#### **Product**

For anyone who is always looking to try new things but is plagued by the burden of choice/ decision paralysis, Rek is an app that brings recommendations from those you actually trust. Unlike with Google Maps or Yelp where you're relying on reviews from strangers, bots, and sponsored content, Rek keeps it real.

The value we provide to users is that they attain a restoration of trust in the review system by way of high-fidelity assessments of merchants. Moreover, they can tap into the network element for a more effective way to solicit recommendations. Instead of pinging your friends individually to see what you should do, the app provides a simplified, aggregated view of what your friends have done and prefer.

The value we provide to businesses is that they can now protect their business from fake reviews as the widespread visibility of those reviews are, by construction, limited to the reviewers network.

In the context of fake reviews, businesses now have a new tool for identifying and isolating. The identification process is a data-driven approach built on examining network characteristics.

In the context of data, a business now has a new and distinctive source of data that can illuminate the network dynamics of current and potential customers.

## Market Segment

#### **Users**

Our target users live in a metropolitan area where there are an abundance of things to do within the domains of dining, physical activities and experiences (either adventurous or cultural). Moreover, within each of those domains, by virtue of being in a densely populated urban area, there are a multitude of competing options.

Our target user enjoys trying new things and allocates a decent portion of their disposable income to the pursuit of these new adventures. However, they are diligent and discerning in what they put their "dollar votes" towards (typically doing some amount of upfront research to determine which option is best reviewed).

Our target user engages in some degree of social media usage. That degree ranges from **somewhat active** which can be characterized as a desire for convenient and low-touch connection with their network. They occasionally share elements of their life but are more inclined to ingest the shared digital life of others in their network. The other end of this range are the **very active** social media users who share frequently and are also willing to provide in-depth

commentary/prose about an experience. More specifically, they are inclined to leave reviews with respect to their experience with different merchants in the event that they have either a particularly pleasant or unpleasant experience.

#### **Businesses**

Our target businesses also operate in a metropolitan area where, from their perspective, there is an abundance of citizens/professionals with a willingness to explore and pay to try something new.

Our target business is more likely to be just getting started. They may attain the curiosity of potential customers by way of their newness and novelty but it is critical that the business make a favorable first impression to establish a foothold for growth and future success. In the context of this app, these businesses are especially vulnerable to negative reviews, press or word-of-mouth. More specifically, they cannot afford to fall victim to a "negative review army".

Our target business has a willingness to experiment. More specifically, a willingness to try new technology that can provide key business insights by way of market intel and network segments within the local area that can make for great potential customers.

## Hypotheses

## 1. Expanding Users' Connections

## Persona - May Bauer - Creating Personal Connections

#### **Demographics:**

25 years old

Single

Lives in Chicago

• Education: Bachelor's Degree

• Income: \$85,000

#### Behaviors:

May moved to Chicago for her new position a few months ago. She's active, outgoing and friendly. Although being new to the city, May started making new friends from work.

May eats out about 5 times a week and tries to find a new place to eat once a week. She also goes out every weekend for activities ranging from exploring new restaurants to attending cooking classes.

Being open-minded, May also adapts well to new technologies and innovations.

#### Pain

Most of her activity/dining selection process involves laborious and time-consuming research across the myriad, pre-existing review platforms. Oftentimes this is a success (i.e. the reality of the experience matches expectations on the basis of research) with a few exceptions...

Scenario 1 - A quick decision based on what are later deemed to be 'suspicious' reviews
She is busy and quickly picks a restaurant that is close and has high-scores without doing more
in-depth research but is grossly underwhelmed by the dining experience. She reads through
the reviews after the fact and finds they are light on substance and from "out-of-towners" whose
profile pictures look like a stock photos

In hindsight, with a deeper inspection, she would have not trusted these reviews

#### Scenario 2 - The tourist trap

In terms of identifying weekend adventures, the conventional review systems filter her towards the high-profile and broadly-known attractions of her new city. Consequently, these experiences are limited in number and are often-times crowded as tourists make use of the same platforms as she does.

She wishes she can find experiences that are fun but less-traveled Current alternative(s)

She can eat out less and take less weekend excursions but, given her personality, she would not be happy.

