

Project: Ramble

Context: MHCID Capstone

Timeline: 6 months, full time

Role: Lead Researcher

Teammates: Sarah, Kiyana, Julie

Research: Exploratory,
Evaluative, & Usability

PROJECT FOCUS

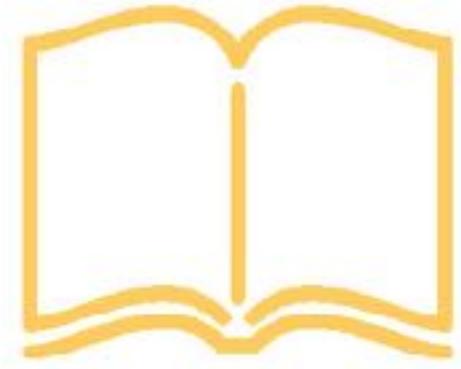
How can we help **female-identifying individuals** *feel and be safer* when walking alone?

Exploratory Research

- Lit Review
- Competitive Analysis
- Expert Interviews
- Field Research
- Diary Study
- Semi-Structured Interviews

Secondary Research

Literature Review



Environment
Perception of Safety vs Actual Safety
Gendered Exclusion
Technological Approaches
Qualitative Research Methods

Competitive Analysis



Panic buttons
Violence prevention
Location sharing
Crowd-sourcing
Wearables
Crime data



Services
Physical Defense
Personal Strategies

01



Subject Matter Expert Interviews

DANIELA ROSNER
HCDE Faculty

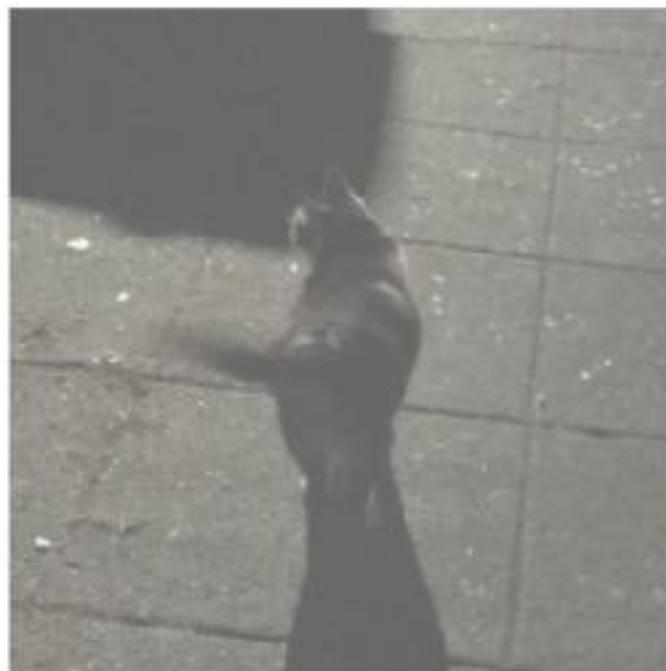
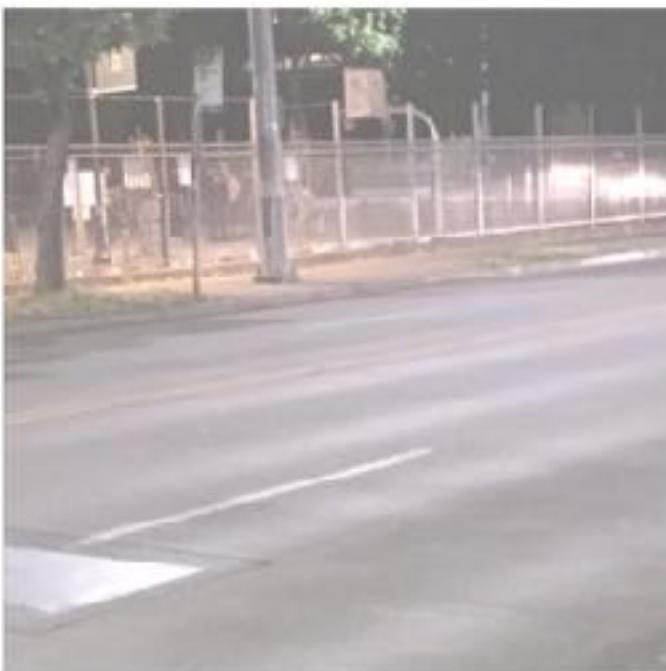
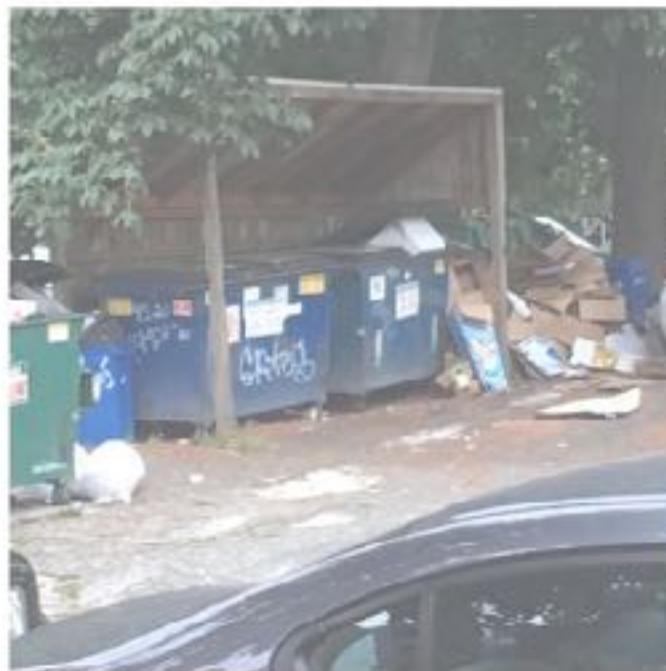
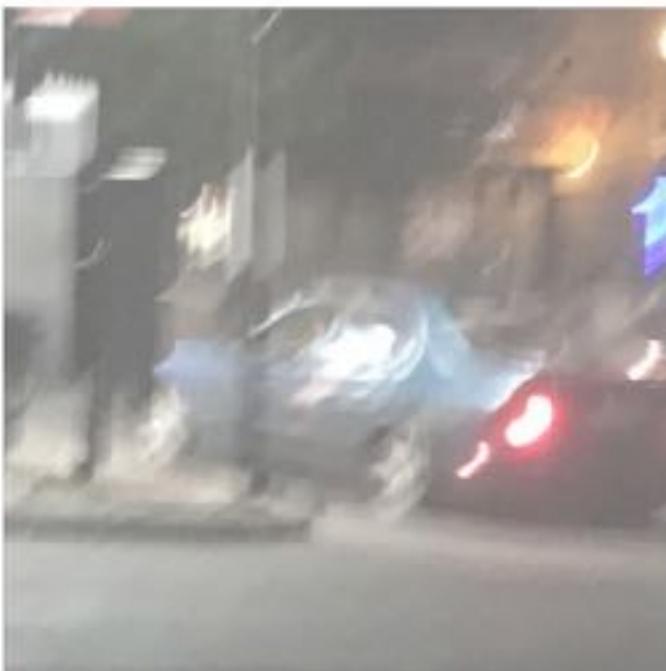
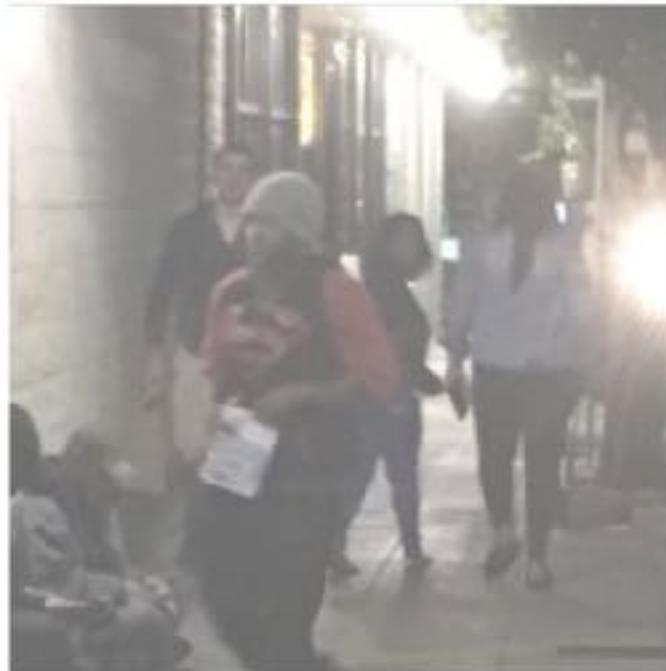
TARI NELSON-ZAGAR
Seattle Neighborhood Group Senior Program Manager

