CS147: POVs and Experience Prototypes

Team: Four's A Crowd Members: Adam G., Hailey S., Alex T., Victoria W. TA: Chris Min Studio Theme: Crowd Power Problem Domain: Creatively Managing Surplus & Waste in the Food Industry

I. INITIAL POV

From our first series of needfinding interviews investigating crowd power, we generated two POVs, one from the business manager's perspective, and one from the consumer's.

- 1. The Business Manager
 - a. We met Francisco (Pizza My Heart Manager)
 - We were amazed to realize how much surplus supplies is ordered so that they can provide adequate customer service and handle variability in demand
 - c. It would be game changing to provide Francisco and other business managers with the means to either predict or better react to variability in demand
- 2. The Consumer
 - a. We met Tracey (Average user/consumer)
 - We were amazed to realize that many people dislike the standard mall shopping experiences in favor of the more low commitment, low stress, game like opportunities of thrift outlets
 - c. It would be game changing to reframe the retail industry in terms of crowd power, empowering shoppers and consumers to engage in a dynamic marketplace

II. ADDITIONAL NEEDFINDING RESULTS

From our first round of interviews, we noticed a recurring theme around excess resources, particularly around food consumption and supply. We decided to narrow our subdomain to managing surplus and waste in the food industry.

	Alicia is the Associate Director for a nonprofit shelter and homeless support network named Project WeHOPE. She was chosen because shelters are often considered for donations when trying to deal with surplus. In our interview, we found out that the organization serves 3 meals a day to 55 people living in the shelter as well as to about 400 children per weekend. Our most surprising find was that places like Costco deliver bread and other perishable foods on a weekly basis. One new insight was that shelters like this one mainly just receive
Alicia Garcia Associate Director, Project WeHOPE	single food items rather than full meals.
	Jennifer is a manager at the Town and Country Trader Joe's. She was chosen because she represents a business owner who interacts with hundreds of different people each day and must manage changing food demands. We were interested in investigating how she deals with excess food. We found that this location works with 3 local community partners to donate what they call "shares and spoils", their excess of unsellable food. This amounts to about \$500 worth of food every day, and has been going on for about a year. The community partners are chosen through crewmember relationships (i.e. someone's church). Our most surprising find was that before the donation
Jennifer Manager, Trader Joe's Palo Alto	system was implemented, all excess was thrown away. A new insight was that "We like to have a tight-knit team of crewmembers. It's my job to keep the store running smoothly and productively. Giving back to organizations that crewmembers have close relationships is a culture thing. It makes our team better."
Elliot Stanford senior, semi- professional poker player	Elliot is a Stanford senior. He was chosen because he represents an average college student who enjoys eating out. We found that when deciding where to eat, Elliot often uses friend recommendations and Yelp; often returning to places he has been before. "We live in one of the most expensive places in the world." Our most surprising find was that he finds restaurants in the area noticeably more expensive than in the Midwest. A new insight was that he really likes promotions e.g. happy hours. Typically he finds out about these kinds of events by word of mouth or Googling. These deals are often motivating reasons to go out.



Mistie Vice President of Operations, Oren's Hummus, Palo Alto12

Mistie is the Vice President of Operations at Oren's Hummus and the President of EyeSpy. She also owns two other restaurants. We chose to interview her because she is a business manager with a highly successful restaurant.

In our interview, she talked about how managers have a lot of responsibilities including customer satisfaction, food quality, presentation, and staff relations.

Our most surprising find was that Oren's uses a company called Food Runner to pick up their extra food at the end of the night and bring it to shelters. Previously, they were not allowed to donate their "waste because of legal artifacts. A new insight she gave us was that "Coupons say you're desperate" because you shouldn't need them if you're doing well. For this reason, Oren's doesn't utilize coupons, but they do use in-store promotions to advertise other locations. However, she said she would be willing to try a coupon-like promotion that doesn't feel like a coupon. "It is very important to maintain your restaurant's image when marketing."

III. REVISED POVs

We revised our initial POVs and generated 10-15 HMW statements for each of our

new POVs. We have included our HMW statements in the Appendix.

Revised POVs:

- 1. The Business Manager
 - a. We met Francisco, Mistie, and Jennifer.
 - b. We were amazed to realize how hard it is to predict demand, to avoid surplus and waste, and to handle staff relations (particularly firing).
 - c. It would be game changing to provide business managers with better ways to predict or handle the variability of demand thereby reducing waste.
- 2. The Consumer
 - a. We met Elliot and Tracey.
 - b. We were amazed to realize how consistently consumers returned to the same businesses and how much price affected their decisions.
 - c. It would be game changing to offer consumers recommendations for new restaurants and shops along with promotions and discounts to incentivize them to eat out and shop more frequently and try new places.

IV. SOLUTION BRAINSTORM

We narrowed our list of HMWs (see Appendix) to 3 top choices by team consensus and then conducted a brainstorm for each.

(1) HMW give consumers a way to engage with waste in the retail/restaurant industries?

