



USCorners

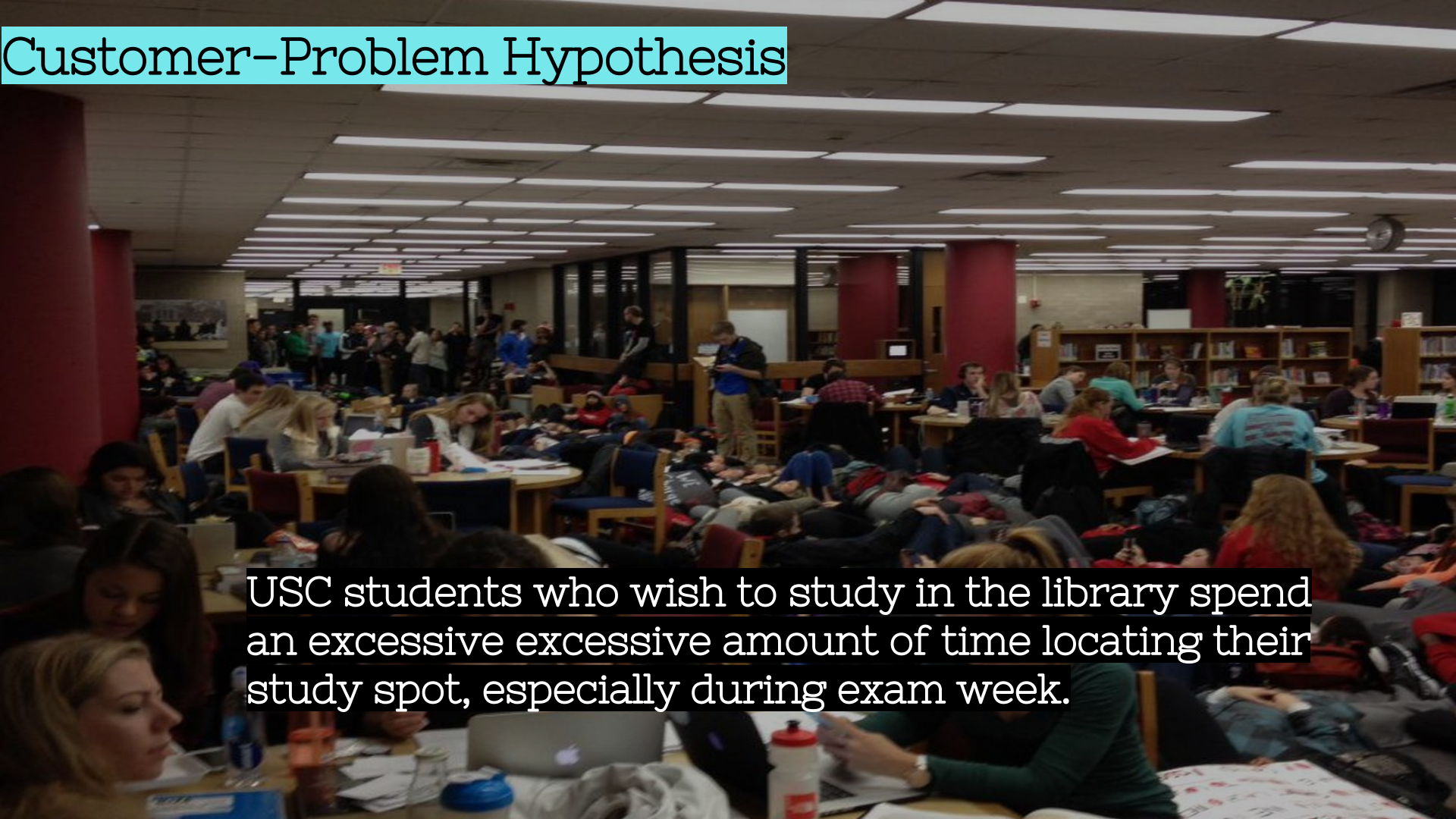
Library Space Finder *for* USC Students



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INF 556 | SPRING 2017

Customer-Problem Hypothesis

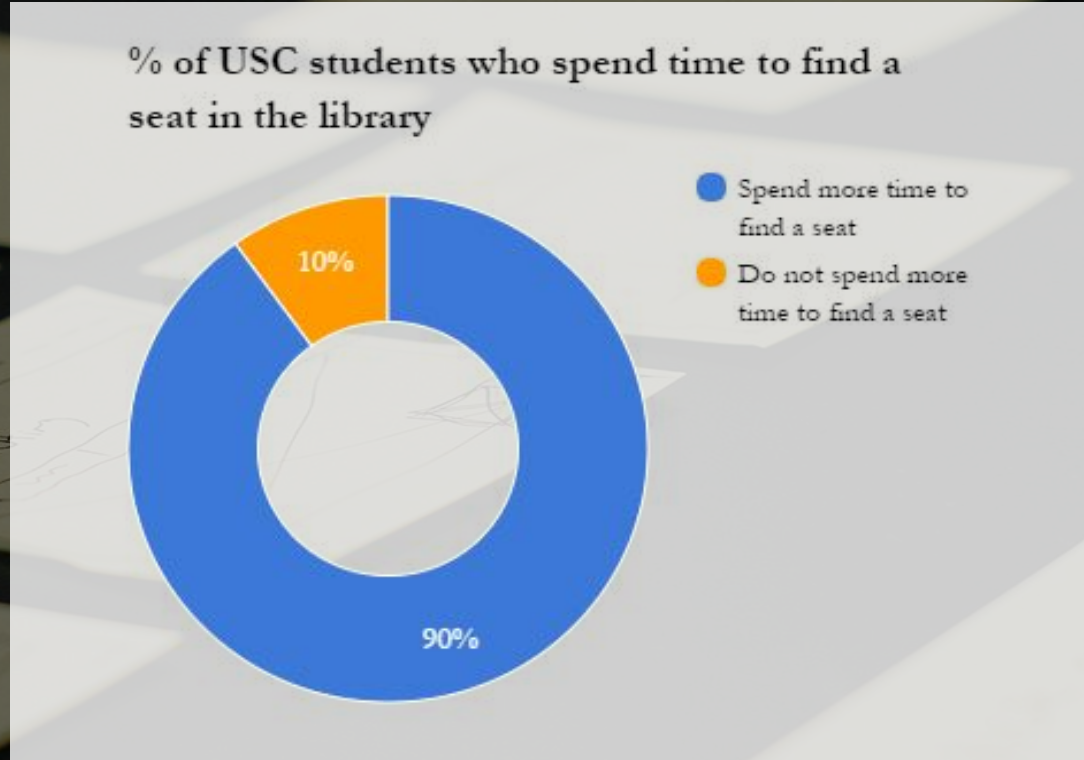
A wide-angle photograph of a large, brightly lit library. The room is filled with students. Many are sitting at round wooden tables, some using laptops. Others are sitting on the floor, leaning against tables or each other, studying. The room has a high ceiling with many rectangular light fixtures. There are bookshelves in the background and red pillars. The overall atmosphere is one of a busy, crowded study space.

USC students who wish to study in the library spend an excessive excessive amount of time locating their study spot, especially during exam week.

Customer Discovery Findings

90% (9 out of 10) of USC students who use the library for studying said they spend too much time trying to find a seat.

THUS, VALIDATED!!!



Additional Findings

100%



10 out of 10 USC students said they can barely find any seats in the library during exam week especially during finals.

100%



10 out of 10 USC students said they always carry their phone with them when they are on campus.

90%



9 out of 10 USC students said they look for a seat that has a charging port nearby, to power their devices while studying.

80%



8 out of 10 USC students said they find leavey library and science library the most crowded out of all the libraries on campus.

Sheldon Cooper, student at USC



"You're in my spot"

Description:

- Late teens/Early 20's.
- Attends the University of Southern California, Los Angeles, California.
- Shares a small on-campus room with his roommate.

Behavior:

- Tech-savvy person.
- Very busy with club activities, hence constantly in a hurry.
- Uses many of the libraries on campus very frequently to work individually or to work with friends.
- Doesn't leave his room without his phone.
- Addicted to Starbucks coffee.

Needs & Goals:

- Needs a quiet space to think/study and to do his assignments.
- Needs to use computers in the library that have licensed software pre-installed like Cadence and Photoshop for his lab/assignments/projects.
- Needs to have plug points near his seat to charge his devices.
- Motivated to turn in his assignments on time.

Competitive Analysis Brief

- + A competitive analysis was conducted to review and compare online sites and applications in the relevant marketplace as of February 2017.
- + The goal was to identify any opportunities or gaps that aligned with our app's value proposition that might allow for a quick win using a "Lean" approach for releasing a minimum viable product.
- + I found 3 direct and 3 indirect competitors.
- + The vision is to create an app that allows USC students to quickly find seats in the library from anywhere using our app.