GILLIAN WICKWIRE
UW SafeCampus Threat Manager

NATALIE DOLCI
UWPD Victim Advocate

02

Field Research

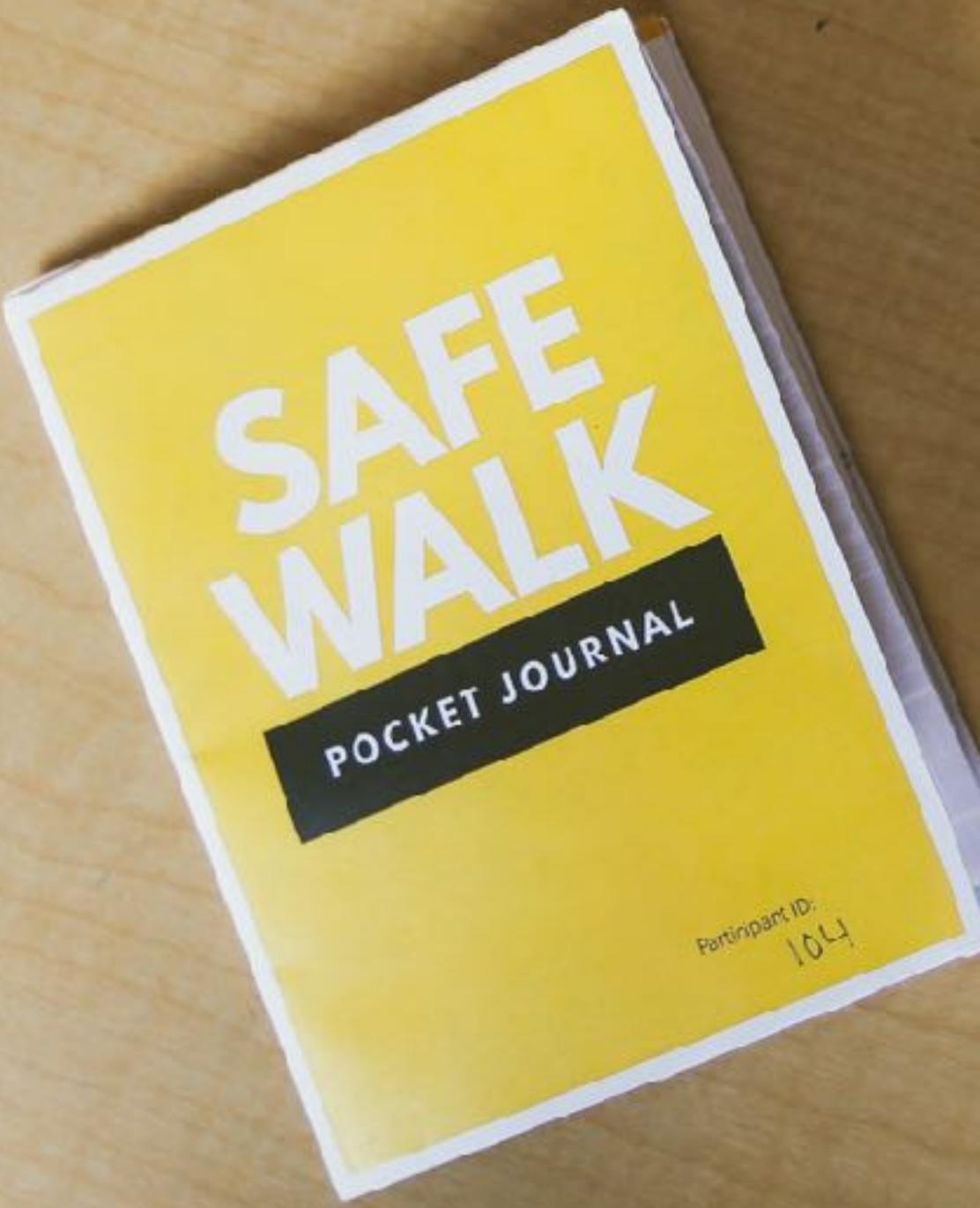


3 participants
(ongoing)

SUMMARY

Walk-along
Probing questions
Audio recordings

03



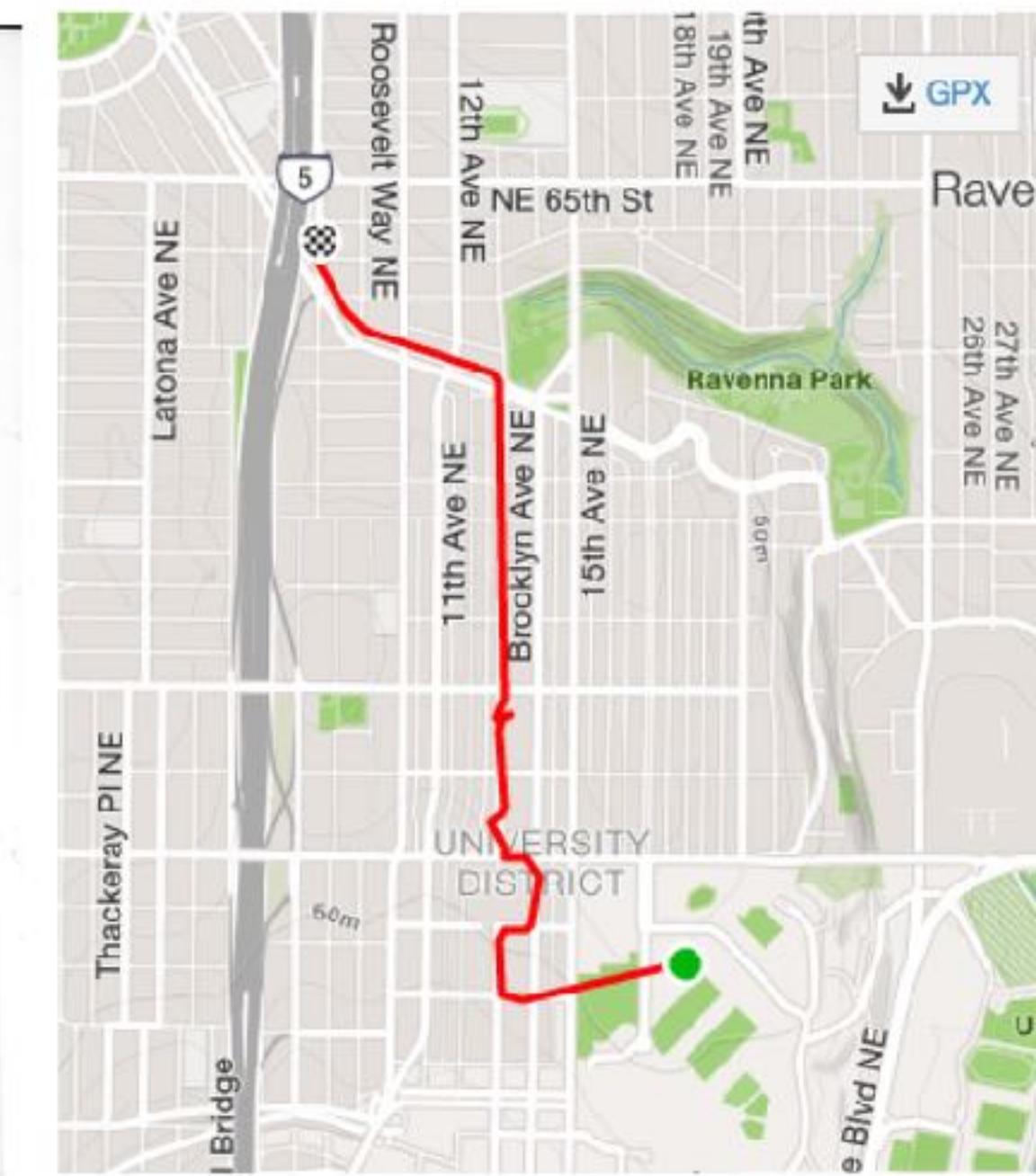
DATE	START TIME	END TIME	How did you feel?
5/22	11:07 pm	11:30pm	:)
Did you track on Strava? Y N			
Why did you take this path? Bus 372 is right in front of the apartment I was living in and it leaves me closer to my dorm.			
Would this route change if you had walked at a different time? For instance during the day or after dark? No because this is the closest bus			
Did you engage in activities while walking? I was texting my friend about how there was drunk people by the bus stop			
Did anything make you feel safe? the light at the bus stop and that there was another sober man at the bus stop talking to the drunk people.			
Did anything make you feel unsafe? The drunk people. A man asked me for a cigarette, also someone pooped on the seat at the bus stop so I couldn't sit down. There are also a lot of stores around. light out.			

