skylark

Freedom From The Gate

Alex Chang   Michael Grazewski   Shiya Liang   Irene Ma   Chase Chen-Hung Wu

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Untethered in a re-imagining of the airport experience. In Summer 2014, our team completed a capstone project as part of the Human-Computer Interaction + Design Program at the University of Washington. Initial research on the air travel industry, consumer offerings, and the current passenger experience revealed two important insights: 1) passengers feel tethered to their gates and are not in control of their own experience, and 2) gates are a source of critical information and services. We hypothesized that a combination of information and services that passengers typically rely on the gate for, personal

location data, and a thoughtful approach to delivery would empower passengers to physically and mentally untether from the gate. Through a process of research, analysis, ideation, evaluation and iteration, we developed a concept called Skylark.

Skylark is a system that delivers contextual, personalized information to passengers as they move through the airport. It integrates data from disparate sources that passengers need, including flight updates, gate activity, indoor maps, directories, and individu-

al location data. It then pushes vital notifications to ensure passengers make their flights on time, enables direct communication with gate agents, and provides information that helps people decide what to do with their time in the airport.

Evaluations of early concepts and prototypes with users confirmed that passengers' primary information needs match those Skylark is designed to provide: time to boarding, walking times, detailed flight updates, and dynamic directories. Interviews and obser-

vations also revealed how vital it is to establish confidence in the information provided, and to design for personalities that approach the concept of time in different ways.

Skylark was designed to empower passengers to take control of their own airport experience by delivering the information they need, no matter where they are in the airport. We believe in its potential to mentally and physically untether passengers from the gate, resulting in a more pleasant, stress-free airport experience.

T E A M

Alex Chang

Alex found his passion in user experience design in 2006 and has been working as a UX designer at a management consulting firm. His experience and expertise span across interaction design, information architecture, Web & mobile design, design thinking, and project leadership. Alex is interested in mobile & ubiquitous computing, internet of things, service and product design.

Shiya Liang

Shiya is a UX designer, striving to create elegant and pleasant designs and experiences that impact our day to day lives. Trained as an industrial designer, and with a bachelor's degree in engineering, she has a deep understanding of physical objects, and is passionate about making things with her hands. Shiya finds it inspiring to truly understand the emotional needs of people, and respons with thoughtful design.

Michael Grazewski

Michael is an *aspiring* experience designer and strategist who's focused on finding elegant, simple and effective solutions to any problem. His past projects include designing an application to help home-care providers coordinate their activities with distant families, modeling physician billing experiences for the large scale health-care systems throughout the United States, and building a world-class platform for fertilizer production for business executives.
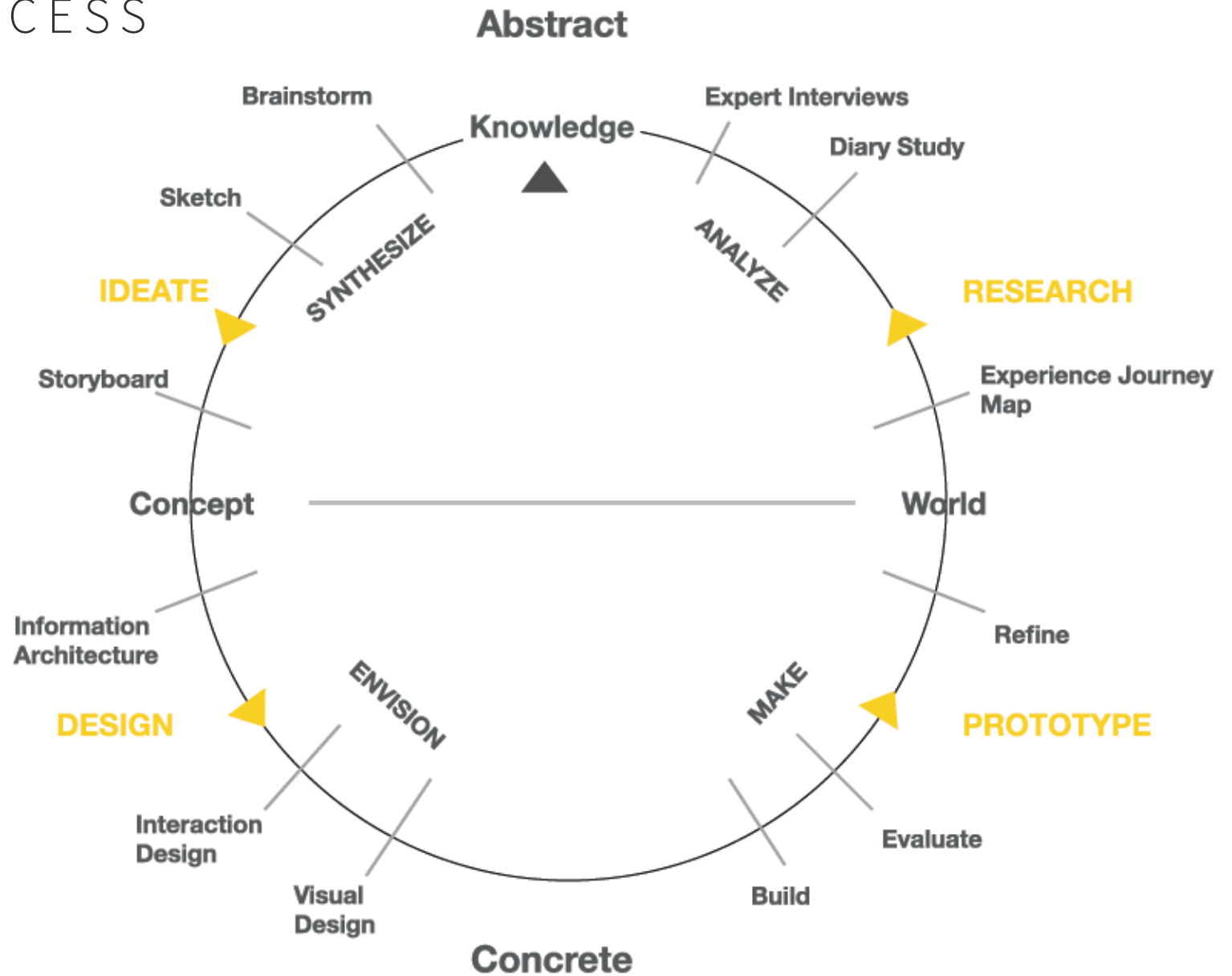
Irene Ma

Irene completed her BA in Sociology at UC Berkeley, and has experience working with leading technology companies to develop and implement strategic programs to support their employees. Understanding people is a driving force in her life, and she feels fortunate to have found a calling where she gets to spend her days doing just that. Irene aspires to work on systems that connect digital, physical and human interactions, and is particularly interested in healthcare and education.

Chase Chen-Hung Wu

Chase is a UX designer, design technologist and travel maniac. As a designer with wicked engineering skills and natural powers of observation, he believes that design and empathy are the core thinking of every single great product. He holds a BS in Computer Science and Information Engineering from National Taiwan University. Chase thrives in challenging work environments, and is currently developing his ability to deliver quality, detailed work through rapid design and development. His life goal is to turn his passport into a living artifact of his travel experiences - stamps, grime and all.

DESIGN PROCESS

Abstract

Brainstorm

Knowledge ▲

Expert Interviews

Diary Study

Sketch

SYNTHESIZE

ANALYZE

IDEATE

RESEARCH

Storyboard

Experience Journey Map

Concept

World

Information Architecture

Refine

ENVISION

MAKE

DESIGN

PROTOTYPE

Interaction Design

Evaluate

Visual Design

Build

Concrete

Our team employed a human-centered design process which began with research to better understand passengers' travel experience within airports. We created an experience journey map based on one of our team members' recent trip to Toronto. We also recruited families and friends to carry out diary studies while traveling through airports. Furthermore, we interviewed a senior project manager at Alaska Airlines and obtained salient insights into the pain points that passengers experience and the challenges that airlines face today.

