

# **Data Science, Machine Learning Case Study**

**Name-Mouparna Chattopadhyay**

**EMP ID-221150**

**COHORT CODE-CDB22DW022**

The social network I would like to build is “Love your Food “. This app can be used to make stop wasting your food. Building this app can help your business estimate the amount of food you need to make per day as per the maximum customer reach at your restaurant.

This app will target mainly the big chain restaurants as well as the small start-ups like homemade food delivery, small cafes etc.

## **What kind of data will be collected from its users?**

- For big chain restaurants the name of the restaurants, address, registration no.
- For home cooked meal the address and the neighbourhood locality, all the information about the owner like, name, phone no, any Govt approved Id.
- The NGOs who need those wasted foods also can register with their details, like no of people they are trying to serve, their address and etc.
- Amount of food they are preparing every day.
- No. of customer they are serving each day.
- How much food is getting wasted?

## **How you plan to use that data to help the users?**

- The food chains can sell their unsold foods at a lower price which is better than just to throw the foods out. And on the other hand, these types of deals usually provide a discount of 40%-50% on food items for those needy people.
- It is one of the most used principles for food waste management apps. The application connects the food outlets to NGOs that distribute food among the needy. A volunteer collects all the food from restaurants at the end of the day and delivers it to one in need and unable to afford it. In this way both of the parties get benefitted.
- This app can also help the users with the estimation of food they should prepare.
- Many people throw the food just to be on the safe side as they don't know the difference between expiry date, best before date, use by date, sell-by

date, etc. So, the mobile applications have arrived with the solution. People in households or merchants at eateries can scan packed food's barcodes. The app will send a reminder to the owner when the food is about to expire. So, the food will not be thrown away before the expiry date, and when the expiry date seems to be approaching, the owner can take better steps for sustainable management of that food.

### **What data products will be offered?**

- In your nearest neighbourhood area who need the food.
- Which are the nearest NGOs in the locality, you can connect to them through the app based on people the NGOs are serving, that you can provide.
- Feature your restaurants as “Zero Waste Food Chain” and showcase your responsibility towards the society.

### **How do I plan to measure user engagement with the platform?**

- Number of new users joining in the platform.
- Number of restaurants are trying to estimate their food and trying to less the food wastage.
- How much time does any user spend on this app?

### **What predictive and prescriptive analytics will be used?**

- Based on the locality given see which locality is more active and try to add more importance.
- There will be weekly and monthly appreciation program for the food chains who have estimated their food well and whose wastage of food is lesser.

### **How do I plan to use churn analysis in retaining making users loyal to the platform?**

- Whatever the personal data provided by the user, that will be totally private like IDs, Registration no., the name of the owner if they don't want to reveal it.
- Whenever there will be any questions in the helpline service regarding any issue by the user, the platform will predict the solution and inform the relevant preference to the user.
- Authentic information will be passed to all the users and checked before given to all the users.

- Machine Learning algorithms will be used to find trends of users leaving the site to find out the reasons and then fixing the problems.

## **How do I plan to monetize the platform?**

- The platform will collaborate with various food chains to promote reduction of food waste and show their ads to the users to inspire them.
- There will be subscription plan for users and those NGOs both as both are getting benefitted. There will be two types of subscription package-
  1. **Usual:** In this package the restaurants only can use the platform to sell the food. Or give away the food, contact the NGOs, the needy neighbourhood people etc.
  2. **Premium:** In this package the users will get all the benefits of the usual package and add on to that they can also participate in the weekly and monthly appreciation programs and can showcase their improvement, can get certificates from the platform.
- There will be 1 month trial period for the users to check what the platform provides.