Diary Study

5 participants

SUMMARY

Diary Questionnaire
Strava Tracking



04

Semi-structured Interviews

4 diary study participants
(one scheduled for next week)

AGENDA

- Lynch Map Exercise
- Diary Walk Discussion
- Seattle Map Exercise
- Semi-structured Interview Questions

1

Women are comforted by the presence of others, but often don't reach out

2

Features of the built environment impact perceived and actual safety

3

There are difficulties around assessing risk and escalation

OPPORTUNITIES

How can we facilitate easier communication of fear — both during and beyond the walk?

What can we give women to enable them to impact their surrounding environment?

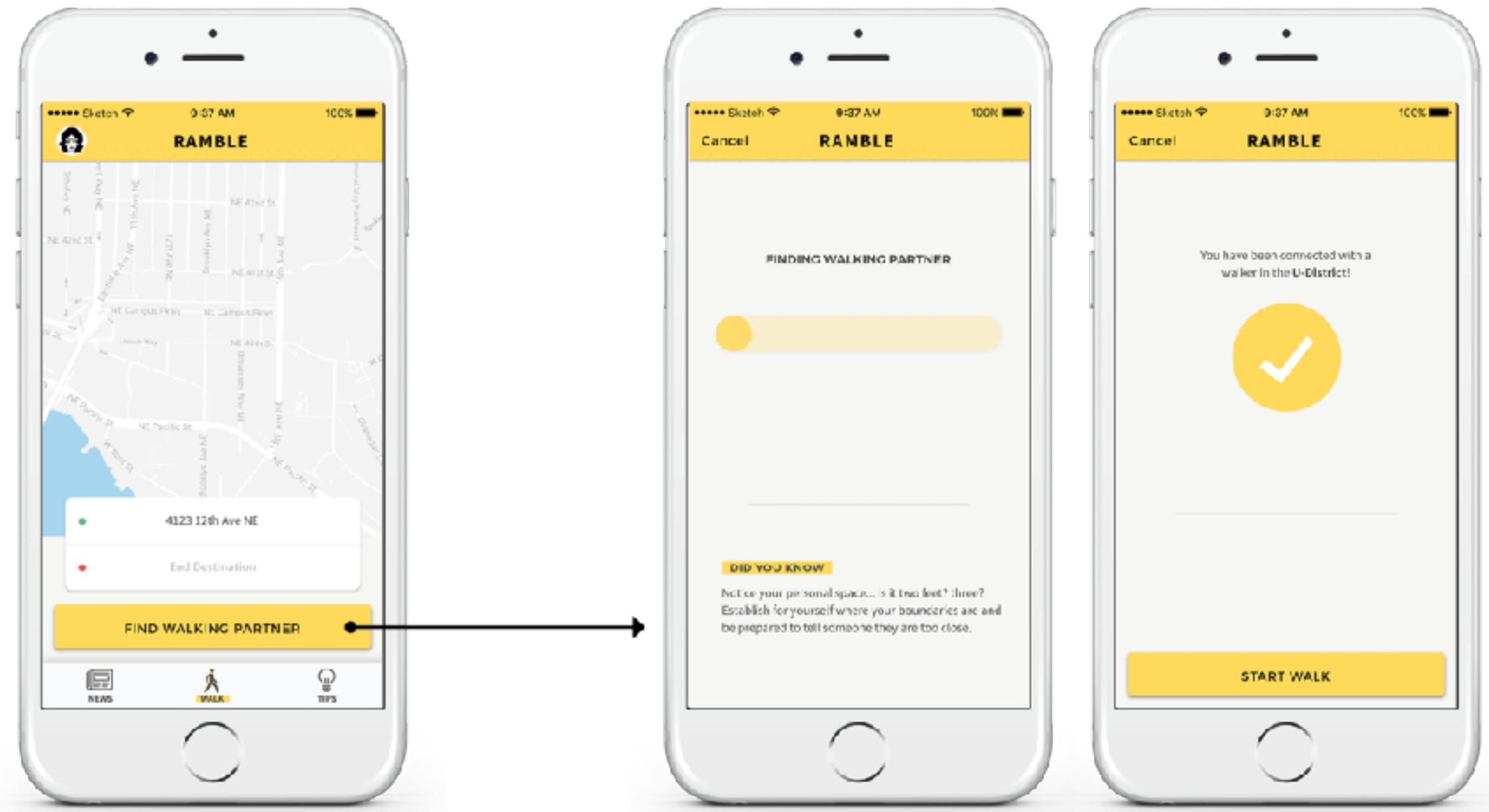
How can we help women feel confident in their ability to assess and respond to risks?

Ideation + Refinement

Through ideation, came up with >100 concepts.
Refined concepts according to how they stacked
up against our preliminary research.