Example Solutions:

- 1. Make consumers take what they don't eat
- 2. Flash Happy Hours at nontraditional times/flash sales & instant coupons
- 3. Uber for leftovers

(2) HMW allow managers in the food industry to influence demand?

Example Solutions:

- 1. Restaurant grouper: discount on one food place if you go to another
- 2. Slider for demand
- 3. Page Rank for Restaurant Consumers: Reward system based on how many new people you bring to the restaurant

(3) HMW make the process of choosing a place to eat out at less stressful & more fun?

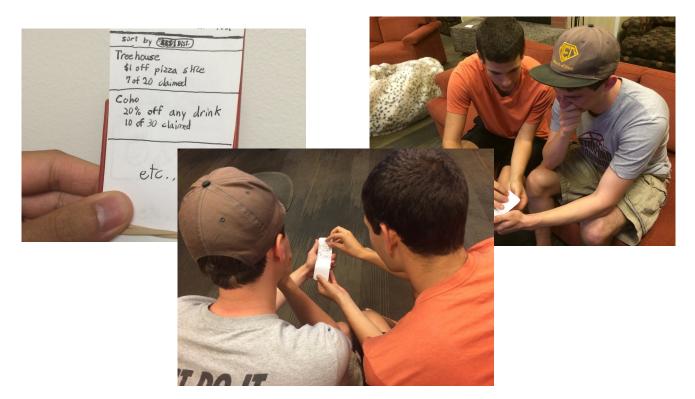
Example Solutions:

- 1. Pick your Niche: Combined menu from multiple restaurants
- 2. Fill out quizzes that give you your fated restaurant for the evening
- 3. Food profiles for each person (ie. vegetarian, massive steak addict, peanut allergy); add people to a eating group; generates short-list of restaurants

V. EXPERIENCE PROTOTYPES

(1) Flash Happy Hours at nontraditional times/flash sales & instant coupons

Our assumption was that consumers would be willing to use our dynamic couponing app to help make eating decisions. We made the prototype by drawing our interfaces on iPhone-sized pieces of paper and then rubberbanding them to an actual iPhone.



The interface was clear and the idea came through. From the consumer side, the idea was very appealing – it's hard to disagree with discounts. The prospect of seeing a deal and then having it disappear or expire was annoying. One thing that was surprising was that showing the number of people who claimed the coupon didn't work so well (i.e. 7 out of 20 claimed). Elliot found this confusing and potentially frustrating.

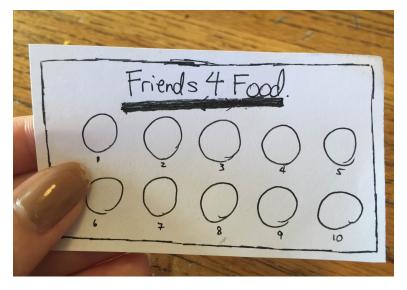
We were surprised to learn that he preferred the idea of getting notifications from our app. We also learned that consumers were okay with the transience of coupons. The assumption behind this solution was valid. Elliot gave very positive feedback, citing that he would definitely go to a restaurant if he saw the offer from our app. He was very supportive of being in the know regarding deals and having good, affordable options.

We also tested a business-facing prototype with the manager of Fraiche in Tresidder. He liked the idea of being able to distribute offers instantly and have them last shorter intervals like a few hours. This validated our assumption that businesses would be willing to use such offers to increase demand. An important issue he raised was that group management normally makes the decision on coupons and offers. This gave us the new insight that we would need to give managers the power to make promotions in a way that does not feel threatening to management.

(2) Page Rank for Restaurant Consumers: Reward system based on how many new people you bring to the restaurant

Our assumption was that users wanted a tangible incentive for bringing their friends to eat at a new restaurant. We found from our needfinding that users tended to default to the same restaurants. From this, our solution was to reward users for going back to their favorite restaurants, and to leverage users' circles of influence.

The first prototype was a physical stamp card that users would bring to a restaurant.





This prototype did not work well - users were worried that the card would make them appear "cheap", and were easy to lose, hard to personalize. We pivoted and made a digital version, prototyped with a QR code on an iPhone.



This prototype was better received. Users liked that it was easy to pull up, was a familiar format, and that could be discretely used at restaurants. The negative feedback mainly revolved around the fact that users often forgot to check-in to get rewards. This was surprising since it undermined our assumption that free food would incentivize people to use this app and evangelize their favorite restaurants.