#### Scenario 1

She can continue to commit to the manual process of identifying "suspicious" reviews but this remains time consuming

#### Scenario 2

She can rely on local periodicals (e.g. Time Out Chicago or a local newspaper's event calendar) but this again requires time-consuming and laborious research

#### Generally

Being new to the city her network is limited to the co-workers she has befriended. They have invited her to events as part of work functions and outside of work. She has greatly enjoyed each of those experiences as she and her co-workers are of a similar age, income and set of tastes. Moreover, they required no effort on her part for discovery via "water-cooler" talk her co-workers, having background knowledge of what May likes and does not like, provide recommendations that she has pursued on her own time and also enjoyed.

However, the frequency of outings with her co-workers is limited and the frequency of these "water-cooler" recommendations is limited. May also sometimes feels bad partaking in these conversations as she has little recommendation or stories to share with others. What she has found from her own research, her co-workers have been aware of for several years. In general, she does not want to hassle these new friends with consistent recommendation requests.

What she really wants is continuous recommendations that she can trust and that require little research on her part. To that end, she wants continuous recommendations from her co-workers without demanding effort, time or attention from her co-workers. She would also ideally want to access the friends of her co-workers who are a part of the network of people that have been in the city longer. They are connected and in-the-know, and they know both what is good but also what is somewhat of a secret or new but worthwhile.

Action to be taken

We want to eliminate the uncertainties from the 'opinions of strangers' effect by allowing users to connect with their friends on Rek and only see their recommendations and reviews. May's network in her new city is her co-workers – many of which she has already "friended" on social media.

Rek permits her to search the recommendations and reviews of her co-workers based on specified parameters such as "cuisine" for restaurants or activities that are physical or cultural. It also allows her to see the recommendations with the same parameters from the friends of her co-workers that will expand the universe of endorsed activities revealing to her what is new and novel but very much worth trying. Connecting on the basis of shared interest and taste also gives May a chance to widen her network. Once May is established in the city, she cna "pay-it-

forward". In time, she can build her own system of how to discover new and exciting things and how to share those with the network that have helped her to date.

#### Expected outcome

We expect higher engagement on Rek as there are more recommendations. In addition, it will help us retain current users when they see the values and benefits of Rek. Rek can be a conversation starter for those who may be connected through a degree of separation but share similar taste or interest. This not only helps users expand their network, but the network effect will increase adoption for Rek.

### 2. Encouraging User Engagement

## Persona - Kyle Finch - Small Business Champion

#### **Demographics**:

45 years old

- Married, with 2 kids

- Lives in Boston

- Education: Master's Degree

- Income: \$130,000

#### Behaviors:

Kyle is a gastronomer, who is active in his communities. For example, he often volunteers at his kids' school events and holds a weekly meeting for his book club with neighbors.

Kyle takes his family out to nice restaurants every weekend and sometimes his wife to dates at fun and romantic spots around the city.

#### **Pain**

Kyle's quiet municipality near Boston proper just welcomed a new ramen place, Slurp Station, down the street and tucked away from the busier business streets of his neighborhood. Kyle loves ramen and has been yearning for a restaurant to open near him. He's one of the first to dine there and finds it exceeds all his expectations.

Kyle wants this place to succeed but worries that there are not enough patrons in the restaurant and its location does not enable the walk-in element for broader discovery. So Kyle wants to waive the banner for Slurp Station and spread the word like wildfire through his neighborhood. Current alternative(s)

Kyle can use a pre-existing review platform to give Slurp Station good press. However, they are not yet on Yelp so Kyle has to add the business to the platform by manually inputting their business information.

However, his target audience (his neighborhood) does not receive notifications when he writes reviews on any of these pre-existing review platforms. His review goes out to a broad audience and he ultimately feels his work will have little of the intended impact unless someone in the neighborhood explicitly searches for "ramen" or "japanese food" within their area.

He targets his network within the neighborhood as he thinks their patronage will have the biggest long-term impact on Slurp Station and so he goes about the manual and time-consuming channels of informing them about this new business. He has a group text thread with his foodie neighborhood friends. That's one step but hardly enough to give this place real traction. Otherwise, he has the old-fashioned word-of-mouth approach so he talks to: other parents in his kids' classes when he goes there to volunteer, his book club members and his neighbors via the opportunistic conversation. Having spread the word through these channels,

it is then upon his neighborhood to recall that information and act upon it by visiting the business.