Equipped with the data and insights from our research activities, our team conducted brainstorming sessions, sketched ideas, and created storyboards for opportunities and potential solutions. After going through the divergent and convergent phases of the ideation process, our team finally selected the portion of the airport journey that spans from the TSA line (after passengers have gone through the security check) to the gate (where passengers board their flights). Once we decided on our specific opportunity space, we conducted a competitive analysis to better educate ourselves on existing solutions and service offerings.

After surveying the landscape of current offerings, our team began to envision and design a system that can fill the gap of the existing solutions and empower passengers to have a more pleasant travel experience. We spent approximately three weeks on information architecture design, interaction design, and visual design of a mobile application to represent the interface of our system idea. Through a few design iterations, we created a number of design concepts. We evaluated the usability of these concepts with research participants.

With the design concepts in hand, we proceeded to build a few versions of interactive prototypes using the Proto.io platform. We tested the prototypes with our team members as well as our advisors. Based on the feedback we received, we further revised (and in some cases, started from scratch) our mobile application prototype.

IDENTIFYING AN OPPORTUNITY SPACE

Our initial primary research revealed an opportunity to focus on the phase of the passenger journey between the TSA security checkpoint and the gate. We created an experience journey map to understand the touchpoints, behaviors and feelings that make up a trip through the airport. We conducted a diary study in which we asked participants to take photos and answer questions related to their feelings, questions and needs at different phases within their airport journey. Finally, we mapped out the physical space of an airport to understand how people move through the space and where key pain points occur.

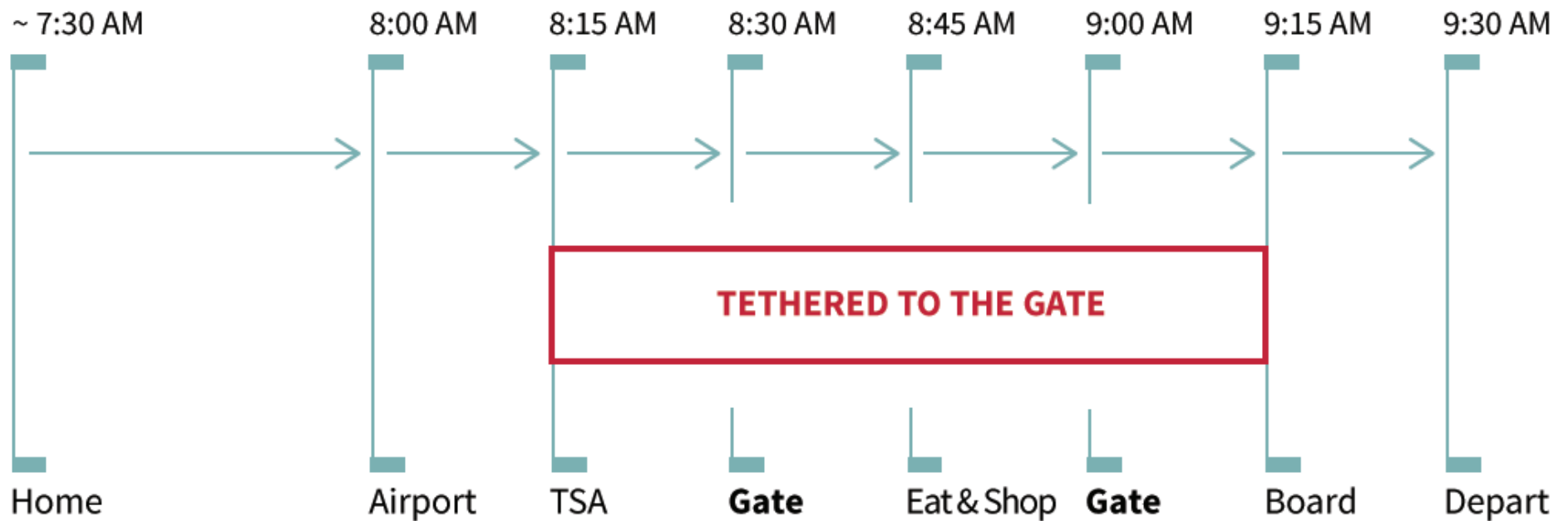We mapped the end-to-end experience of an individual's journey from Seattle to Toronto.

We conducted a diary study with four participants (a mother and her young children, an infrequent traveler, and two seasoned travelers) who traveled through US airports.

We mapped the physical space of an airport, and plotted insights from observations and the diary study.

FINDINGS

| ~ 7:30 AM | 8:00 AM | 8:15 AM | 8:30 AM | 8:45 AM | 9:00 AM | 9:15 AM | 9:30 AM |

TETHERED TO THE GATE

| Home | Airport | TSA | **Gate** | Eat & Shop | **Gate** | Board | Depart |

1 Passengers' number one priority at the airport is to take a flight

Diary study participants exhibited the behavior of going straight to their gates after leaving the TSA security checkpoint. Some left the area again to purchase food or visit shops, but participants prioritized finding their gates first.

2 Going to the gate is a priority for passengers

It's a physical milestone

Passengers want to know where the gate is located to prevent the risk of getting lost and missing a flight.

It's a source of important flight updates

Passengers want to know if their flights are delayed. They also look for visual cues about what is going on at the gate. For example, if there is no plane at the gate when the flight is scheduled to board in 10 minutes, its likely the flight is delayed.

It's a place of service
Passengers often need to place requests for upgrades, standbys and seat changes at the gate. Confirmation of requests happen there as well.

"My gate was in an unfamiliar area of the airport, and I had no idea how long it would take me to walk there. Because of this, I didn't stop to wander through any stores along the way to pass the time."

"I'm getting worried because there are no agents at my gate and no flight info on the sign. I check the departure board again and the gate has indeed changed."

3 Stress, anxiety and un-met needs

A combination of factors within the airport lead passengers to feel stress and a lack of control. Passengers need the information they would typically obtain at the gate, may not know their way around airports, and are anxious about catching their flights. As a result, they are often tethered to the gate - fearful of leaving the immediate gate area and nervous when they aren't close to it. The overall experience is marked by stress, anxiety and unmet needs.

Lack of Information When It's Needed

Unfamiliarity with Airport

Stress & Lack of Control

Anxiety of Catching the Flight

OPPORTUNITY

FOCUS ON THE PROBLEM OF PASSENGER TETHERING AT THE GATE, AND HOW INFORMATION MIGHT CHANGE PASSENGERS' BEHAVIORS AND FEELINGS.

VALUE PROPOSITION

Our research shows that passengers are not the only ones impacted by the phenomenon of tethering to the gate.
Airlines and airports, both key stakeholders in air travel, are affected as well.

"Please, please, please do not crowd around the gate 30 minutes before boarding. Yes, overhead space is at a premium, but you are just slowing down the boarding process for everyone by blocking the pathway." - Airline Gate Agent [1]

AIRLINES

Airlines care about tethering at the gate because they want to improve the customer experience. Airlines have a very narrow profit margin of 1.8% ($5.94 per passenger[2]) as a result of regulatory restrictions and fluctuating fuel costs, according to the International Air Transport Association. This means that competition is fierce among airlines, and one way airlines set themselves apart is through improved customer experience.

Tethering at the gate also means that more people are concentrated around their gates, leading to crowding. This impacts on-time departures, and leads to overwhelmed, overworked gate agents.

1 Hobica, George. "Everything You Ever Wanted to Ask an Airline Gate Agent." Airfarewatchdog.com. N.p., n.d. Web. 19 Aug. 2014.

2 Irvine, Dean. "How Airlines Make 'less than $6 per Passenger'" CNN. Cable News Network, 03, Jun. 2014. Web. 19 Aug. 2014.

