# Machine Learning Report

Case:

**Apprentice Chef Inc.** 



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### Introduction

This report highlights analysis on CROSS SELL Promotion, *Halfway There*. From the analysis, CROSS SELL SUCCESS audience can be targeted by exploring:

- Which customers follow our meal recommendations more than 20% of times?
- Which customers have used our Cancellation before noon policy at least once?

## **Insights**

Insight 1: Following our Meal Recommendations

"How should I eat?" is a question that many Americans ask daily (WSJ, 2020). Many are extremely health conscious especially towards obesity (body weight). They have their preferences towards food and have a good healthy life. And they encourage to take recommendations on what to eat. In this analysis, we found that about 45% of our total customers who followed our meal recommendation more than 20% of times subscribed to *Halfway There*. Furthermore, there is a close positive relation with total photos viewed on the web and mobile platforms as well. This shows that these customers trust our service and have taken the subscription.

#### Insight 2: Cancellation Policy

According to Toast's *Restaurant success in 2019* industry report, 51% of customers have used a restaurant's online order, while 38% used an aggregating service like GrubHub (Stine, 2019). Customer Loyalty plays a great deal in these platforms. In the analysis, we found that 47% of our total customers have subscribed to *Halfway There* who have got full refund on meal cancellation before noon at least once. Furthermore, from the model, about 8% and 28% of total customers who are Junk email users and professional email users respectively have taken up on the promotion. About 41% of those who have used cancellation before noon at least once are professional email users.

## Recommendation

The US Government, Office of Disease Prevention and Health Promotion (ODPHP) gives information on the eating patterns of U.S. There is high calorific intake by people which lead to obesity and other health related issues (ODPHP, 2015-20). Users who follow meal recommendations more than 20% times and have high total photos viewed rate can be targeted with small promotional discounts to take up the subscription. Also target customers who have cancelled before noon on their meal orders at least once. In this case, focus on professional

and junk email users. Give these customer segments who take up the subscription, special discounts, freebies with points-based loyalty programs.

When targeting these two customer segments, use marketing and meal recommendations that creates awareness on good eating habits that include right consumption of vegetables and proteins. This could create good customer loyalty, trust and have better success on our promotion.

#### Model Score:

The Model's Final AUC value obtained is 0.910.

## Reference

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