POVs and Experience Prototypes

Initial Points-of-View

During our initial round of needfinding, we met Rajan, who wanted to feel like he was having new, exciting experiences while still staying on top of his responsibilities back home. We also met with Katie, who often needs access to consolidated information on the go, largely due to her travel inexperience. Third, we met Jonathan, who needs a way to help him feel like he is in control of his honeymoon plans while also accommodating the preferences of his fiancée.

Additional Needfinding Results

This week our team conducted five new, in-person interviews to broaden the scope of our insights. In addition to the demographic and professional dimensions covered in our first exercise, we expanded to more diverse travel circumstances. We decided to structure our interviews to dive deeper into three aspects of travel:

- What are travelers' pre-trip and in-trip planning behaviors?
- What are the needs of group travelers versus solo travelers?
- What are the needs of business travelers versus leisure travelers?

In addition to in-person interviews, we used a survey to collect additional data and insights. We focused on items 1 and 2 above for simplicity, and received 8 responses.

Profiles of Additional Interviewees

Spontaneous solo leisure traveler

Group trip planner

	 Who Jason, 27-year-old self-employed consultant who plans group trips. Needs + Access to a centralized information and booking resource + A collaborative trip planning tool + A truly trusted source on the best activities Insights + Managing group preferences is difficult + Handling group payments is a pain
--	---

Business Traveler-turned-Parent

 Who Ben, 48, VP of a startup. Ben is an experienced business traveler, but also a father who wants to stay involved. Needs + Travel that allows him to return home faster + In-person interaction and bonding with business colleagues Insights + Wants to stay connected with family
 + Wants to stay connected with family + Desire for efficient travel

Law Firm Business Traveler

	Who
t t	Lucas, 23-year-old Penn law student who travels for
	business.
	Needs
	+ An easy tool for travel reimbursements
	+ To work during business travel
	Insights
	+ Law firms are less comfortable with new tech.
	+ Traveling lawyers must maintain normal work
	responsibilities.

Dual citizen traveler

Image: Sector of the sector	ho raham, 21, is a student with dual-citizenship in US and Venezuela. He travels to be with friends d family. eds access to trip information without WiFi auggage monitoring sights Enjoys culturally relevant activities ikes to have major aspects of trip planned out, but t everything.
---	---

Revised POVs

Our second round of interviews provided us with a better idea of how travel behaviors and needs differ. Similar themes resonated in the second round as in the first: collaboration, information access, and efficiency.



Exhibit 2: HMW Brainstorm

We met Jason who needs a collaborative trip-planning tool that makes it easier for a group to make decisions and split payment, because planning group trips is logistically taxing. It would be game changing if we could provide a means for users to collaborate on a group trip and easily pay their share. This was similar to the needs of Jonathan for his honeymoon planning.

- HMW make it easier for group trip planners to determine the group's preferences and price sensitivity?
- HMW make group trip participants get more involved in the planning process?
- HMW enable users to collaborate on a trip more efficiently?

We also met Abraham who needs a way to better access travel information when internet is not available. It would be game changing if we provided an offline, aggregated source of travel information, which was similar to the need found in our initial "New Traveler" POV.

- HMW provide quick access to airline policies for many airlines (e.g. carry-on policies)?
- HMW provide a list of cultural foods/events in an area based on if they need to be scheduled ahead of time?
- HMW consolidate information for travelers that is currently fragmented across platforms?

Next, we met Ben and Lucas, business travelers who need a way to optimize their trips. Lucas expressed that law firms expected travel to not interrupt normal workloads, while Ben wants to spend more time with his family. Our initial interview with Rajan echoed these needs. It would be game changing if we could provide a means for making business trips more efficient for travelers.

- HMW make a trip as efficient as possible to minimize trip time?
- HMW make travelers more productive while on their trip?
- HMW help travelers feel satisfied that they got the most out of their trip, both professionally and personally?