Action to be taken

He's connected with the bulk of his neighborhood (his target audience) on social media. He wants to write a rave review of Slurp Station and then blast it out to his target audience. Rek enables this via a seamless process known as the "crave wave". Rek enables Kyle to achieve his intended action via a sequence of 3 steps.

# Step 1: Slurp Station is not yet on Rek, but Rek makes it easier to add new businesses. The fields typically required to add a new businesses are:

#### required

- o name
- address
- o contact information (phone, email)

#### optional

- business website
- o cuisine
- priciness category

Our app will provide Kyle with a button to load a new business when he cannot find it via search. That button will then bring up an input form where the name is pre-populated based on Kyle's attempted search. It will also pre-populate the address based on Kyle's phone location (the address and name are editable should he need to make an adjustment).

Kyle can then pre-populate the remaining items by either inputting the business' website or the text of a google search. From there, our app engine can automatically scrape the relevant source of information for the needed contact information. The only other manual inputs required from Kyle are "cuisine" and "priciness category". The "cuisine" field will auto-populate as Kyle starts to type words based on pre-existing keywords within our app engine database. The "priciness category" is a drop-down selection field with a small handful of options.

Once Kyle submits this form, the business is in a "pending" state. Kyle can input his review (with photos) and have that review locked and loaded until the business owner approves the pending listing of their business on the app.

#### Step 2: The business owner confirms their registration on Rek

If the contact info includes an email address for the business, Rek will automatically send an email to that address with a link that, once clicked, will:

- prompt the business owner to download the app
- confirm their business information
- register the business with Rek

If the contact info only includes a phone number (or the emailed message has not been responded to for some time) then a human sales associate will reach out to the business owner through that number, walk them through the Rek process and its benefits, and then ask for an email to initiate the aforementioned workflow.

#### Step 3: Make a "wave"

Kyle receives a notification that Slurp Station is finally registered on Rek. He is then asked if he wants to send a "crave wave" to a targeted group of friends. Of his target audience, almost none are currently on Rek, but they are connected on other social media platforms. Within Rek, he then builds a targeted list from his social media contacts and hits a confirm button to mass message his review. Everyone in his target list either receives an email or message (native to the other social media platform) indicating that Kyle has a restaurant he wants them all to try. Within that message is a link for them to download Rek and set up an account.

A subset of that target list ends up going to Slurp Station. When they arrive at the restaurant, they receive a notification on their phone asking them to check in. Our app engine can discern that Kyle had recommended Slurp Station to them previously. The app asks the user to confirm if Kyle's review brought them here.

Expected outcome

Many users might abandon their reviews midway through upon realizing the business is not on Rek, having to manually input information. This also creates a redundancy. If one user gives up on inputting new information to Rek, another user needs to take on the burden of going through the whole process again. Eventually, if no one completes the process, the information will never be added to Rek, and the users' efforts are in vain.

With the new feature, we expect the users to be able to write reviews with ease and have better user experience. This should encourage users to add new businesses to Rek, allowing users to add reviews to the existing businesses on Rek and driving more recommendations.

By championing the business via the "wave" feature, Kyle finds a seamless means of mass marketing Slurp Station to his neighborhood. Moreover, he brings new users to Rek.

### 3. Attracting Business Users

# Persona 3 - Austin Tran - Scrappy and Savvy Small Biz Owner Demographics:

- 34 years old
- In a relationship
- Lives in Seattle
- Bachelor's Degree
- Income: \$65,000

#### Behaviors:

Austin is a proud owner of Cà Phê, a Vietnamese cafe. He has been in the food industry for 15 years, and is passionate about delivering best services and quality products to his customers. The cafe has been doing well and is recognized on social media.

Austin is also a technophile who is always on the lookout for new innovations. He is currently utilizing SEO and the cafe Instagram account to attract customers.

