

hw1: Dallas Stars Analysis

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Introduction:

I analyze the performance of the St. Patrick's Day direct mail promotion conducted by the Dallas Stars hockey team. The promotion had three treatments, randomly assigned to a sample of current fans:

1. Control group: No offer value, just a notification to celebrate St. Patrick's Day with a hockey game.
2. Food group: Same as the control group, but includes a \$10 food credit (costing the Dallas Stars around \$6).
3. Drink group: Same as the control group, but includes a free themed drink. The cost of this drink for the Dallas Stars when redeemed is \$2.

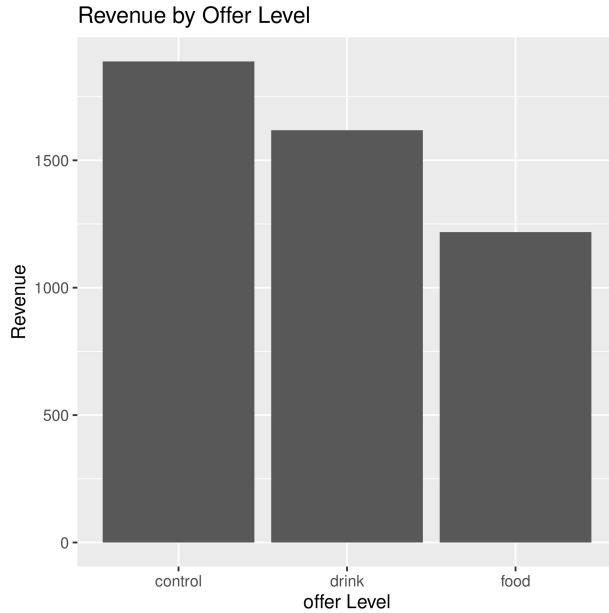
Findings:

Out of the total 1,500 fans who received the direct mail promotion, 24% responded. In terms of response rates, the food group had the highest response rate (30%), followed by the drink group (23%), and the control group had the lowest response rate (19%).

When looking at the revenue generated in terms of concession, the control group outperformed the other two groups. The control group generated \$1888.06 in total revenue, followed by the drink group with \$1618.14, and the food group with \$1218. However, food group outperformed the two other group in term of top-line revenue. Using statistical test when comparing top-line revenue of no offer and drink, we conclude the two group are significantly different with 95% confidence interval -2.47 and -0.45 dollars. Likewise with the control and drink promotion, and the drink and food promotion. Overall, the analyses suggest that both the food and drink promotions led to significantly higher concession revenue compared to the control group, and the drink promotion had a larger effect than the food promotion

Profitability comparison for 1500 customers

.	Control	Drink Offer	Food Offer
Pr(Response)	19%	23%	30.0%
Responses	95	114	152
Top-line revenue	\$1888	\$2618	\$4218
Contribution margin	\$1888	\$1618	\$1218
Average Revenue	\$3.78	\$3.24	\$2.44
Average Top-line revenue	\$3.78	\$5.24	\$8.44



Recommendations:

Based on these findings, I recommend that the Dallas Stars continue to offer no promotion to random sample in future marketing campaigns. Because the food promotion had a higher response rate and resulted in higher top line revenue, if we target customer that spend at least 10 dollars the food promotion will be profitable, following by the drink promotion have the a second higher response rate, generating more revenue overall.

Limitations:

It is important to note that this analysis has some limitations. Firstly, this was a one-time promotional campaign, and the results may not be generalizable to future campaigns. Secondly, there may be other factors influencing the response rates and revenue generated, such as the team's performance, the location of the game, and the time of year. Additionally, the concession revenue only represents revenue generated from those who responded to the promotion and not those who did not receive the offer, which may have biased the results.

Conclusion:

In conclusion, the no offer promotion was the most successful treatment in terms of revenue generated, and I recommend that the Dallas Stars continue to use it in future marketing campaigns to random con. However, it is essential to consider other factors that may influence the results, and further studies are needed to assess the generalizability of these findings.