MAKING WALKING SAFETY A SOCIAL FOCUS



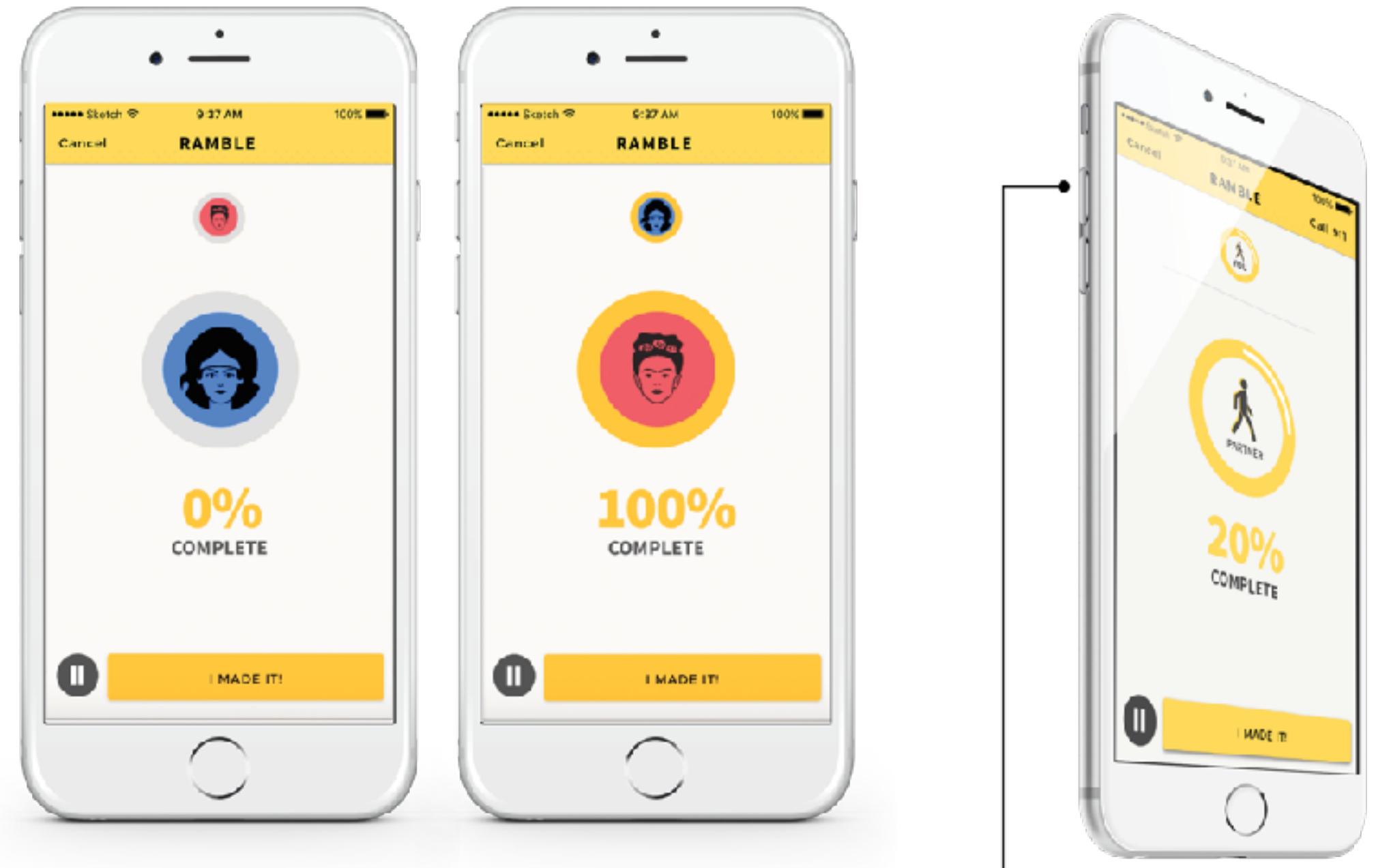


Enter Origin + Destination

When a user is ready to walk, they can navigate to the walking screen, enter their origin and destination, and then tap “Find Walking Partner” to continue. Origin and destination information are required in order to determine the length of an individual’s walk so they can be paired with another walker whose journey home is of a similar duration. Additionally, Ramble calculates progress towards walkers’ respective destinations to provide real-time feedback to partners.

Find Walking Partner

As a user waits to be paired with another walker, the JI displays a loading screen that features a safety tip. Presenting a user with a safety tip before they embark on a walk is an effort to increase a user’s awareness of their surroundings. Participants who tested the Ramble prototype preferred having a passive safety tip before they began their walk over having the partner sending a tip or not having a tip at all.



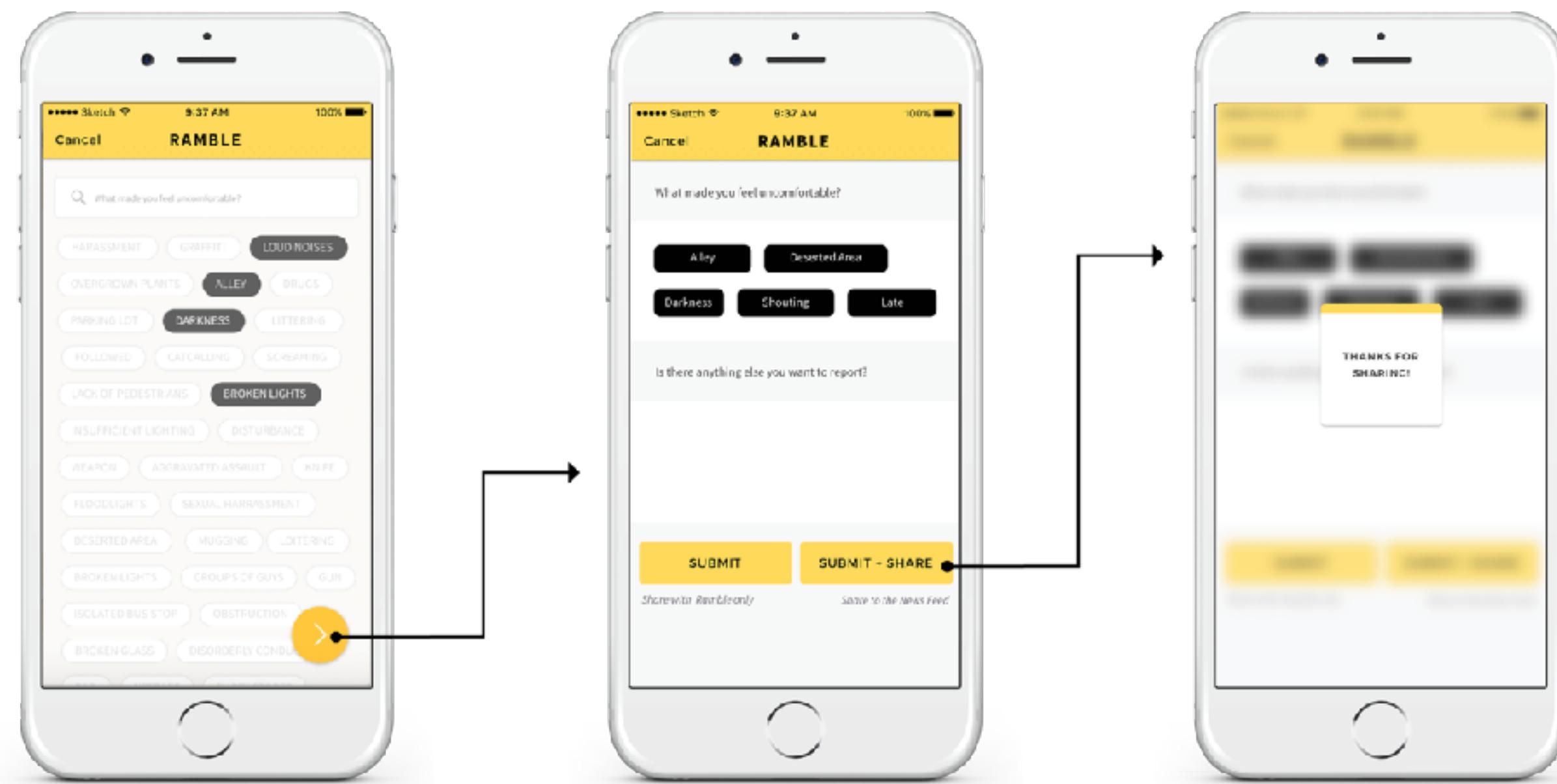
Walk / Monitor Partner's Walk

Walkers can monitor each other's progress by viewing the progress indicator. It is important to note that although walkers can view one another's progress, they do not know their partner's geographic location and the progress indicator is a simple circular loading graphic. This progress indicator underwent several iterations with the goal of becoming less realistic and less visually interesting as the original graphic was something concept evaluation and usability participants were distracted by.

Although walkers can view each other's progress, we believe it is important for walkers to avoid attending to their device screen because attending to a device screen prevents individuals from being mindful of their surroundings, which may increase the susceptibility of becoming a crime victim (USA Today, 2012). We intentionally designed these screens to contain as little information as possible in an effort to dissuade users from staring at their cell phone. A walker can indicate that she has arrived at her end destination by clicking the "I Made It!" button.

Share Feelings of Unease

Users are able to share feelings of unease with their partner by pressing the volume buttons during the walk. A rapid multi-press initiates a 911 voice call and shares your GPS location with the dispatcher. Walkers can also customize other escalation preferences.



