

Apprentice Chef

Classification Modeling

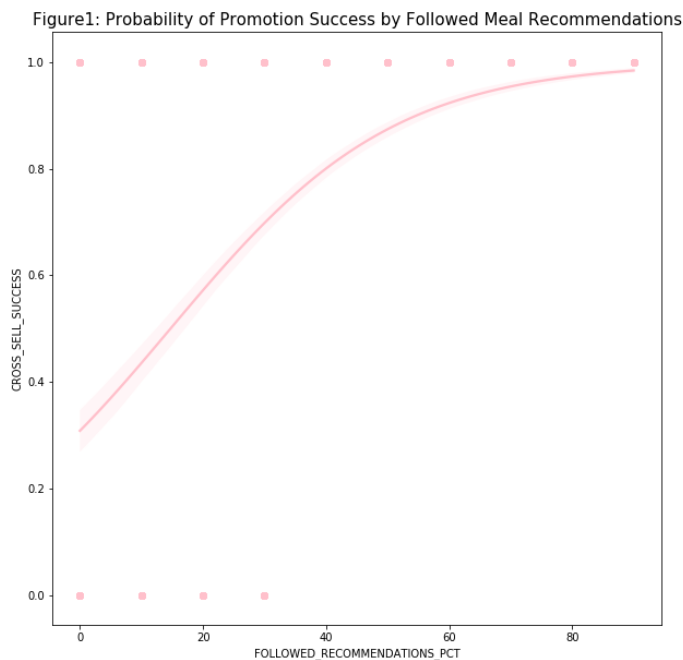


March 15th, 2020

Insights from Analysis

1. Promising possibility of promotion success for those who follow meal recommendations

Based on the Figure 1, it is found that those customers who have followed meal recommendations on the platforms at roughly more than 30% of ordering times accepted the *Halfway There* subscription by 100%. Moreover, those who utilize this platform feature at 70% of their ordering time contribute the most to the cross-selling success. It indicates that this customer segment, that utilizes the recommendation engine by 40 to 90% of their time, is more inclined to try whatever is offered/suggested to them at least once.



2. Customers email domain types have impact on the probability of being success in the promotion

According to Logistic Regression stats model, it shows both positive and negative correlations between cross-selling success and email domain types. It demonstrates that customers whose email domain type is classified as junk are 75% less likely to be success, while those whose email domain types are professional and personal are 150% and 18% more likely to be success respectively. The marketing team classifies these domain types based on email response rates, thus, it indicates the more response rates they have, the more successful the promotion can be.

Table 1 : Likelihood to be cross-selling success based on email domain types

Email domain type	Likelihood to be success in promotion
Professional	150%
Personal	18%
Junk	-75%

Recommendation

I suggest Apprentice Chef to offer customers a price range for *Halfway There* subscription. Based on the analyses above, it is obvious that cross-selling success depends on customers' ordering behaviors as well as their email response rates. It seems promising to obtain a certain amount of new subscribers by setting focus on only these customer segments, however, it is not a best solution in case to maximize the success. Just targeting those who utilize the recommendation at more than 40% of their time and also those who use professional email domains will discard those who are hidden behind the scene. Actually, 537 customers with less than 40% of recommendation usage signed up for Halfway There, while 625 customers with the same condition did not sign up. Also, the number of those in the personal domain group is 127% bigger than those in the professional group, although there is a significant gap in the likelihood of success in subscription. One possible reason for these factors is because there might be a difference in price elasticity to some extent. Therefore, giving customers a range of price for *Halfway There* with original and lower price model, expands opportunities to those who are more price sensitive as well.

AUC Score : 0.779

Reference

business.com. (02/15/2009). How to Boost Sales with Cross Selling and Cross Promotion. Retrieved 03/15/2019 from: <https://www.business.com/articles/how-to-boost-sales-with-cross-selling-and-cross-promotion/>