Insight 1

The most important feature to predict whether a costumer will subscribe to Halfway There is the percentage of time that the customer followed the personalized meal recommendation.

Our model shows that 587 out of 1459 customers in our database follow the recommended meals at least 35% of the time, and 100% of them ordered the new product. This can be attributed to both the unique value of Halfway There, and the accuracy of meal recommendations generated by the recommendation engine. For those customers are within the first twelve month of subscription are more likely to follow the recommendations, there is plausibly established trust in the recommendation engine.

Insight 2

Customers who use email domain from JP Morgan and Microsoft are substantially more likely to purchase Halfway There in the recent promotion.

When all the rest of the variables in the database are held constant, customers with email domain @jpmorgan.com demonstrate 88% probability of successful cross sale, or the odds of cross sale success for @jpmorgan.com customers over those who are not is 7.3. Similarly, in the same model, ceteris paribus, customers with email domain @microsoft.com demonstrate 88% probability of successful cross sale, or the odds of cross sale success for @jpmorgan.com customers over those who are not is 7.0.

Recommendation

Existing database captured insights such as the two previously mentioned, however, Apprentice Chef could have captured existing information to better predict cross sale success in the case of alcohol.

Particularly, even though ID data is collected for new mobile subscribers throughout the customer journey, it is not reflected in the database. Because alcohol delivery requires checking ID for legal drinking age, there is possibly a strong correlation between the presence of ID information in an account and whether this customer is likely to purchase alcohol on the platform.

Additionally, tastes and preferences which is collected in the customer sign up process can bear immensely valuable information as of what wine to recommend to the customer. Once again, accurate recommendation is an important tool to establish customer experience and trust. Analyzing customer taste and preferences could optimize the recommendation accuracy and hence cross sale success rates.

R Squared

Based on data analysis and comparing across several predictive models, the best AUC prediction accuracy is 0.734. It tells us that according to this model, there is 73.4% chance of accurately telling whether a customer in the database is going to subscribe to Halfway There.