Dallas Stars Promotion Analysis

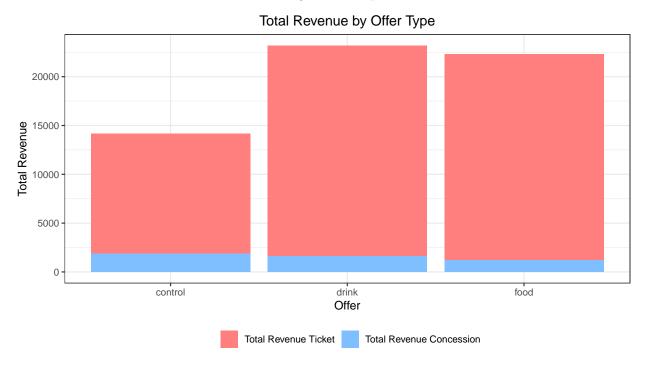
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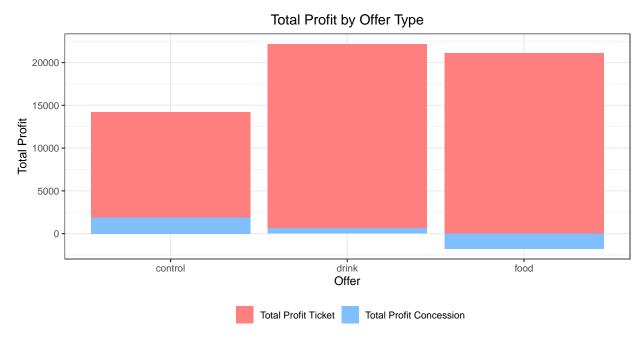
Yin Wang

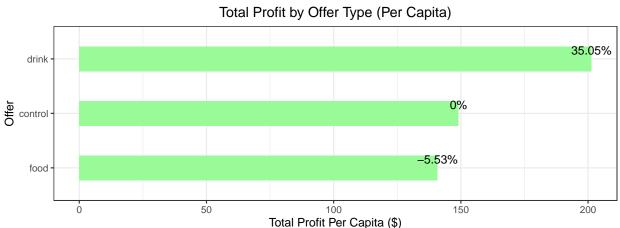
This report presents the findings of a study that analyzed the performance of different direct mail promotions on St. Patrick's Day. The study included three treatments that were randomly assigned to a pool of 1500 customers, with 500 customers in each treatment group. The purpose of this report is to provide data-driven recommendations based on the analysis of the A/B/C marketing test data. The study aimed to examine which marketing methods work best in generating revenue and profit while holding all other factors constant except for the food and drink credits provided in the promotions.

After conducting statistical tests, the key findings show that food and drink offers positively affect customers' overall response rate and increase average revenue on St. Patrick's Day. The response rates for the food and drink offers were higher than those of the control group, with the food offer generating the highest response rate at 30.4%, followed by the drink offer at 22.8%, and the control group at 19.0%. Additionally, the drink treatment group generated the most revenue, closely followed by the food treatment group, indicating that providing food and drink significantly boosts revenue and drives business operations.

It's important to note that ticket sales contribute significantly to the overall revenue, accounting for over 93% of the total revenue. This is likely due to the belief that food and drink offers would attract visitors, and it's highly likely that customers contacted would bring along family members, further generating more ticket revenue. However, the food treatment group resulted in a negative profit, meaning monetary loss is foreseeable if we offer \$10 food credits, even though it can help draw more visitors as \$6 cost is inevitable.







To further understand the problem, we examined the total profit by offer type per capita and found that the food offer has a negative impact on the overall profit (ticket and concession) per person, specifically -5.53% compared to the control group. While the food treatment is unsuccessful in terms of profit per capita, the drink treatment performs surprisingly well at 35.05%, meaning each responded customer spent 35.05% more compared to customers without any offers.

Based on the findings of the study, it is clear that the drink offer promotion is the most promising option for the Dallas Stars. This conclusion is supported by the statistical tests and data analysis conducted on the A/B/C marketing test. Therefore, we recommend that the Dallas Stars adopt the drink offer promotion as it has a sufficient increase in response rate and generates the highest revenue, showing the most promising profitability after deducting costs. By doing so, the Dallas Stars can capitalize on the success of the drink promotion to generate more revenue and drive business operations.

However, there are several limitations to this analysis. Firstly, the sample size is relatively small, which could lead to sampling error. Secondly, the data only includes fans who were mailed the offer, and we do not know how they compare to fans who were not mailed the offer. Thirdly, we do not have information on the demographics of the fans who responded. It's possible that certain groups of fans respond differently to different types of promotions based on age and income. These limitations should be taken into account when interpreting the results of this study.