Tethering also contributes to feelings of stress and anxiety for passengers. According to a 2010 report by J.D Power and associates, providing high levels of airport passenger satisfaction has a strong positive impact on retail spending. Passengers who are "delighted" with their airport experience, spend an average of $20.55 on airport retail purchases - 45 percent more than do "disappointed" passengers.

AIRPORTS

Airports care about tethering at the gate because want to grow revenues that are not dependent on the airlines. According to Airports Council International, 70% of airports are not focusing on non-aviation revenue as a way to cope with the volatility of the airlines business cycle. Two ways that airports grow revenues is by increasing airport capacity to process more passengers, and encouraging spending in shops and restaurants in the airport. According to an interview with a Port of Seattle representative, solving the problem of crowding at the gate is a huge value for airports because it increases capacity and efficiency of the airport.

Hobica, George. "Everything You Ever Wanted to Ask an Airline Gate Agent." Airfarewatchdog.com. N.p., n.d. Web. 19 Aug. 2014.

Irvine, Dean. "How Airlines Make 'less than $6 per Passenger'" CNN. Cable News Network, 03, Jun. 2014. Web. 19 Aug. 2014.

VISION

AIR TRAVEL
CAN BE
AN ENJOYABLE
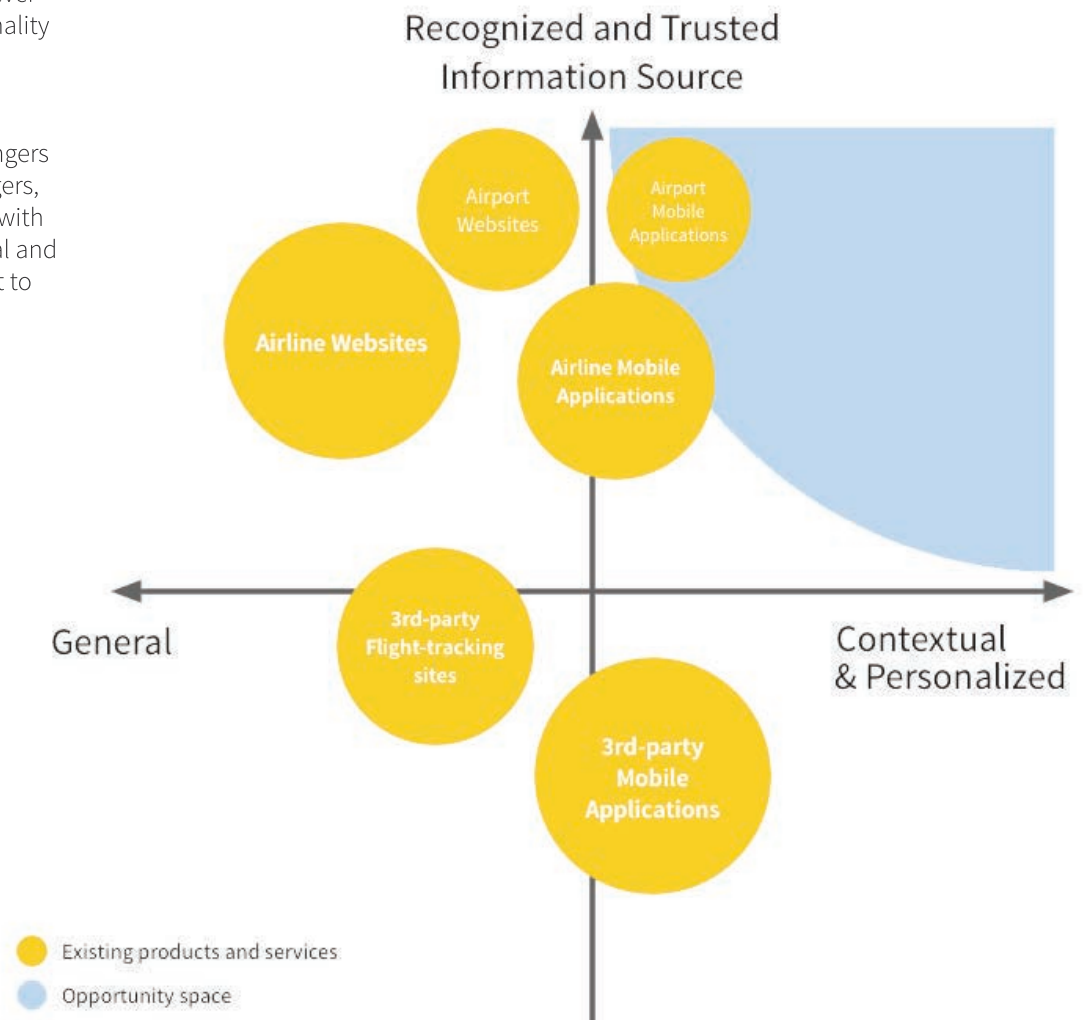# AND WORRY-FREE
EXPERIENCE
EVEN AT THE AIRPORT

DESIGN QUESTION

HOW CAN WE EMPOWER PASSENGERS TO PHYSICALLY AND MENTALLY UNTETHER FROM THEIR GATES?

COMPETITIVE ANALYSIS

Existing products that address information needs for on-the-go air travel passengers include airline websites, airline mobile applications, airport websites, airport mobile applications, flight tracking API and websites, and trip planners. Many of these products and services offer different aspects of the solution that we were looking for. However none serve as a single platform that combines the essential features and functionality we believe are important for successful untethering.

Existing offerings are not contextually aware of the passengers' preferences and real-time locations, and so do not offer relevant and just-in-time data that passengers need. Existing airline and airport products are trusted and recognized by passengers, while many of the more dynamic 3rd party products tend to be viewed and used with less trust. We believe there is a unique opportunity for a product that is contextual and personalized, and trusted by passengers so that they will feel comfortable using it to make decisions in the airport.

Recognized and Trusted Information Source

Airport Websites

Airport Mobile Applications

Airline Websites

Airline Mobile Applications

General

Contextual & Personalized

3rd-party Flight-tracking sites

3rd-party Mobile Applications

Existing products and services

Opportunity space

FROM INSIGHTS TO IDEAS

After a month of research to gain a deep understanding of passenger behaviors and needs, and existing solution in the marketplace, we moved on to concept ideation. We began by pitching ideas and storyboarding, and moved on to paper prototyping and role-playing exercises to understand how different concepts might play out in the airport. These activities helped us understand what impact our concepts might have on the passenger experience. The concepts were balanced against our capstone project and team objectives:

1. Does it support infrequent travellers-- individuals who don't have an established airport routine, and experience more uncertainty and stress in airports.

