

Problem Statement Worksheet (Hypothesis Formation)

Can Super Cue Café use a new store operation hours and/or provide a new seasonal staff schedule to yield more than 10% yearly net revenue than previous year?

1 Context

Boba joints are popular in the Bay Area that attracts students from middle school to grad school. Due to the majority of the customer database being students, it is only natural to find out what will be the most optimal seasonal scheduled hours for staff members and store operation.

2 Criteria for success

New staffing schedules for 3 to 4 seasons over the year in hourly basis and/or new store operation hours should be implemented before the schools start again.

3 Scope of solution space

Use the data provided to find out the optimal open/close hours, and staffing for maximum efficiency of staff members. A staff member must be in store one and half hour before store opens for prepping, and closing shift must stay another half an hour after closing hour for clean ups. Rule of thumb, for each \$100 sales, only one staff member is needed, but at no time should the store have only one staff member working. If the hourly sales doesn't reach \$50, the store will be losing money.

4 Constraints within solution space

- Since most of staff members are students, they would like to work 4~8 hour shifts only.
- By law, working shifts with 6 or more hours is required to take a 30-minute non-paid break.

5 Stakeholders to provide key insight

Store Owner
Store Manager
Shift Supervisor

6 Key data sources

The store's hourly sales data – Clover (POS) system has analytic tool that may extract certain raw data to compose such data set, which will be the datasets I'll be using.