Share Experience

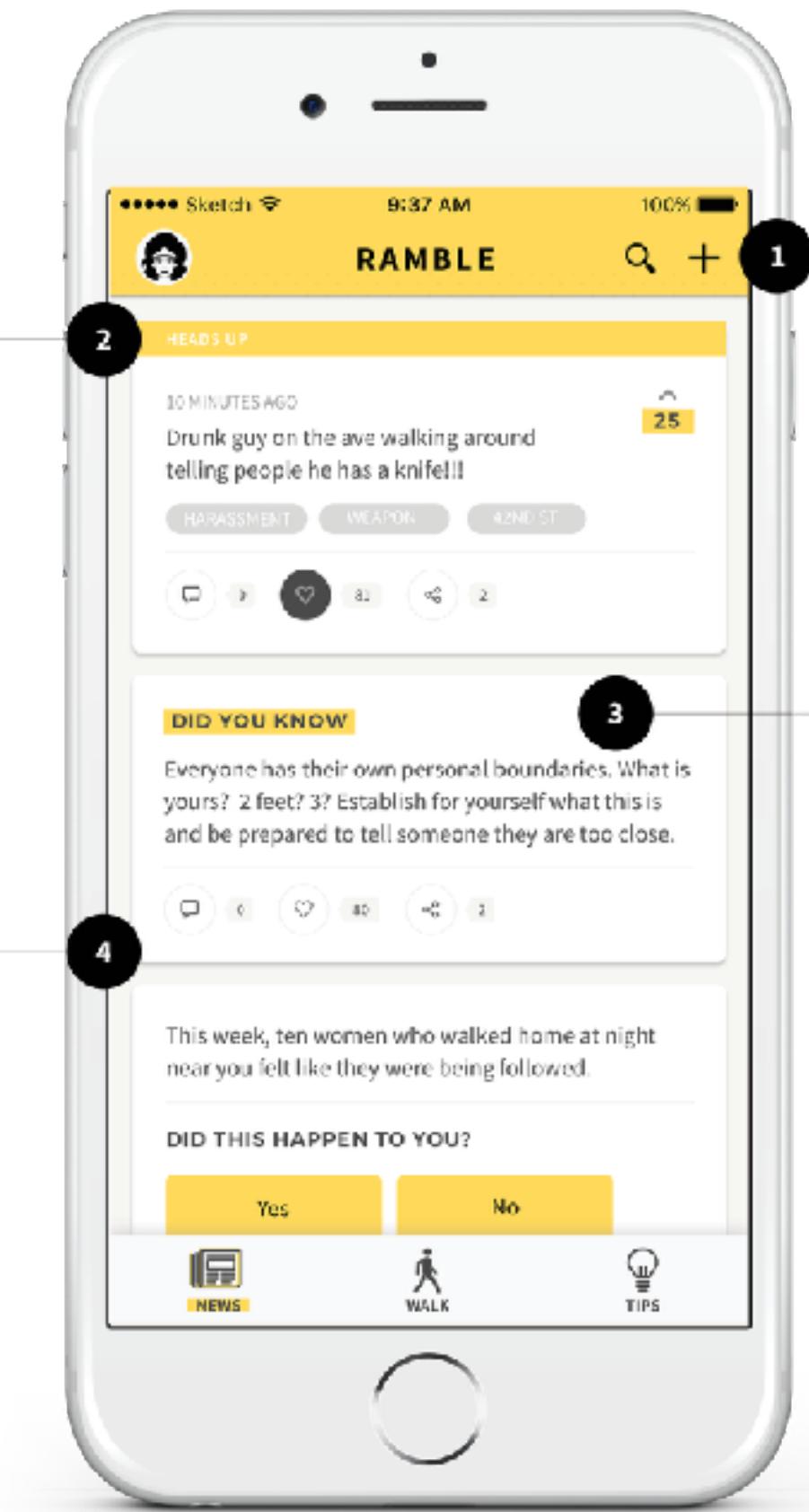
If the user signaled feeling uneasy during the walk, Ramble will prompt them to share more details about the source of said unease. Users are tasked with selecting relevant tags from a collection, giving users language about describing the environment they were uneasy in. Tags are “smartly” populated, that is, selecting a particular tag causes other related tags to appear. For example, selecting a tag labeled “darkness” would cause a tag labeled “broken streetlights” to appear.

Comment on Experience

If a user feels compelled to do so, Ramble allows them to provide written comments about the source of their unease during a particular walk. Users can choose to submit the experience to all users in the vicinity, or just to Ramble for aggregation purposes.

Share

This information is then used to determine areas that could be improved through environmental design.



"Heads Up"

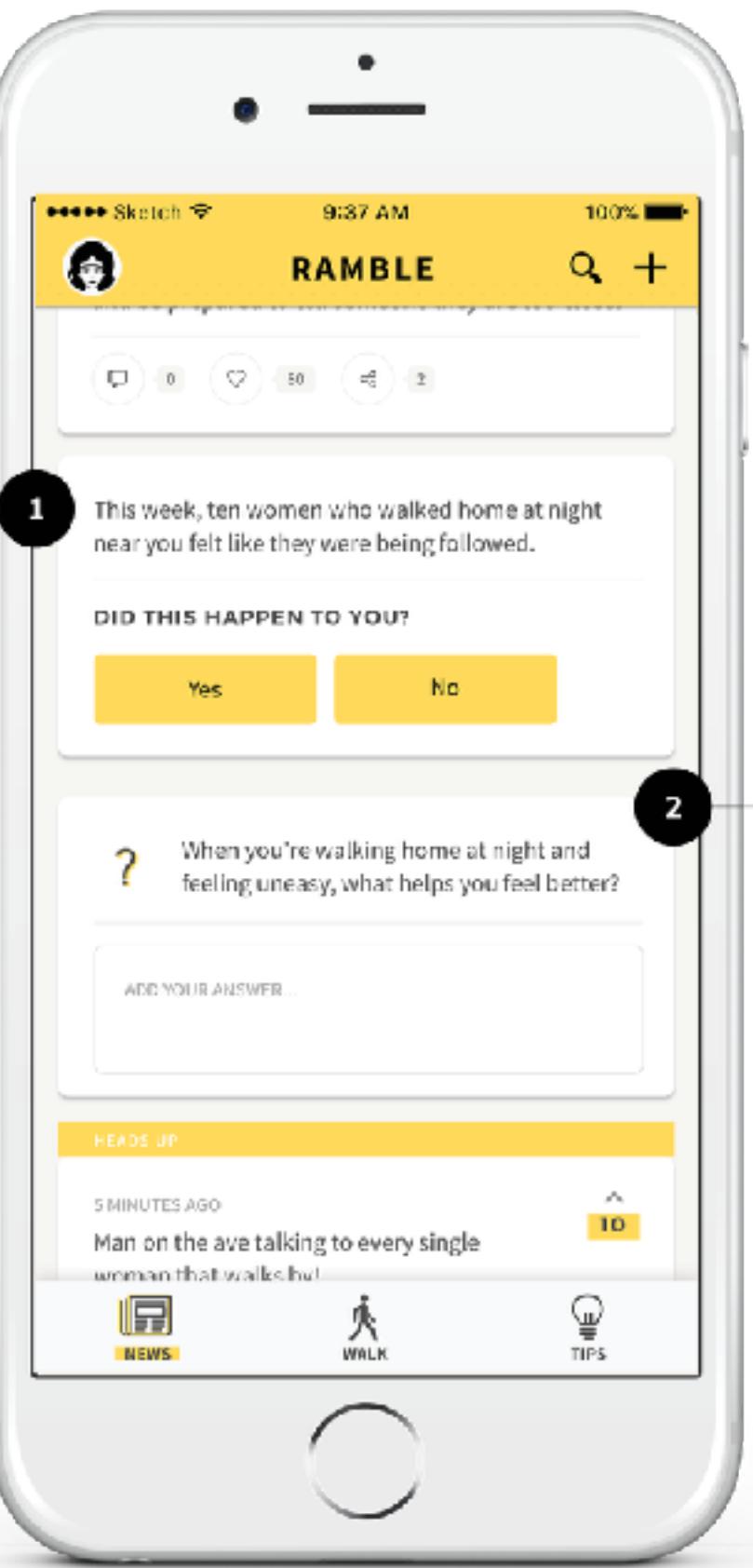
User-generated content appears on the news feed as a "Heads Up" post, alerting other users of nearby concerns. This format encourages users to only share information that can be seen as actionable, empowering other users to make more informed choices.

User Engagement

Users are allowed to upvote, comment, bookmark, or share posts.

Add

Allow users to share information directly to the news feed.