DIRECT COMPETITORS:

- *UCI Libraries
- *NAU Libraries
- *LSU Libraries

INDIRECT COMPETITORS:

- *IsItBusy.in
- *SpaceFinder
- *RoomFinder

INFLUENCERS:

- *Ticketmaster

Significant Direct Competitor: UCI Libraries

PROS:

- + Intuitive UX
- + Real time data of systems available
- + Floor plan and map help
- + Wide filter list
- + Icons for amenities for easy reading

CONS:

- No app available!!!
- Doesn't provide real time seat count
- Only rooms can be booked

Filters
Select the filters below to narrow down your results.
[Clear](#)

▼ Amenities

- ☐ Food/Drink Allowed
- ☐ Group Study
- ☐ Individual Study
- ☒ Libraries Spaces
- ☐ Open Late
- ☐ Public Computer
- ☐ Quiet Study
- ☐ Study Room
- ☐ Whiteboard

▼ Buildings *

- ☐ Ayala Science Library
- ☐ Grunigen Medical Library
- ☐ Langson Library
- ☐ Libraries Gateway Study Center

▼ Equipment *

- ☐ 3D Printer
- ☐ 3D Scanner
- ☐ Color Printer
- ☐ Copiers
- ☐ Printers
- ☐ Scanners

* library spaces only

Location

Amenities

Computer Availability

Clear Image

Icons for easy display

Real time count of systems

Name, Hours & Reservation Link

Long list of Filters

Link to floor plan & Interactive map

Ayala Science Library
Ayala Science Library
open: 8:00 am
close: 6:00 pm
[Reserve a study room](#)

Claire Trevor Arts (AITR 290)
Claire Trevor Arts
open: 10:00 am
close: 4:00 pm

Faculty and Graduate Student Reading Room
Ayala Science Library
Use restrictions apply
open: 8:00 am
close: 6:00 pm

Grunigen Medical Library
UCI Libraries
open: 8:00 am
close: 8:00 pm
[Reserve](#)

Computer access not currently available.

6 of 17 computers available now

Significant Indirect Competitor: SpaceFinder

PROS:

- + Good UX, easy to read.
- + Users can provide TIPS about the places (UGC)
- + Long useful filter list
- + Icons for amenities very easy to read
- + Contact information and hours of operation clearly provided.
- + Google map integration

CONS:

- Real time data unavailable
- Can't reserve space
- No app available yet

The screenshot displays the SpaceFinder app interface. On the left is a filter menu with sections: 'I WANT TO WORK...' (with a dropdown arrow), 'ATMOSPHERE', 'NOISE LEVELS', and 'FACILITIES'. The 'I WANT TO WORK...' section includes options like 'Alone, in private', 'Where others are working', 'With friends', and 'On a group project'. The 'FACILITIES' section includes 'Food & drink allowed', 'Natural daylight', and 'Attractive views out of the window'. A 'CLEAR ALL' button is at the top, and a 'USE MY LOCATION' button is below it. The main content area shows search results. The first result is 'Costa Coffee (Grand Arcade)' with a 'CAFÉ - UNIT K5' tag. Below the name is a description: 'A small seating area on the ground floor of the Grand Arcade in quite an open area, so lots of people passing by.' Below the description are icons for amenities: a trash can, Wi-Fi, a laptop, a moon, and a hand. The second result is 'Cambridge Public Library - 2nd Floor (Non-Fiction and Reference)' with a 'LIBRARY SPACE - CAMBRIDGE CENTRAL PUBLIC LIBRARY' tag. Below the name is a description: 'Brilliant for group study, but don't forget being a public library you are likely to get groups of A-Level & GSCE'. Below the description is a photo of the library interior and a row of icons: a sun, a book, a laptop, Wi-Fi, and a monitor. On the right is a Google map of Cambridge with red location pins. Annotations with arrows point to specific features: a green box labeled 'Big font for heading. Google map integration' points to the 'Costa Coffee' heading; a green box labeled 'Use of icons' points to the amenity icons; a red box labeled 'No seat indicator' points to a red pin on the map; and a green box labeled 'Personalized Filter list' points to the filter menu.