2. Is it technically feasible today?

3. Can high fidelity, interactive prototypes be built?

4. Are resources available to conduct concept evaluations and usability tests for the concept?
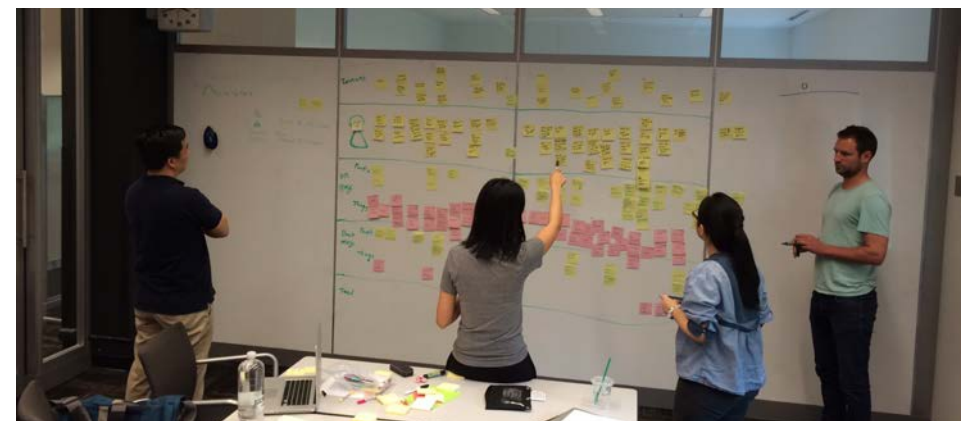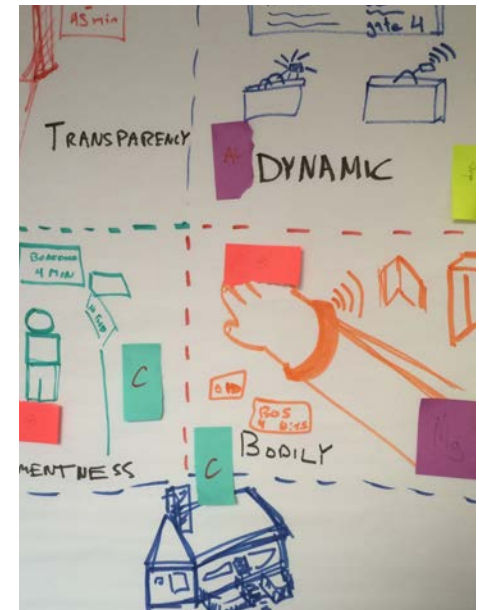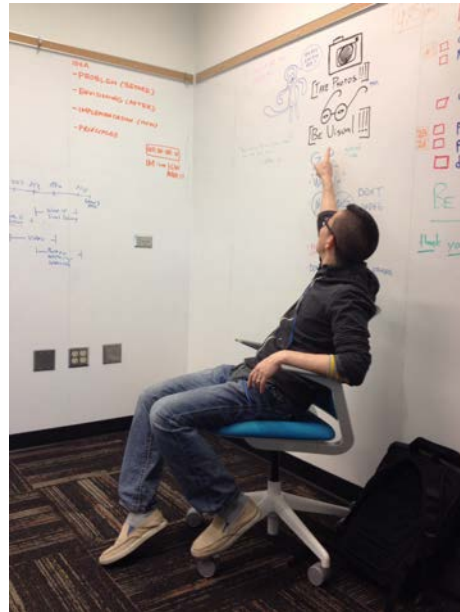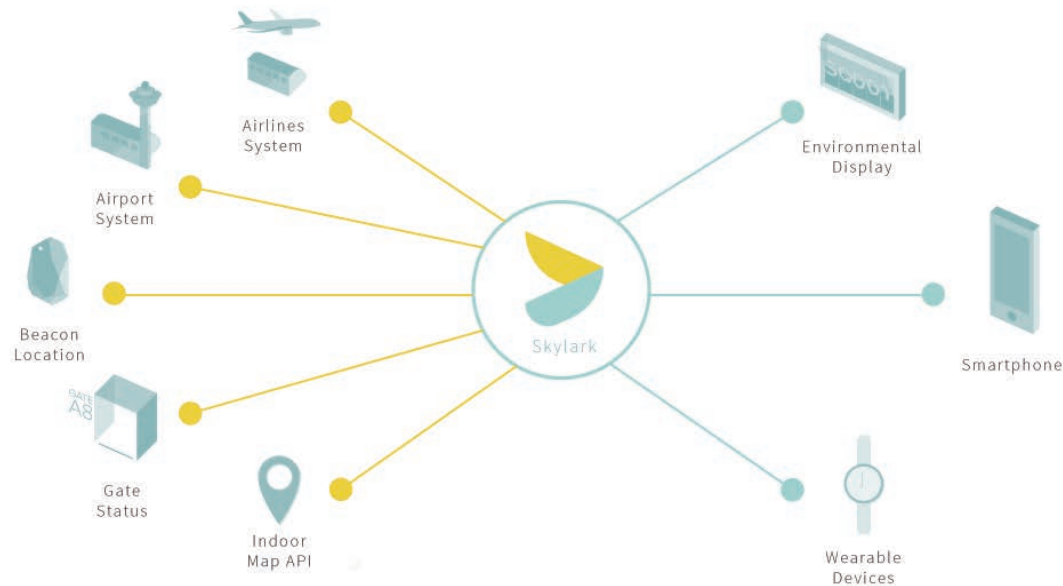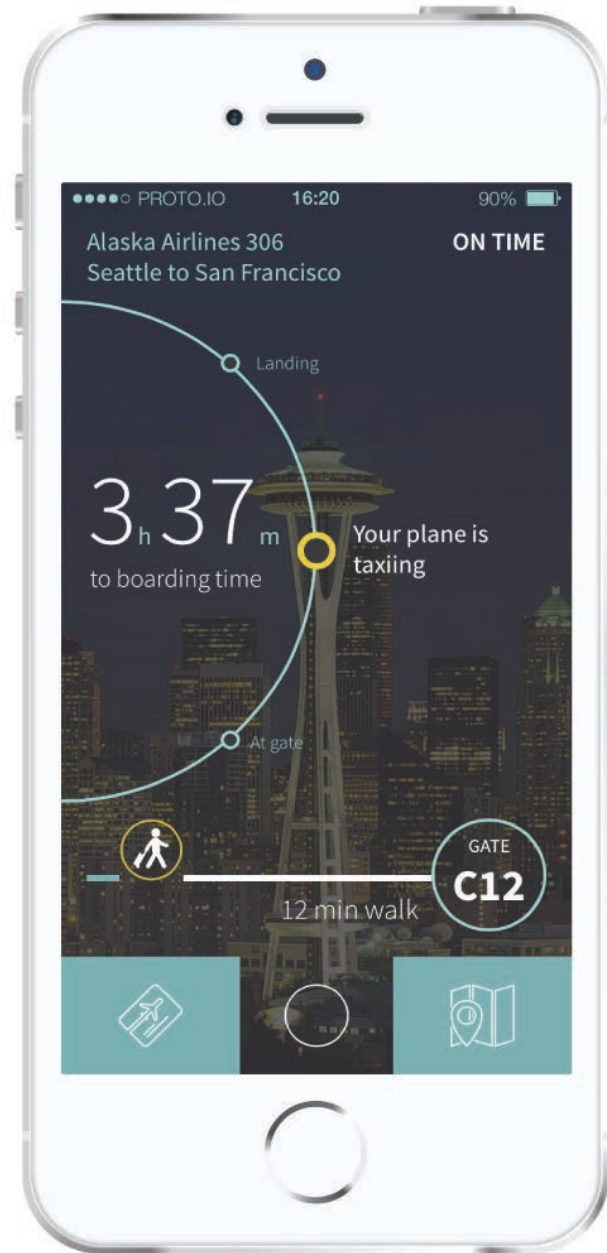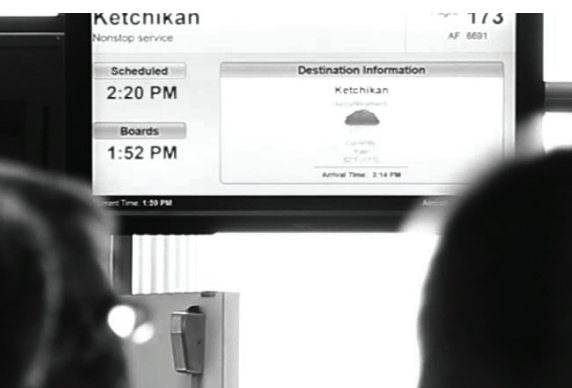
SKYLARK

Ultimately, the concept for Skylark was developed. Skylark is a system designed to deliver personalized, contextual information to passengers as they travel through the airport. It pushes timely notifications to passengers while they're on the go, and serves as a single place for passengers to access their boarding passes, obtain flight and airport related information, and access services that they would typically only receive at the gate. "Remaining time to boarding" and "walking time to the gate" is front and center in the app, enabling passengers to make the most of their time in the airport while confidently getting to their gate on time.