Question of the Day

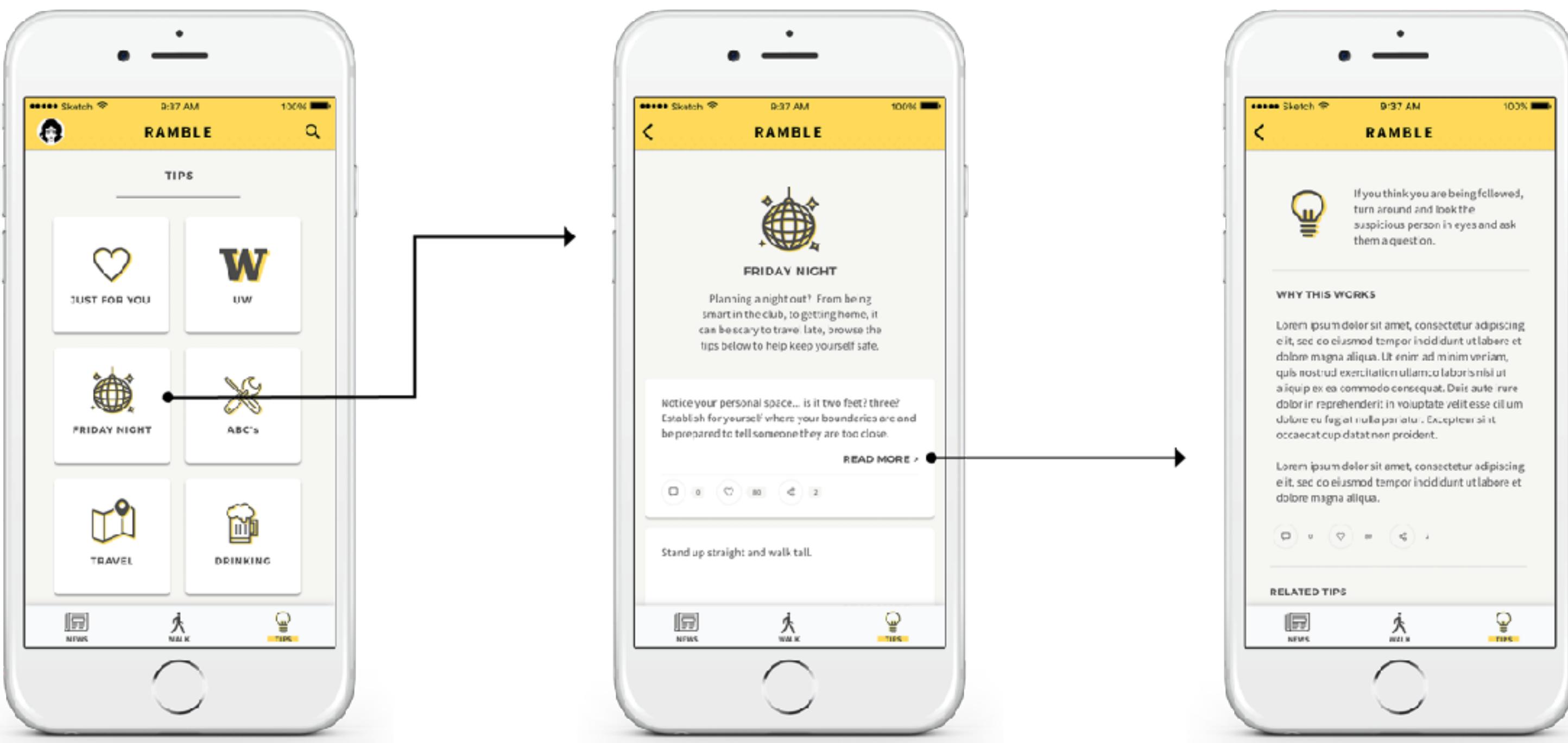
Daily questions also appear on the news feed to promote and normalize conversation about personal safety and walking experiences.

Polls

Polls are used to aggregate more information about user safety and personal experiences, in addition to surfacing common themes or situations occurring in your area. These also promote further engagement inside the app.

Tips

Ramble incorporates safety tips in the News Feed to increase confidence and knowledge in risk assessment and response. These tips are often related to recent local report data or recent user experiences.



Tip Collections

Tips can be found in curated collections to surface similar information based on common themes. For example, the "Just For You" collection is a combination of tips that a user has favorited and ones that are recommended based on preference information.

Category or Collection Page

Selecting a collection brings the user to a list of related tips. The collection page provides a brief description of the context that these tips are useful.

Selecting 'read more' on one of the visible tips brings the user to the Tip page.

Tip Detail Page

The tip detail page explains how and why this tip works, providing more background context and credible documentation.

Research Questions

01

What is the desired level of interaction during the walking experience ?

02

What tone and culture should the social media channel have?

03

What type and form of education are users most perceptive to?

Concept Evaluation

Concept Testing

2 Walking Interaction Tasks
4 “In-Lab” Tasks
Paper Prototypes
3 participants + 1 pilot

*Video, audio, photography, notetaking,
and participant notations*

Usability Testing

Task Completion Activities
Think Aloud Activities
Interactive Prototype
3 participants + 1 pilot

Video, audio, photography, notetaking

| KEY FINDING |

**Lack of burden on friends
and family is valued**

| DESIGN IMPLICATION |

**Anonymous walking partner
is an appropriate solution**

| KEY FINDING |

**Presence of partner is desired
during walk, but interactions during
and after should be minimal**

| DESIGN IMPLICATION |

**Partners will only interact via button
presses during the course of a walk**

| KEY FINDING |

**Personalized and gradational
escalation is desired**

| DESIGN IMPLICATION |

**Provide two levels escalation
(contact partner or 911) and provide
ability to select emergency contact**

| KEY FINDING |

Actionable information is preferred over casual rants about incidents

| DESIGN IMPLICATION |

Balance user generated content with educational information

KEY FINDING

Social media feed should be empowering, not fear-inducing

DESIGN IMPLICATION

Balance user generated content with educational information

Project: SteadyPack

Context: MHCID coursework

Timeline: 2 weeks, part time

Role: Researcher, Video

Teammates: Ankit, Matthew

Research: Evaluative & Usability

Topic

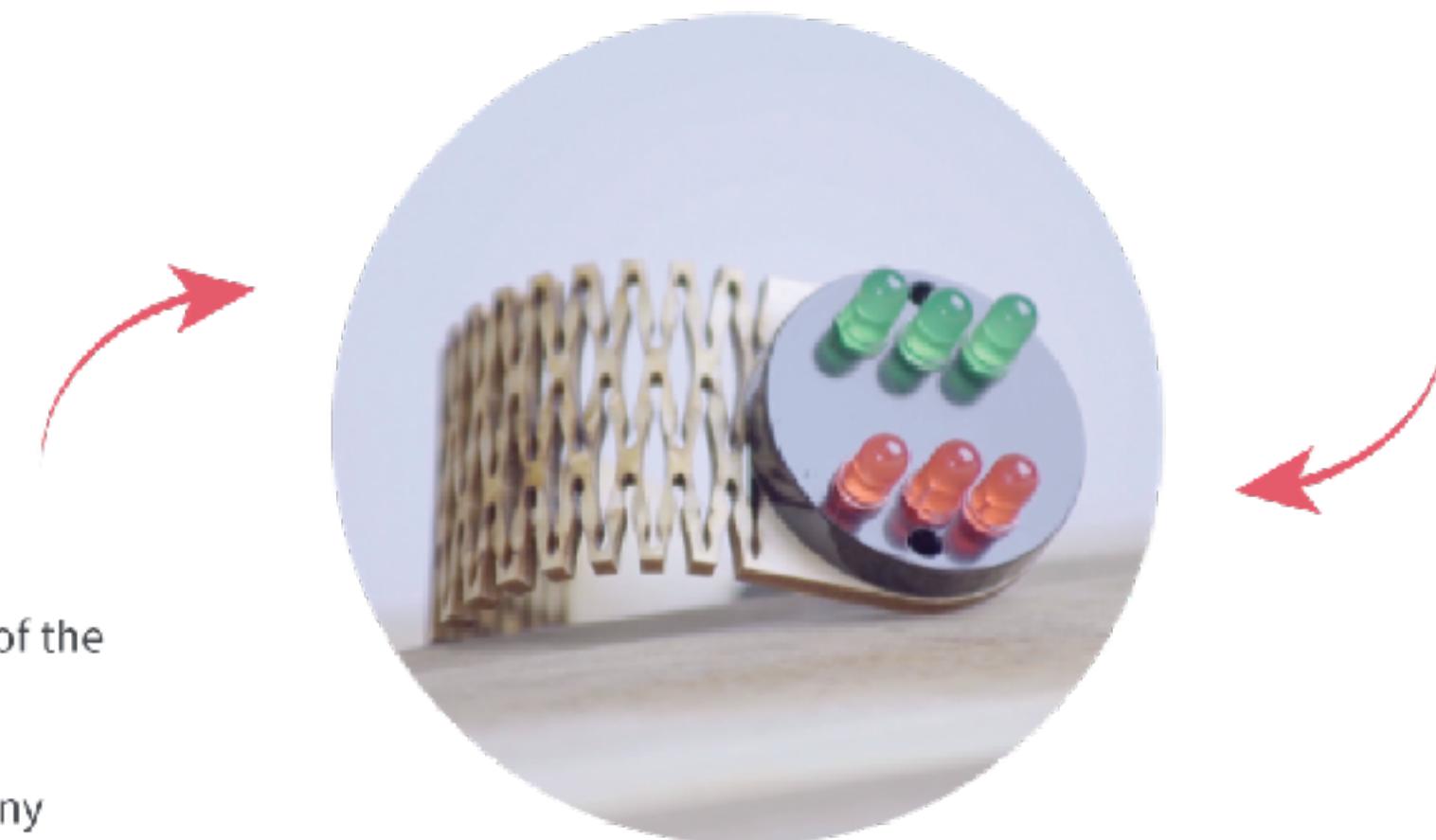
How can we help children and adults practice
better backpack health?