Three best HMWs

After a detailed discussion, we decided on three HMWs that best addressed the issues of our POVs:

• How might we enable trip planners and participants to collaborate on a trip more efficiently, from the point of view of our group trip planner?

- How might we consolidate information that is fragmented across platforms, from the POV of an inexperienced traveler?
- How might we help travelers feel fully satisfied that they got the most out of their trip, from the point of view of a professional?

Prototyping Solutions

From our solution brainstorming process, we selected three solutions we considered best:

- 1. Tinder meets Pinterest meets TripAdvisor: a fun way to find activities activities in a new place
- 2. WiFi-Based Travel Booking: a suggestion engine for transportation, hotels, and other experiences that are likely to have WiFi, rated by reliability and speed
- 3. Democratic Trip Planner: an activity voting/ranking app that produces optimized recommendations for a group organizer



Exhibit 2: Solution Brainstorm from 3 HMWs

Prototyping Results

Tinder meets Pinterest meets TripAdvisor

We assumed the user has access to a smartphone, is familiar with other popular apps (Tinder/Pinterest), is traveling for leisure, and doesn't want 100% control of their trip. The prototype was created as follows:

- 1. Googled images for locations and activities in Cancun
- 2. Resized pictures so they were roughly the same size, and printed them
- 3. Cut out



Once the prototype was created, we needed to test it on a potential user. Our testing process was as follows:

- 1. Told testee to imagine that she is traveling to Cancun
- 2. Placed photo stack in front of her, and have her move the card right or left based on if she wants to do the activity or not
- 3. After all photos were classified, a subset of the photos in the right stack were selected as her "itinerary"
- 4. The testee was presented this "itinerary", and asked how she felt about the selected activities

Amanda M., Dennis E., Rhea D., Tanner G. Behavioral Change -- Travel Behaviors



Based on the evaluation of the prototype, we found the idea of swiping images and not deterministically picking activities worked well. Conversely, the lack of ability to rank activities above others made it impossible to ensure any particular activity. Something we learned is that this can be a lot of fun; users get to explore activities without it feeling like monotonous research. Upon concluding the prototype, it appears that our assumptions held true for the user being tested.

WiFi-Informed Travel Booking

For this prototype, we assumed that users plan their own travel, users need more information than currently available, and that people will select their lodging partially based internet availability. We built the following for our prototype:

- 1. A map of a trip destination with hotel information popups: price, review rating, location
- 2. A second, identical map that added wifi information to the hotel popup windows.



To test the prototype, we followed these instructions:

- 1. Introduced the user to the setting and asked him to pick a hotel based on the data presented.
- 2. Recorded selection

- 3. Informed the user that he would need to do work on this next trip, and presented him a new map with WiFi data included
- 4. Recorded new selection
- 5. Discussed choices, changes, and feelings throughout the process



Through our tests we learned that maps are a nice visual for users, and people enjoy easy seeing information. Business travelers were less interested in this idea, however; every business testee asked if they could access the internet via mobile tether if traveling for business. Ultimately, we found that people did choose differently when presented WiFi information, but business travelers questioned the need.

Democratic Trip Planning

To prepare for what was to be our most successful prototype, we assumed that users are internet users familiar with group communication, are traveling with a group, participants want to be able to voice their opinions on the trip, and organizers want access to group preferences. The following steps were used to create the prototype:

- 1. Created sticky notes with activities (type, price, atmosphere)
- 2. Established a set itinerary with blocks of time (meals, activity, etc)
- 3. Recruited a small test group to act as a trip planner and participants



To test the prototype, we followed these instructions:

- 1. Told recruited planner that he was responsible for organizing a trip with his friends to Zanzibar and that he had worked out the set schedule blocks, but wanted to prioritize actual activities
- 2. Had the planner give the stacks of index cards to each participant and ask them to rank their preferences
- 3. I collected new stack ranked cards and created a "recommended stack" from the data
- 4. I provided the recommended stack and access to each individual stack to the organizer, then asked the organizer if they felt more comfortable planning the trip



In evaluating the product, we found that ranking activities builds excitement for the trip, and the planner loved getting unbiased group preferences. A challenge we discovered is that people were mixed on having all categories in a single stack, indicating we should bucket activities. We learned that the natural process for a user is to think of same-category items together rather than judge cross-category. In the end, our initial assumptions held true and only slight modifications will be necessary to expand the prototype.