Skylark is designed to communicate with a custom developed mobile application. We chose to do this because smartphones are widely adopted devices, and we could easily develop mobile prototypes and run evaluations. But we believe there is future potential to deploy Skylark on other platforms, including wearables and in-environment displays. Each has unique properties which would complement the system's ability to deliver contextual, personalized data in dynamic, often chaotic airport environments.

Airlines System

Airport System

Beacon Location

Gate Status

Indoor Map API

Skylark

Environmental Display

Smartphone

Wearable Devices

CONCEPT EVALUATION

The primary goal of concept evaluations was to understand whether the delivery of information has an impact on behaviors and feelings, and what types of information passengers seek. We re-created an immersive airport environment on the University of Washington campus. Participants were run through a series of scenarios and tasks designed to elicit typical airport behaviors. Tasks included getting a coffee from Starbucks, or using the bathroom. A specific set of information was delivered through the "System" which was played by a team member. The focus was on understanding the utility and impact of the information itself, than the way in which it was delivered.

Confidence in the information provided is critical for a successful system.

Throughout the test, we observed participants go to the gate for the purpose of double checking their flight information. In some cases, participants asked the gate agent to confirm changes. Participants know that flight information changes constantly, and looked to the gate as a definitive source of information.

"There, I see my gate. I will go double check that the gate is saying what I need it to say. San Francisco, awesome." -Participant 0

Participants reported more confidence in flight information they got from the airport and gate displays than the System. In response to a question about confidence in the information received from standard airport displays, one participant said:

"Its the information that the airport decided to give me, so I figure they would know better than anyone...
I guess its the current information the airport wants you to know. " - Participant 1

Participants cited connectivity issues, and room for user error as a primary reasons that they trusted personal devices less than standard in-airport displays for flight information.

"I don't really trust watches that much, I am always worried that they are off. I try to look at the airport clock. I don't know, if they run out of batteries... sometimes they could be off. I was more confident [in the phone than the watch]. It's probably hooked up to the internet which usually makes it a litte more accurate." - Participant 1

Participants actively sought the information the System was designed to provide while completing their exercise.

They asked for the following information:

directional indication
walking time to a task
location of a task
free time

Participants also seemed to naturally acknowledge the information pushed to them through "System notifications". They did not exhibit confusion or surprise, and immediately used the information to adjust their plans.

"I liked knowing the plane has landed...it gives you a little bit of time because you know they've got to clean out

the plane and everything, so you know that you've got a few minutes there." - Participant 2

It gave me an extra five minutes that I knew I had that I probably wouldn't have been able to make it to one or two places, so that helped, yeah." - Participant 3
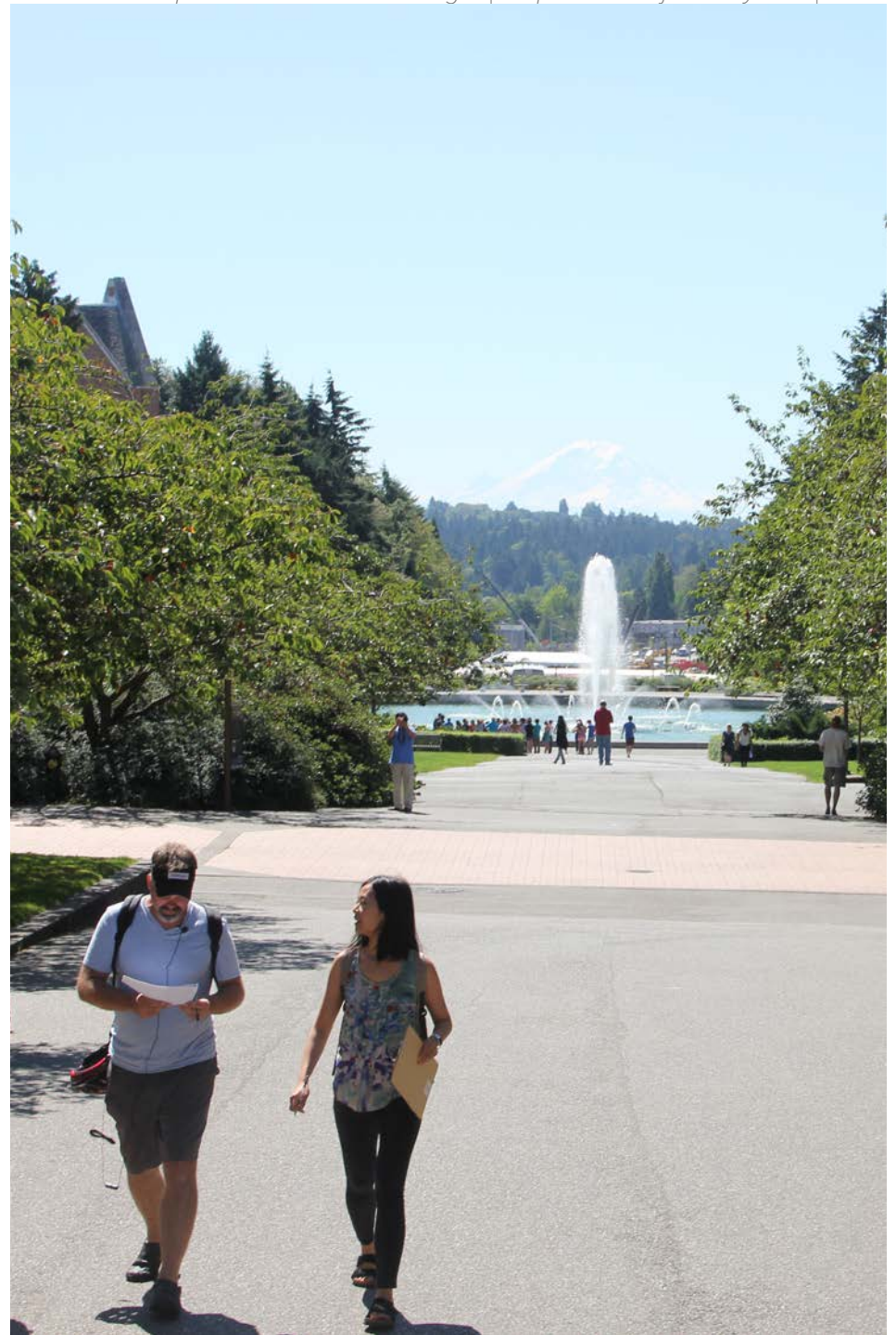
Participants interpret and react to time in different ways.

All participants had a limited amount of time in which to accomplish their tasks, but approached their activity in different ways.

Participant 2 took a passive approach to time - she simply went from task to task until she ran out of time, not thinking about how to maximize her points. When she ran out of time, she proceeded to the gate. She preferred not to know the time as frequently.

Participant 3 was much more ambitious, and preferred to plot out his tasks strategically based on time, location and distances. At each stop, he requested a new set of information about the next location. He also asked "How are we doing on time?" every 2-3 minutes.

Context of where the participant is and relative distances between locations is key for wayfinding.

Participant 2 was nervous and unsure of herself, and stated she was not good with maps and directions. When she was not provided with System help, she focused on doing just those thing close to her. However with the System's help, she was more willing to take the chance and venture further away to complete higher point tasks.

"Which way did I come? I guess I came this way. Did you see me come this way? I can't even remember if I did or not. You won't tell me. God, this doesn't look familiar to me. Must be this way. Just how everything looks the same." - Participant 2

"Mostly I just wanted to do what was near me. I felt a little intimidated though because I was concerned about if I would be able to find everything." - Participant 2

At every stop, Participant 3 asked for the location and distance of the next task on his list. He prioritized his upcoming tasks by frequently asking about his current location relative to other locations. Even he showed less trust on the information from inquiring people, he was constantly checking in with staff member around the library to make sure he was heading to the right direction. Also, during the testing he was frequently referring his own location to several other ones to measure the distance and to prioritize his upcoming tasks.