#### **Pain**

Austin is reasonably tech savvy and has notifications for his business enabled across the broad system of web-based tools (i.e. all review systems, Google Alerts, Twitter Alerts). He uses that technical leverage to facilitate his commitment to customer satisfaction. His business overall has a 4.5 rating on average across all platforms. He sometimes receives a negative rating in the 2-3 star range (everyone has an off day) but owns how he failed that customer and replies to their review to publicly thank that reviewer for their feedback, apologize for their bad experience, convey how they will address that feedback and warmly invites them back to give his restaurant another shot.

One day, however, Austin receives a high volume of negative 1-star reviews that seem very suspicious and happen to coincide with a competitor's business opening just down the street. Austin combs through these reviews and quickly discerns that they are fake. In most cases, the reviewers have zero Yelp friends, their profile was created just a few days ago, their only review is for his restaurant and, the kicker, a Google Image search of their profile photos reveals matching stock photos on the internet. Austin begins to examine the options at his disposal to address these fake reviews.

#### Current alternative(s)

Austin flags these reviews to Yelp as suspicious through his business account. From Yelp's customer service department, he receives an automated message stating that their team is looking into it (along with other reports) and that they will be in contact with him when they have more information.

Days become weeks as Austin does not yet hear back from Yelp. In that time, the negative reviews remain visible to all potential customers. What's more, the scale of these negative reviews have materially impacted his overall rating and he notices a drop in sales. He does some research and finds posts from other small businesses that have gone through the same ordeal with Yelp. These businesses indicate that Yelp is a very large company with many businesses under their umbrella. Further, they have a manual, human review process that can be time consuming. Worst yet, Yelp prioritizes reported reviews on the basis of those that pose a "valid legal concern" or that "might be offensive to other users".

On that basis, Austin's situation is unfortunately not a high priority. Another week goes by and Yelp's team replies to Austin with their findings. Sure enough, all of those review accounts were created in Jakarta. The reviewers didn't bother to mask their IP address and so Yelp can discern that the reviews were written in Jakarta. So Yelp surely determines that there is no way that these reviewers were in Seattle and were at Austin's business and subsequently deletes those fake reviews from the platform – finally restoring Austin's genuine business rating.

Austin, however, is furious at the lumbering and bureaucratic response from Yelp and the loss of revenue in that time.

Action to be taken

Austin was unfortunately hit by a fake review army (FAA) sitting on the other side of the world.

Rek requires that a user checks into a business before they can leave a review. Checking into a business requires that the user's phone location is reasonably close to that address. As such, a fake review army in Indonesia cannot be mirch his restaurant's reputation from their desktops on the other side of the world.

Say that location insurance was not in place. Suppose a local fake review army (LFAA) moves in down the street. They all walk by the restaurant, get close enough to check-in and subsequently write their negative reviews. By construction, Rek limits the visibility of those reviews to the business and to people within the network of the reviewer.

Going step-by-step through the workflow, when Austin sees a bad review he wants to know more. The reviewer is semi-anonymized like Yelp (i.e. first name and first letter of last name). However, Austin can click on the reviewer to see a dashboard with summary statistics of the reviewer's network. The dashboard does not reveal any personally identifiable information but instead includes the total number of people in the reviewer's network and numeric break outs of that network by: locality (city or municipality), university and employer.

In the case of a LFAA reviewer, Austin may see that there is either: no one in that reviewer's network OR other members of the LFAA in that reviewer's network. Therefore, Austin can, at that moment, have peace of mind in the fact that the impact of these fake negative reviews are muted and cannot reach his genuine target customers as they are unlikely to accept a random friend request from someone they do not know in the LFAA.

Austin can then report the suspicious reviews to Rek via his business account on the app. Rek's app engine can instantly and programmatically analyze the network of the reviewers to easily identify their suspicious nature and delete their reviews from the platform. Expected outcome

We are expanding the customer segment to the business owners. While the business owners gain benefit from Rek by being able to see customer feedback, we can increase the accuracy of the information by having the business owners confirm the information input by the users.

Further, we impose significant barriers for FAAs to affect Austin's business while also giving Ausitn a more streamlined and programmatic process for isolating and removing fake reviews.

## **Prototype**

Screens:

https://www.figma.com/file/KRXF49MAyot7b0INzATwIM/Rek-v3?node-id=0%3A1&t=aCniFAFeg0TuC0PU-1

Mockup:

https://meilin80502.invisionapp.com/console/share/TR6Z7NJ4U89/975211 360/play