Apprentice Chef, Inc. Insight Report

Insight 1: Contact customer service per total order rate

The increase in the rate of customer service contact per total order highly affects the decrease in revenue. The customer service team said that the majority of the call are complaints, so we can imply that this is the complaint rate. It might happen because of the low quality of food or bad service. Customer service is very important in this industry because if customers satisfied with our product and service, they will order more. We can increase our revenue by reducing the customer service contact rate.

Insight 2: Average time a customer watched instructional videos for meal preparation

The more customers spend time to watch our instructional videos, the more revenue we will get. There are some pages or accounts on YouTube and Instagram like Tasty or Tastemade that make cooking instruction videos, and it is very famous among people who love to cook. They show the easy way to cook some dishes that people can follow. The more interesting in our videos, the more people will follow and order our food. We can create videos that attractive to our customers to earn more revenue.

Recommendation

We can improve after-sales service to get more revenue from our customers. There are many ways that we can implement it.

First, we can organize training for our employees to improve service. It will increase customer satisfaction and make them want to order more next time.

Second, we can launch another survey for service scores after they receive the order. At this moment, we only have meal satisfaction rating information, which we do not know that customers gave us the score based on the meal or service. If we have separated data only about service, we can see how good we are, and we can know what the points that we can improve to deliver better service are.

Third, improve on our website, or social media account to provide more health tips and cooking videos to attract our existing customers. By providing knowledge and cooking tips, it will make them see us and increase the chance that they will make an order again.

Finally, keep tracking the changes after we implement it to see that we are doing good or with the plan not. I believe that this recommendation can help the company increase revenues.

Final Model

I decided to use XGBRegressor by adjusting hyperparameters as follow

learning_rate = 0.14,
max_depth= 4

Then, I calculated the R^2 by using cross-validation (cross_val_score())

score for training data set: 0.823
score for testing data set: 0.815