USABILITY EVALUATION

We set up a lab-based usability evaluation to examine the effectiveness of our preliminary designs. The focus was on the user experience - how well the interface communicates functionality and supports users' tasks.

The usability evaluations uncovered a number of lower level issues related to visual cues, terminology, information architecture, and task flow.

Higher level findings that are fundamental to the System's success are as follows:

Participants did not understand how free time and walking time was calculated, and the usefulness of the information changes with regard to circumstances that affect free time.

Participant 5 believed free time was calculated based on time to departure, and did not assume walk time was included in the calculation. Participant 4 believed free time was calculated based in time to boarding.

"[It] would be worthwhile to have departure time and walk time so I can calculate that out. You are telling me how much free time I have but I really don't know when they are going to close the gate… I would not be happy with my map if I miss my flight." - Participant 5

"I think it [walk time] means walking time to the gate, from when you go through Security. [Free time means] I have 38 minutes until I have to get back to the gate… [until] people are starting to board." - Participant 4

Because of how Participant 5 interpreted an image on the main screen, she believed she was on the plane at a stopover location for her next flight.

"There was just the confusion of whether I'm off the airplane or on the airplane… you might be just pulled up to the gate, so its reading, but you're still stuck on the airplane behind a hundred people, and you wouldn't want that calculated in your free time." - Participant 5

Accuracy and timeliness of information is important for passengers who rely on the System to make their flights on time.

"I just would be… I would want to know if the information is accurate. You wouldn't know it was, unless you did it [sourced the information] out of each airport." - Participant 5

"I'd be worried about talking to staff [the function on the System] because I'd be worried about how fast they can get back to me. I probably would just talk to the face to face agents [at the gate]." - Participant 4
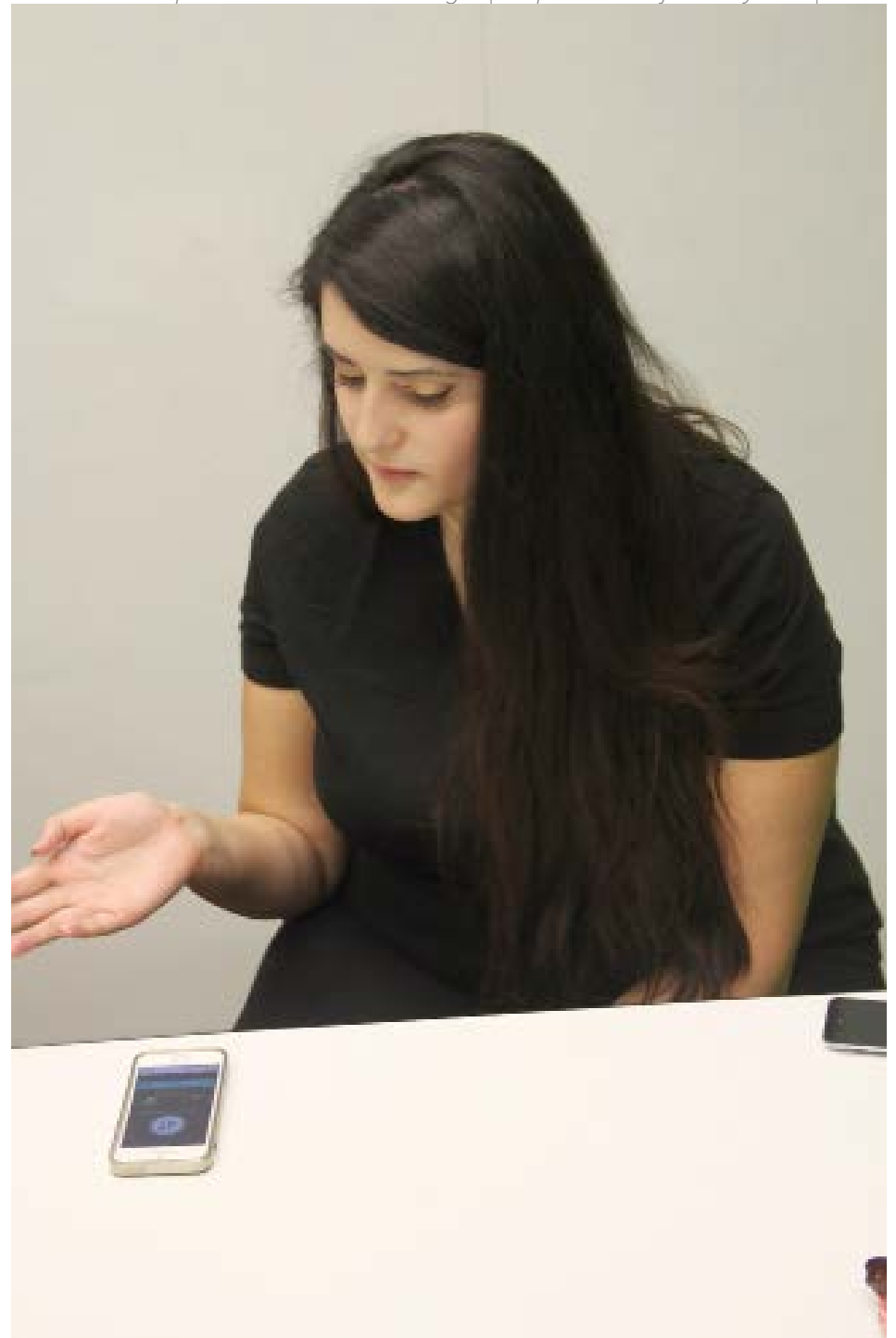
DESIGN PRINCIPLES

Findings from the evaluation directly impacted the development of key design principles we felt were essential for a successful system. These principles informed the design of Skylark.
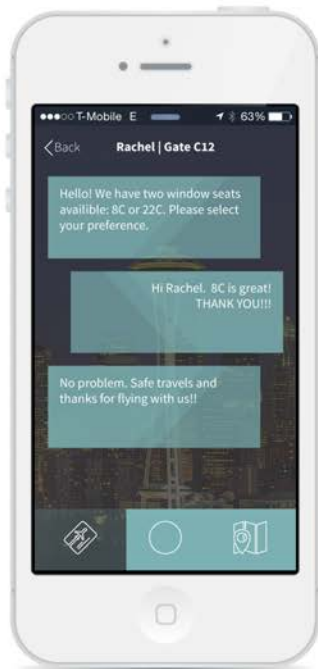
EMPOWERING

Direct communication with gate agents

Seat Changes | Seat Upgrades | Standby

PERSONALIZED

Different ways of displaying time

Empowering

Help passengers feel more in control by providing them with information that helps them make decisions. Empower them to step away from the gate, and relax where they want to, by delivering information and services they typically rely on the gate for.
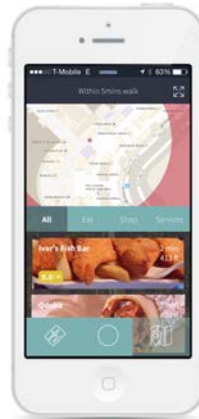
Personalized