(3) Food profiles for each person (ie. vegetarian, massive steak addict, peanut allergy); add people to a eating group; generates short-list of restaurants

With this solution, we assumed that one of the barriers to trying new eateries is that you do not always have somebody to go with. Additionally, the underlying assumption of the solution is that community building can be facilitated in reasonably sized groups with common interests. In this case, the common interest is food. Like our first solution, we built a paper prototype that mimics the experience of an iPhone app. We tested the prototype on Maria, a customer at Philz coffee in Palo Alto. She was able to navigate the app very easily and commented that "the flow makes sense." She also appreciated the use of icons and the fact that the app focused on her specific food preferences. On the other hand, Maria found the "Looking For..." concept confusing as it was unintuitive to her that this feature was for delineating new friends, romance, etc. One thing that surprised us was that Maria wanted to be able to start a new group, which directly contradicts the "fear of being the first in the crowd" idea found in our initial needfinding. Additionally, she discussed her desire to have both public and private groups. We found that the assumption behind this idea was valid as Maria responded very positively to the idea of finding new friends and having "dates already built in and planned" through the app. She also confirmed the need for it by stating that she hates eating alone and thinks that this would help that.

VI. NEXT STEPS

In trying out each of our three experience prototypes on real users, we found that the consumer facing side of the Flash Happy Hours was most successful. We had the most positive response from both the business and consumer audience. Businesses were interested in being able to make additional revenue at a discounted price, though highlighted their concern around the appearance of coupons. Businesses were also excited about the idea that the flash hales gives them control over when they give promotions and additional gives them a channel for which to distribute excess or surplus food. Consumers were interested in eating good food at greater discounts, and also were intrigued with the idea of gamifying the eating experience. We are currently considering pursuing this idea further; however, before we make a final decision we hope to engage with our studio regarding our other ideas and prototypes.

VII. Appendix

HMW statements per POV:

The Business Manager:

- 1. HMW help business managers connect with reliable community organizations in order to share surplus/spoilable items?
- 2. HMW reduce the amount of food that grocery stores donate or throw away and increase store revenue by selling them instead?
- 3. HMW make crowds/demand more consistent?
- 4. HMW make it easier to order less surplus food supplies?
- 5. HMW allow managers to predict variable demand?
- 6. HMW allow managers to influence demand?
- 7. HMW make managing staff relations enjoyable?
- 8. HMW make the process of producing or purchasing surplus items valuable to the business owner?
- 9. HMW make wasted food, clothes, etc a desirable outcome?
- 10. HMW make this unfrequented business a desirable place to go?

11. HMW make coupons seem less taboo for businesses?

The Consumer:

- 1. HMW make close to expired food more desirable to consumers/eaters so that they are inclined to purchase it?
- 2. HMW help hungry/broke college students find good quality food at peak eating hours when typical discount deals (happy hour specials) are not offered?
- 3. HMW create a dynamic marketplace for food?
- 4. HMW leverage a consumer's consistent restaurant visitation in an innovative way?
- 5. HMW make the process of choosing a place to eat out at less stressful & more fun?
- 6. HMW make the benefits of a service like Groupon more consistent?
- 7. HMW gamify the indecisiveness of consumers?
- 8. HMW incentivize consumers to eat out every night?
- 9. HMW give consumers a way to engage with waste in the retail/restaurant industries?
- 10. HMW integrate recommendations and discounts in a more cohesive way?
- 11. HMW offer consumers location-based notifications about promotions in their area?

(1) HMW give consumers a way to engage with waste in the retail/restaurant industries?

Solutions:

- 4. Blender: recipe builder from restaurant surplus food postings
- 5. Make consumers take what they don't eat
- 6. Consumers bring waste to homeless shelters
- 7. Offer food/discounts in exchange for delivering food for donation
- 8. Waste tracker in restaurants/supermarkets
- 9. Food giveaway/notification system
- 10. Flash Happy Hours at nontraditional times/flash sales & instant coupons
- 11. Surplus food cornucopia with challenge to earn discount
- 12. Uber for leftovers
- 13. AYCE groceries; but if there's waste, you have to pay a larger x the retail cost

(2) HMW allow managers in the food industry to influence demand?

Solutions:

- 4. Flex menu: recipe chooser for restaurant chefs; top votes for new menu items
- 5. Make couponing more attractive
- 6. Restaurant grouper: discount on one food place if you go to another
- 7. "Test drive": free samples, etc.
- 8. Combining entertainment with food business
- 9. Within-restaurant reward system (i.e. 4th visit, sit with the chef), equity in restaurants
- 10. Tinder for restaurants
- 11. Slider for demand
- 12. Restaurant hot spot tracker by time & location
- 13. Page Rank for Restaurant Consumers: Reward system based on how many new people you bring to the restaurant

(3) HMW make the process of choosing a place to eat out at less stressful & more fun?

Solutions:

- 4. Meal planner app based on location
- 5. Machine learning recommendation system
- 6. Pick your Niche: Combined menu from multiple restaurants
- 7. Spin the wheel recommendation system
- 8. Earn points and rewards for trying new restaurants
- 9. Countdown to claim food at a restaurant
- 10. App that rewards free food for loyalty
- 11. Top restaurateur: leaderboard for how many places you've been to, recommendations & featured places, missing places nearby listed
- 12. Fill out quizzes that give you your fated restaurant for the evening
- 13. Anonymous voting for restaurant options
- 14. Food profiles for each person (ie. vegetarian, massive steak addict, peanut allergy); add people to a eating group; generates short-list of restaurants