Selecting a Solution

Overall, the responses from the prototype testing were most positive for Democratic Trip Planning. This idea resonated both with trip planners, who received feedback and direction for trip activities, as well as with the trip participants, who might otherwise have felt left out of the planning process or even worse, drowned out by other participants.

Word count: 1741

Appendix/Additional Information

Revised POV(s):

We met Jason, a 27 year old notorious for voluntarily planning (domestic and international) group trips, who needs a collaborative trip planning tool that makes it easier for people in different locations to weigh in, make decisions (especially purchase) and split payment because planning group trips is too logistically taxing and email threads don't do the trick. HMW make it easier for multiple people coming from any starting point to book flights to the same end point together? HMW make more people want to plan group trips? HMW make it easier for group trip planners to determine the group's preferences and price sensitivity? HMW make group trip participants get more involved in the planning process? HMW eliminate the need to take others' needs into consideration? HMW make group trip planning as simple as going to the grocery store? HMW reduce the # of steps needed to plan a trip? HMW make information more easily available? HMW eliminate the need for one person to process payments before the trip? HMW enable users to collaborate on a trip more efficiently?

We met Abraham, a dual citizenship of the US and Venezuela, who needs a way to better access information, especially airline/flight info, when outside the country because airports aren't as well controlled as they are in the US.

HMW inform the user how a flight delay/cancellation will impact the rest of their trip
HMW provide courses of action in the event of a flight delay/cancellation
HMW provide information about the status of a user's luggage
HMW help select connecting flights such that delays won't impact connection
HMW provide quick access to airline policies for many airlines (e.g. carry-on policies for different airlines)
HMW help users avoid airlines that are often delayed
HMW help users understand what causes delays/know when there will likely be a delay

HMW provide a list of cultural foods/events in the area you are visiting based on if they need to be scheduled ahead of time, or if you can just show up Tips for finding preferred forms of transportation in a given location HMW inform users about the best times/places to travel to avoid problems HMW consolidate information for (typically new) travelers that is currently fragmented across platforms

We met Ben, who needs to balance his business travel obligations with his desire to be a present father, even though he lacks an affection for planning. HMW teach new business travelers to travel as if they are more experienced HMW help designate a group planner, but only when one doesn't naturally exist HMW make it easier for him to stay connected with his family HMW make it easier for Ben to easily plan a trip HMW make a trip compact/efficient so as to minimize trip time HMW help professionals hosting business guests choose local sites to which they can take their guests HMW help keep children (toddlers) entertained so they don't cause problems HMW facilitate group bonding in a business-travel setting HMW help travelers feel fully satisfied that they got the most out of their trip (schedule optimization) while still having serendipitous experiences?

Solutions

HMW enable users to collaborate on a trip more efficiently?

An event, activity, food, etc. voting app that produces optimized recommendations for the organizer

A tool that travelers can use to input their availability, budgets and preferences

A tool that allows organizer to buy flights and tickets in bulk at the same time only using everyone's personal credit card

A group chat app integrated with a to do list / project management tool

Place for travelers to suggest events for trip

Cost-splitting app

We could help everyone meet up in person before they travel (build bonds)

A food swiping system (left == like, right == hate)

Amanda M., Dennis E., Rhea D., Tanner G. Behavioral Change -- Travel Behaviors

Individual, handheld preference rating system (like a personal yelp only shared with your friends)

A way to choose events and meals based on time available for the meal

A consolidation tool for each person's itinerary

A meetup tool for when travelers in a group split up for a few hours

Load your trip itinerary into your calendar or be a separate app

optimizes schedule based on time/availability of events and attractions

An easier way to help hosts decide where to take their guests

HMW consolidate information for (typically new) travelers that is currently fragmented across platforms?