People are complex, and they approach and react to time in different ways. Take these differences into account when presenting time-related information. Design for the clock-watcher who needs to track every minute , as well as for the escapist who prefers to know only general milestones in the journey.
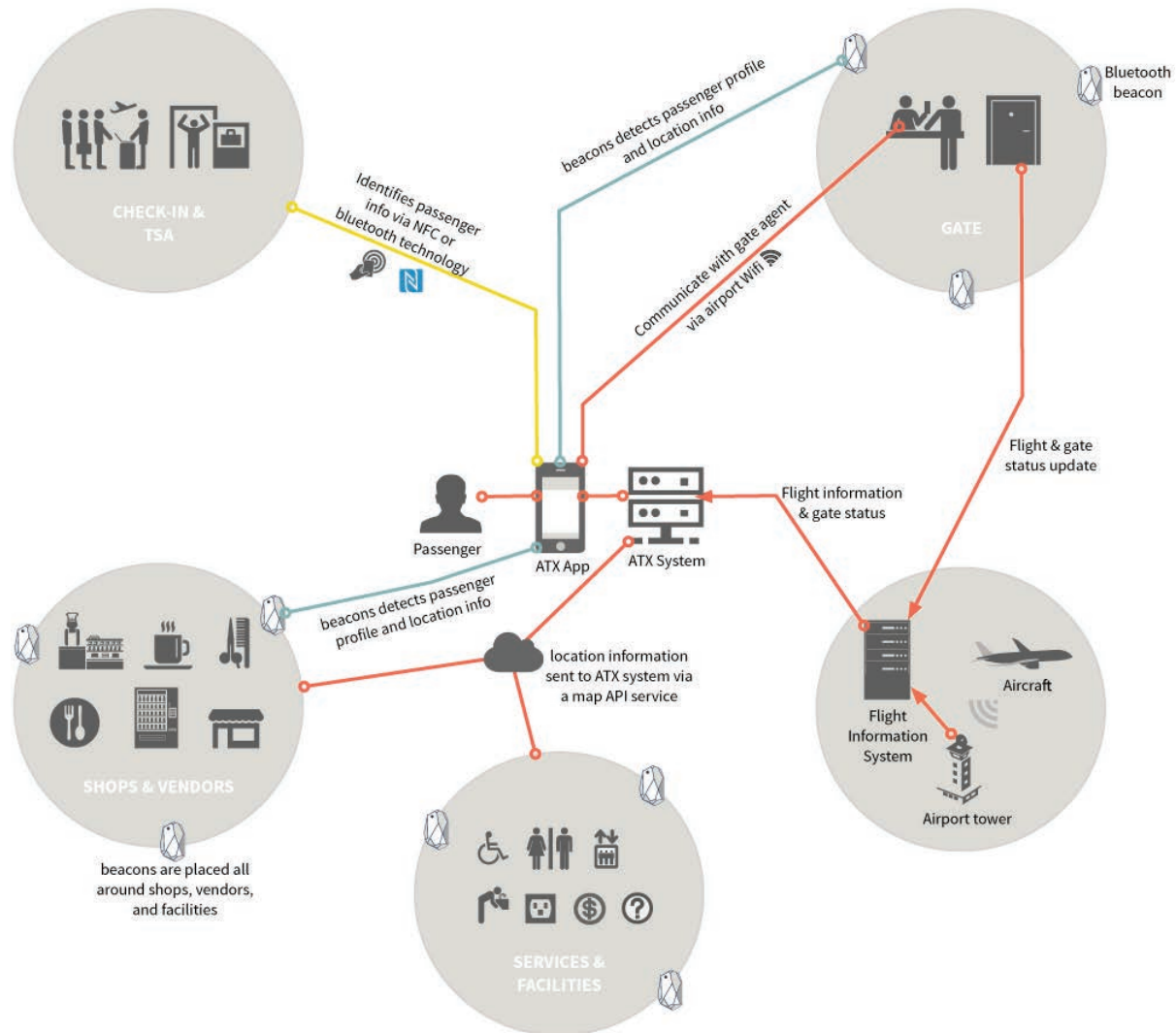
Contextual

The airport is a dynamic, often chaotic environment, and the most important decisions passengers need to make are related to movement through the space. Focus on presenting only the most relevant information required to make a decision, taking into account the passenger's location, the environment, and the situation.

Inspires Confidence

No matter how well designed a product is is, behavior change won't happen unless passengers trust the information. Catching the flight is the end goal, and all other personal needs pale in comparison. It's important to develop and maintain confidence in the system, so passengers feel comfortable making decisions to meet their needs without sacrificing the ability to get to their gate on time.

SKYLARK SPECIFICATIONS

CHECK-IN & TSA

Identifies passenger info via NFC or bluetooth technology

beacons detects passenger profile and location info

Bluetooth beacon

GATE

Communicate with gate agent via airport Wifi

Flight & gate status update

Passenger

ATX App   ATX System

Flight information & gate status

beacons detects passenger profile and location info

location information sent to ATX system via a map API service

Aircraft

SHOPS & VENDORS

Flight Information System

Airport tower

beacons are placed all around shops, vendors, and facilities

SERVICES & FACILITIES

Login Screen

Login Screen

Main Screen

Main Screen

1 The Skylark application requires a user account. Passengers can create and manage their accounts on the Skylrk website.

2 Once passengers log into Skylark, it automatically retrieves the passenger's profile and preferences from Skylark's backend system, as well as flight and gate data from the airline and airport.
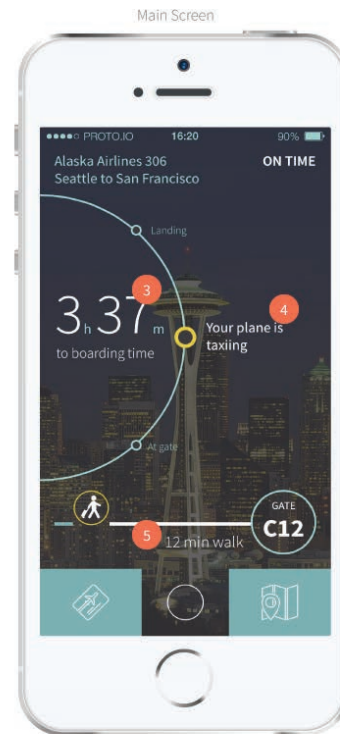
3 This is the application's main screen. The time remaining until boarding is displayed prominently, as this is the most relevant information for passengers. The value is calculated by taking the boarding time and subtracting the current time.

4 The passengers' current flight status is displayed in large text here The yellow circle indicates current status. The smaller blue circles indicates the immediate previous and next status ("Landing" and "At gate") and the messages are displayed in a smaller font size.

5 The distance between the passenger's current physical location and the gate is calculated and displayed here. Average walking times are used.

6 The passenger's airline and flight number are displayed at the top of the main display, along with the current status (ON TIME, DELAYED, CANCELLED).

7 As the passenger walks toward the gate, the passenger icon moves closer to the gate icon. The walking time to gate is also updated accordingly.

**8** Selecting the boarding pass tab will take the passenger to the boarding pass section.

9 Selecting the map tab will take the passenger to the Points of Interest & Map section.

Boarding Pass Screen

Boarding Pass/Service Request

Boarding Pass/Service Request

Boarding Pass/Service Request

10   The passenger's airline, departure city, and
arrival city are displayed here. When there are
multiple legs to the trip, each leg will be
displayed. The current leg is indicated in
yellow. To see the boarding pass for the next
leg, the passenger swipes left anywhere on
the screen.

11   The most important information to the
passenger at this point in the journey is
highlighted with a semi-transparent yellow
background. These include the gate number,
boarding time, group number, and seat
number.
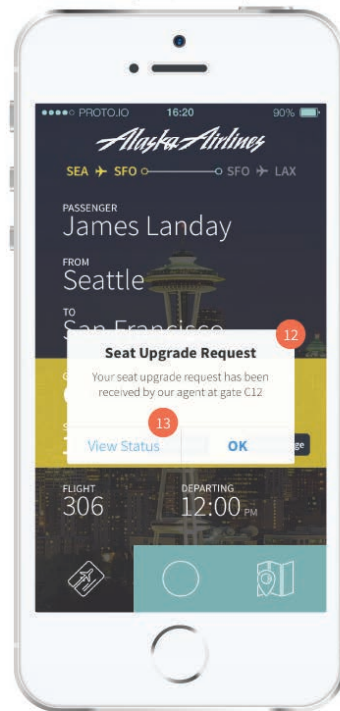
12   Selecting the Seat Upgrade button will send a
seat upgrade request to a gate agent. The
Passenger will be notified of the request
receipt with a push notification.

