‘revenue\_after’ regression the p-value is greater than 0.05. Then, discount coupons don’t have a significant impact on sales revenues. If Artea’goal is to increase the firm revenue, discount coupons may not be the best strategy.

3. Which customers do you think Artea should be targeting? (‘Identify Alternatives + Recommend a Strategy’)

4. What are potential risks of using this targeting policy? (‘Identify Alternatives + Recommend a Strategy’)

5. What do you learn from the demographics data? How do they influence your recommendations? (‘Identify Alternatives + Recommend a Strategy’)