A crowdsourced offline platform to aggregate airline and airport policies

A way to walk new travelers through an experience step-by-step (like Google maps for travel tasks)

Monitor status/location of luggage

popular activities/events in the area being visited

information about customs/traditions traveler should be aware of

Way to predict if flight is likely to be delayed/cancelled

A system to coordinate a stranger to pick up your luggage for you so you can start doing fun things

Buy wikitravel

A source that contains FAQs of local policies

A localized safety guide for activities, areas of a city, countries in general

An app that knows when you're lost or late

A way to know if a place will be open by the time you get there

HMW help travelers feel fully satisfied that they got the most out of their trip (schedule

optimization) while still having serendipitous experiences?

A way to block out and fill chunks of time for "fun" and" work"

A tool that suggests a daily itinerary given their personal preferences (ex. likes museums) and obligations (ex. to work for 2 hrs/day). The app can also include navigation and optimal routing (ie. do xyz first)

An mobile audio tour that leaves room for personal exploration but still makes sure you see all the key sites Automated curation of their photos for social sharing increases post trip satisfaction

A travel companion that gives you high fives or badges or points for all the awesome things you

did that day (something like Foursquare for travel)

A way to find office space to "rent" out for the day

FREE COOKIES

There are no bad ideas

A suggestion engine for transportation, hotels, and other experiences that are likely to have WiFi, rated by reliability and speed

A tool to suggest activities that integrate multiple things (like meetings + interesting meals, or meetings + cool experiences)

App that guides you to a nearby, random location you may want to visit based on some criteria <u>Tinder meets Pinterest meets TripAdvisor (you can make judgments on different activities while</u> <u>you're at home, and you can show up in a location and your phone will generate an optimized</u> schedule/map for you)

A way to trick people into documenting their experiences in a way that helps them remember how fruitful a trip was

An image-based to-do list that has both images for responsibilities and activities

Prototyping Solutions

An event, activity, food, etc. voting app that produces optimized recommendations for the organizer

Have post-its that have suggestions for 5 different food places and three different things to do in San Francisco

Select a group of 4 people and separate them so that they can't see each other's laps/hands Give each person post it notes with the 5 suggestions and have them independently order them and give them back to you

Lay out all of the stacks in order of preference and see if there is a clear "winner"

Tell the participants which choices won and will be on their itinerary for the weekend and see how they react

Tinder meets Pinterest meets TripAdvisor (you can make judgments on different activities while you're at home, and you can show up in a location and your phone will generate an optimized schedule/map for you)

Go to Pinterest and print out images from a few travel boards (activities and places to stay). Cut them out place them on a phone screen (stacked) Have the participant imagine him/herself at home or en route to destination (akak monotonous travel time) "swipe" the activities based on the ones he/she is interested in Now have them imagine they are at their destination and a notification pops up on their phone telling them that it's recommended that they do these 3 things (of the things they swiped right on).

Boom! Optimized itinerary that's a surprise each day!

A suggestion engine for transportation, hotels, and other experiences that are likely to have WiFi, rated by reliability and speed

Tell them they are in a foreign country with sporadic, unreliable wifi

Have user select a hotel based on traditional criteria (price, location, pictures)

Tell them they need to work x days while they are there

Have user re-select from the same hotels, but include wifi metadata (this can be synthesized) Can repeat this process with choices of getting from Paris to Amsterdam, where different modes of transportation have different WiFi reliability (for example, busses tend to have WiFi that's awesome at night but terrible during the day, but trains tend to have very reliable WiFi)