13   Selecting the View Status button will take the
passenger to the Seat Upgrade Status section.
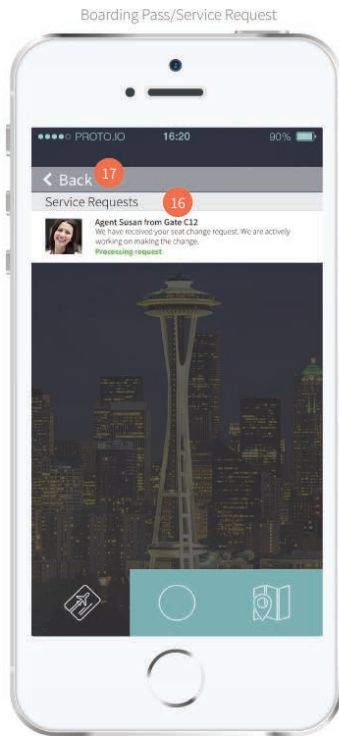
14   After submitting a seat upgrade request, the
passenger will receive follow-up messages.
The number of unread messages will display
here.
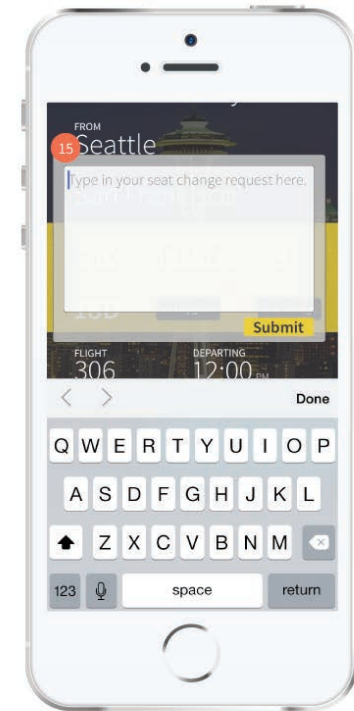
15   Selecting the Seat Change button will open a
test message box, and the mobile device's
native keyboard will open up. The passenger
can type his seat change request for
submission to a gate agent.

Boarding Pass/Service Request

Boarding Pass/Service Request

Map/Points of Interest Screen

Map/Points of Interest Screen

16 This is the Service Request list. It displays all the updates/messages between the passenger and the gate agent. The gate agent's photo and first name are displayed.

17 Selecting the back button will take the passenger back to the boarding pass screen.

18 After submitting a seat change request, the passenger will receive follow-up messages. The number of unread messages will display here.
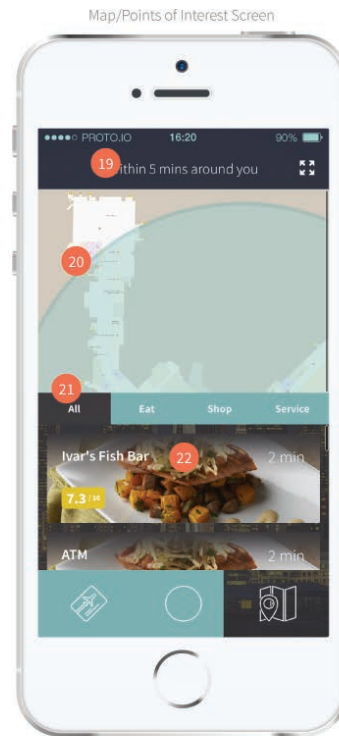
19 The distance filter allows passengers to see points of interest by walking time radius. The default walking time is 5 minutes.

20 An indoor map is displayed using map services (Google Indoor Maps is used in this example). The semi-transparent blue circle covers the area within the walk time that the passenger selects.

21 The tabs display different categories of points of interest (All, Eat, Shop, Service).

22 The list of points of interest can be scrolled vertically. This snippet view displays the name of the business or service, walking time to the location, and rating (Foursquare is used in this example). Passengers can select any item on the list to open an expanded view.
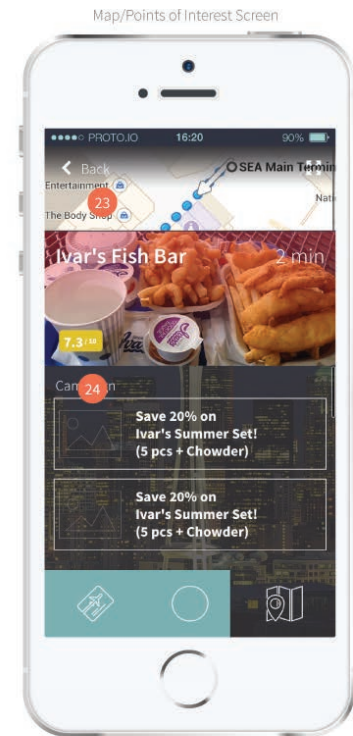
23 This is the expanded view. The map is contracted here, and passengers can select the map to open an expanded view that includes route visualization.

24 Promotions and coupons are viewable here.

Map/Points of Interest Screen
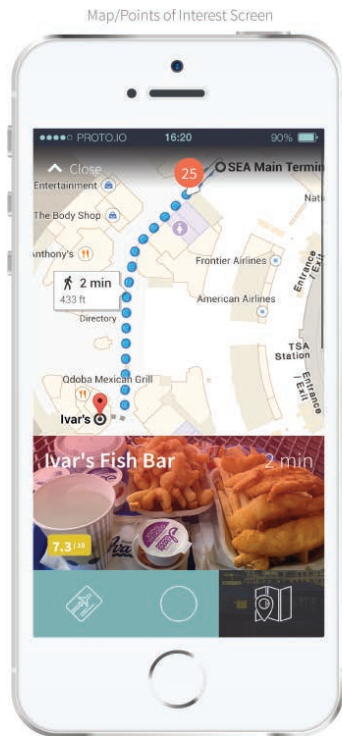
25   The expanded view shows the passenger's current location, the desired business or service, and the walking route.

NOTIFICATIONS

Based on the insights we gathered from interviews and concept evaluations with our research participants, we crafted nine notification messages that we feel are most relevant to passengers to display on our mobile application. A subset of these messages are more critical, and are delivered to passengers as push notifications. The objective was to not overburden nervous passengers in busy and chaotic environments with frequent alerts and messages.

Notification Message	Main Display	Push Notification
"Your plane is en route"	✔	
"Your plane has landed in Seattle"	✔	✔
"Your plane is now taxiing"	✔	
"Your plane is at gate C12"	✔	✔
"Your flight has been delayed"	✔	
"Your flight has been delayed. Now departing at at 12:25pm"	✔	✔
"Your flight is boarding soon, and you should head toward the gate"	✔	✔
"Your group has started boarding"	✔	✔
"Have a good trip. See you in San Francisco"	✔	

POTENTIAL

We believe Skylark has the potential to truly change passengers' airport experience. If this concept were to move beyond a student project, partnership with an airline would be a good first step. Airlines are already working closely with airports, and could drive infrastructure development and access to the necessary airline and airport databases. In addition, customers ultimately look to airlines as a source of information, and brand trust will go a long way in successful adoption.

Beyond the app
We chose to develop Skylark as a mobile app, because smartphones are widely used and commonly accepted for this type of service. However we also see the potential to use other platforms such as smart watches, Google Glass, and displays embedded in the airport environment. Each platform has unique properties that would be ideal for passengers who are on the move, distracted and holding luggage.

Beyond the terminal
Skylark has the potential to help passengers beyond just the terminal.
The system could be developed as a platform for managing the check-in
process, planning a trip to the airport, and orienting passengers after they
land. The ability to use a single app to manage the complete air travel
journey could fundamentally change the way passengers experience
travel in the future.

T H A N K   Y O U

Linda Wagner
Andy Davidson
Jared Bauer

TEAGUE
Cameron Campbell
Julie Anne Seguin

Alaska Airlines

Scott Ichikawa
Abigail Steinem
Catherine Lim

MHCI+D

DUB