

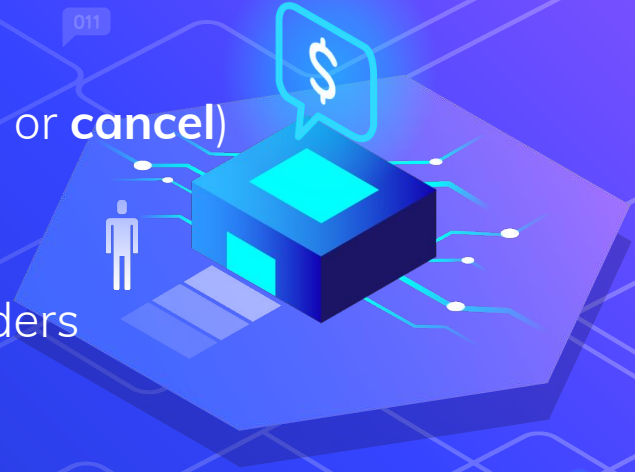
The Summary for Client

Delivery Rider Response Challenge



Challenge

- ❖ Why does riders react negatively (**ignore** or **cancel**) on a particular order?
- ❖ What factors can influence the predict riders reactions?



Approach

By developing Machine Learning Model to predict which reaction of a rider Likely to act in regards to a particular dispatch across the platform.

Real world Application:

Sendy company wants to minimize the rate of negative response (`ignore` and `decline`) of a particular order across the platform. Therefore the machine learning model should be able to catch perfectly all negative reactions `decline` and `ignore` and make sure doesn't classify `accepted` order as negative reactions.

Feature Generation

From the datasets provide able to generate:

1. Distance features[from **rider_to_pickup**, **rider_to_dropoff**, **pickup_to_dropoff**]
2. Time for particular order [**hours**]
3. Rating factor for a rider on particular order[**RF_@rider**]
4. Categorizing hours on early,day,evening and late hours

Insights

The greatest predictor of riders reaction are:

1. Active Rider Age
2. Number of Ratings
3. Distance from rider's location to the pickup location.
4. Rider amount of earning after successful delivery
5. Dispatch day
6. Dispatch hour

Earlier suspect was the number of order hits to a rider at a particular time.

Evidence of image attached.

Recommendations

From the insights I recommend to sendy company:

1. To Cluster prices depending on the distance
2. To specify/add riders status on the platform this will help to send orders to idle riders and reduce time consuming and orders rejection.