Concept: SteadyPack

A clip-on backpack accessory that provides feedback about backpack's weight distribution.

flexible, clip-on design

SteadyPack clips onto the shoulder strap of the backpack, enabling the user to attach or remove it easily. While our research participants approved of its flexibility, many expressed a desire to use the device while loading their backpack. This would require further design iteration, as SteadyPack's current feedback algorithm relies on calculating the pressure between the backpack strap and the wearer.



haptic and visual feedback

Light and vibration patterns signal whether the backpack is too heavy or being worn improperly. In our research, we found that the lights are generally not desirable to adult wearers (unless they were to double as a flashing bike light), but may serve as helpful visual feedback for parents whose children wear backpacks.

Is SteadyPack **desirable**?

Concept Evaluation using video + survey:

<https://vimeo.com/159392633>



Survey Findings

82% agreed with the problem, attributing shoulder and back pain to improper backpack use.

95% of respondents felt that the SteadyPack may be able to reduce the problem, but **only 27%** would use it themselves, mostly due to **lack of regular concern** for the problem (**50%**).

In open-answer, users expressed reluctance to install multiple parts, or use a **visible** backpack accessory.

Usability Findings

1. Is shape and function of the clip intuitive? (asked users where they assume the SteadyPack would go): **5 out of 5** users tested answered that they would clip it around the strap of the backpack.
2. Haptic, Visual, or both? **Haptic feedback was unanimously preferred** when users were asked if they would favor vibrations instead of lights. One user mentioned that **lights may be more desirable for children**, but preferred vibrations over lights for herself.
3. **2 parents** we interviewed said that while they thought it was a concern, rather than helping their child carry less weight, they thought this would be a good tool to **teach their child to excess carry weight properly** due to large amount of school supplies required.
4. **3 participants mentioned ideas for specialized use cases**, as opposed to every day use: military personnel often carry a large volume of weight, professional athletes need to avoid injury at all costs, backpackers, etc.

Project: Video Turbine

Context: My Startup

Timeline: 6 months, on & off

Role: Researcher & Designer

Teammates: Solo

Research: Exploratory, Evaluative,
Usability

Topic

How can we make product video production
more accessible to businesses?

Exploratory Research

- Competitive Analysis
- Market Research
- Expert Interview
- Contextual Inquiry

Competitive Analysis

Examined advertised production processes and services
of **15 video production companies.**

- Each video tends to go through involved creative process.
- No opportunities for bulk or templated video production.
- No services for video project management
- Typically location dependent
- Pricing, timeline, and outcome (what the video will look like) is unclear.
- Lack of utilization of user-friendly revision processes

Market Research

Examined market data presented through **eMarketer** to evaluate commercial video production market and **scope target users**.

Sample Findings:

- 15% of US Smartphone users watched a digital video prior to making a purchase in a physical retail store, Google, 2016.
- In 2015, videos made up 12% of digital ad spending for US retail brands. eMarketer, 2015.
- Retail eCommerce sales are expected to increase by over \$40 billion per year, surpassing \$500B by 2020. eMarketer, Feb 2016.
- 95% of US Luxury Brands offer video content. By comparison, 71% produce editorial content, and only 36% produce blogs. L2 Think Tank, 2015.

Expert Interview

Sample findings from interviewing video producer.

Finding: 5/10 of last year's clients were recruited directly through expert's website. Clients are hand-picking him and given his poor SEO, likely doing a lot of research to find him.

Implications: Clients shop around before choosing a production company. Support their research efforts by anticipating what analyses they do and providing content that shapes those analyses.

Finding: Expert's clients desire more communication than is necessary for him to achieve desired outcome. These clients seem to want to make sure their project is getting worked on.

Implications: Provide digital updates of project's process and frequent touch points for feedback.

Finding: Expert's clients feel underprepared to have a video made (e.g., they don't realize all they need for a script is a list of product features).

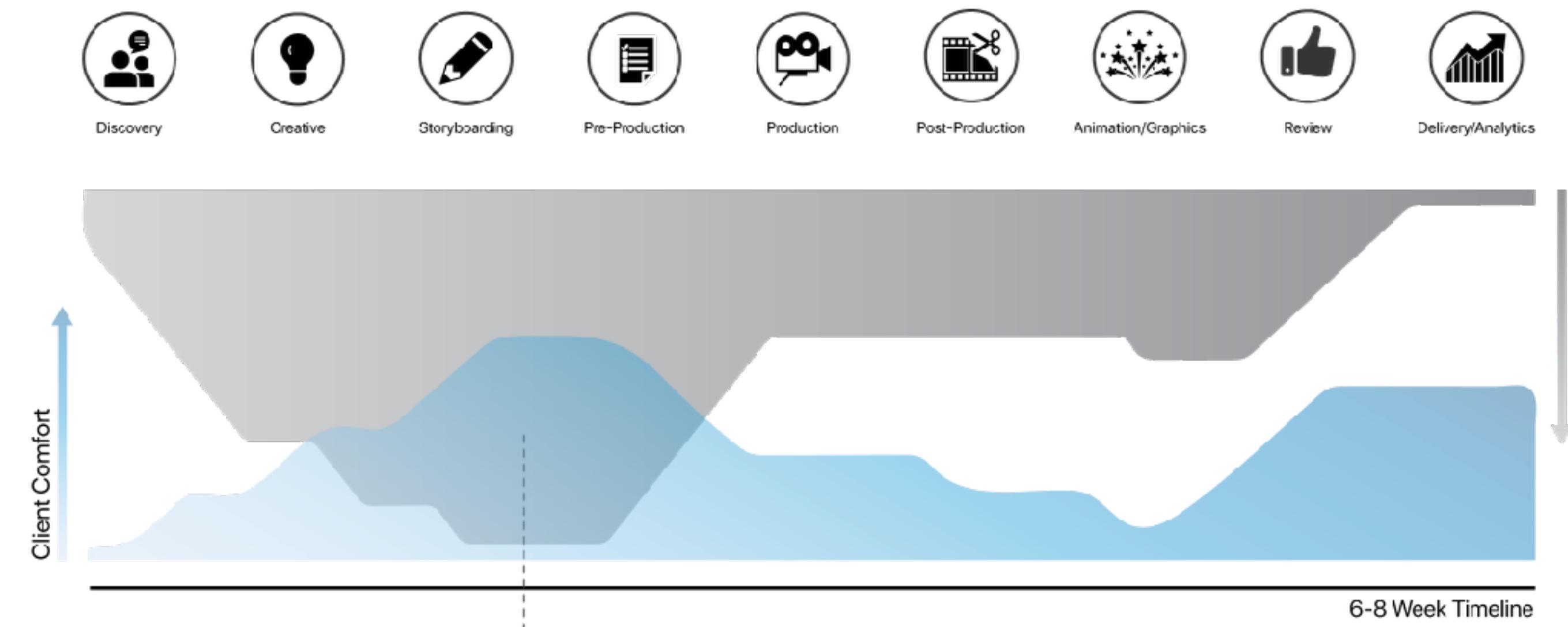
Implications: Up front, and during the process, demystify the process and make it abundantly clear how little information is needed from them. Don't overwhelm clients by asking for all information up front, at once. At different stages in the process, ask for the relevant information.

Finding: Clients are interested in other services and/or having additional videos made after starting the process often up-sell themselves.

Implications: Provide bundle pricing and discounts on bulk orders (e.g., a calculator that responsively updates the per video rate as quantity of video is updated). Add-on services could also be provided in the progress bar (e.g., they could click to add stills of their photo before getting to the production phase).

Contextual Inquiry

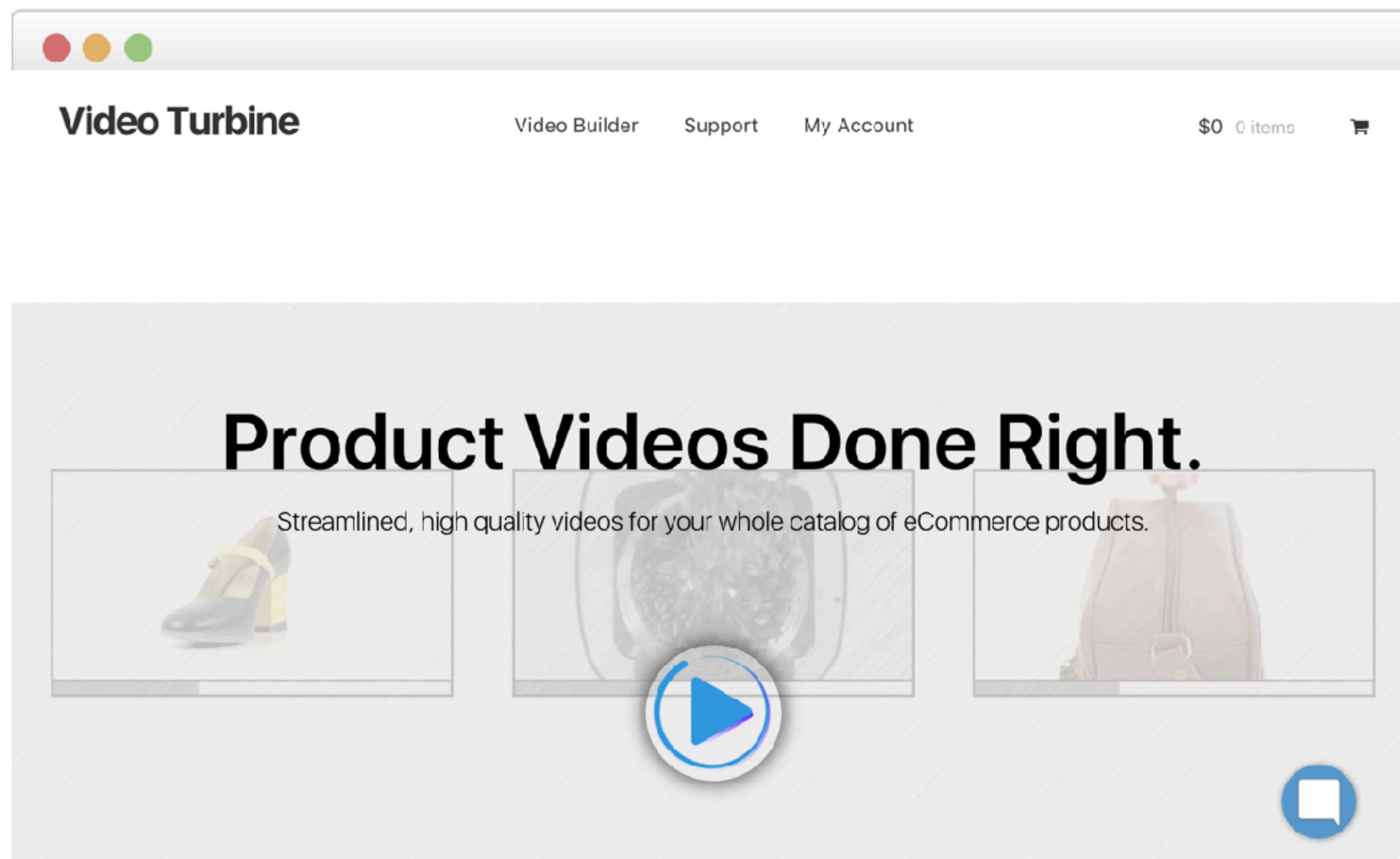
Observed process of professional video producer.



The largest disparity between producer effort and client comfort occurs during the storyboarding and pre-production stage, where producers attempt to alleviate doubt and confusion for their clients by producing non-video deliverables like scripts, shot lists, and storyboards.

Concept: Video Turbine

Businesses design their own product videos using templated options,
send their product to our studio, and receive their video.



Key Features

- Design Videos by selecting from curated options (e.g., like Squarespace does for web design)
- Track progress of videos being produced through video project manager
- Generates style guide to use across bulk videos, creating consistency and ease of use
- Easily request edit revisions using time-stamped comments while viewing video.

Evaluative Research

- Is it **feasible** to create high quality videos by collecting a small amount of info from the client via a digital interface?
- Is Video Turbine a **desirable** solution to businesses?

Concept Test

Is it **feasible** to create videos the client had in mind using VT?



Method: Had video producer re-create video made by Zappos using only info collected through Video Turbine.

Findings: Yes! Our video was shockingly similar to the Zappos, and we believe higher in quality. However, producer did have to take some liberties not specified in the video design portion. Need to add a 'shot list' process that client signs off on.

Concept Test

Is Video Turbine a **desirable** solution to businesses?

Method: Showed concept video and landing page to three businesses. Interviewed them about what they liked and didn't like.

Sample Findings:

- 3/3 felt positive overall that this was a solution they would consider using.
- There were concerns about the specific needs of *their* product. They wanted to see example videos of products similar to theirs (e.g., apparel, appliance, cosmetic).
- Creating a script from scratch seemed too daunting.

Usability Test

Method: Instructed 3 participants to build a video that would recreate the Zappos video, using VT while thinking aloud.

Top Navigation

People really liked being able to see the progress of their order, future steps, and the ease of navigation b/w steps.

Initially, it wasn't clear to one user that they couldn't click future steps until completing previous ones. Make error clear (greyed out step is not enough).

Your Selection

Remove thumbnail - it just creates awkward spacing.

Studio Sets & Backdrops

Photos of studios should be actual sets, not just wice photos.

Provide list of available props.

Is there a plugin that would enable clients to arrange sets?

Need more photos of each studio.

Order Summary

3/3 participants LOVED this. They liked seeing the itemized price, that the current step was clear, and ease of navigation.

Prev/Next Step Navigation

These links to previous and next steps feel unnecessary and distracting. Remove them or make it come after all options.

Add to Cart Button

3/3 participants felt the action of "Adding to Cart" strongly reinforced the simplicity of the process. It felt very familiar to eCommerce shopping.

The screenshot shows the Video Turbine interface. At the top, there's a navigation bar with 'Video Turbine' and links for 'Previous Video Builder', 'Support', and 'My account'. Below the navigation, there's a progress bar with numbered steps: 1. Video Template, 2. Backdrop, 3. Actor, 4. Narration, 5. Captions, 6. Script, 7. Music, 8. Call to Action, 9. Video Preview, and 10. Gif. Step 2 is highlighted in blue. To the right of the progress bar is a 'Your Video' section showing a thumbnail for 'Hire Demo' and a list of items: 2. Backdrop (White Backdrop \$0), 3. Actor (Erik), 4. Narration (Narrator \$0), 5. Captions (Custom Captions \$0), 6. Script (Script \$0), 7. Music (Mixed Acoustic \$0), 8. Call to Action (Call to Action \$0), 9. Video Preview (Video Preview \$0), and 10. Gif (Three Free Product Promos \$0). A large 'Add to Cart' button is at the bottom of the list. On the left side of the interface, there are sections for 'Your Selection' (with a note about removing thumbnails) and 'Studio Sets & Backdrops' (listing 'Dance Bar', 'Yoga Studio', 'Brick Office', 'Brick Loft', 'Beverly', and 'City Box' with their respective prices: \$349, \$349, \$549, \$549, \$549, and \$749). There are also notes about the progress bar and the 'Add to Cart' button.