CLEAR ALL

USE MY LOCATION

I WANT TO WORK... ▾

- ✓ Alone, in private
- ✓ Where others are working
- ✓ With friends
- ✓ On a group project

ATMOSPHERE ▴

NOISE LEVELS ▴

FACILITIES ▾

- Food & drink allowed
- Natural daylight
- Attractive views out of the window

Large desks

Showing 35 of 37 results.

Costa Coffee (Grand Arcade)

CAFÉ - UNIT K5

A small seating area on the ground floor of the Grand Arcade in quite an open area, so lots of people passing by.

Use of icons

Cambridge Public Library - 2nd Floor (Non-Fiction and Reference)

LIBRARY SPACE - CAMBRIDGE CENTRAL PUBLIC LIBRARY

Brilliant for group study, but don't forget being a public library you are likely to get groups of A-Level & GSCE

Big font for heading. Google map integration

No seat indicator

Personalized Filter list

Findings Brief Summary

Current Marketplace

We are currently competing in the “Purple Ocean” market conditions since we have three direct competitors, but none have used IOT (Internet Of Things) to extract sensor readings from the library rooms or seats to provide real-time data.

Opportunity

None of the competitors have a fully functional app that has all the essential features we are aiming for.

However, ours is a little bit of a futuristic idea, but there is still plenty of room for innovation.

Recommendations

I can definitely envision the right hardware and software required for the app in future, given the rapid market changes in technology.

Hence, we could go ahead with the project for now and test drive with a few essential features with the “hypothetical” sensor in place.

Value Proposition

A library space locator for USC Students to quickly find ideal study spaces.

Key Experiences



Long list of filters to personalize your choice of study space



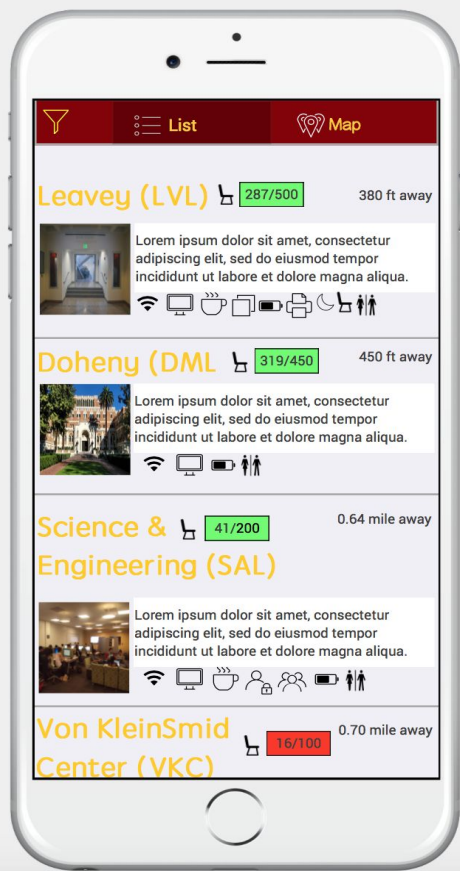
Real-time map of reliable study spaces on each floor of every library on campus



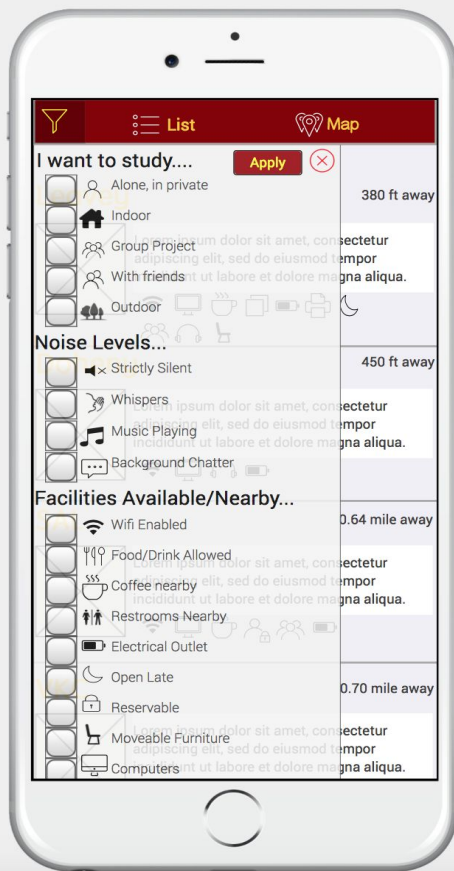
Real time notifications whenever a favorite seat or spot opens up nearby (within 2 mile radius of campus)

Prototype

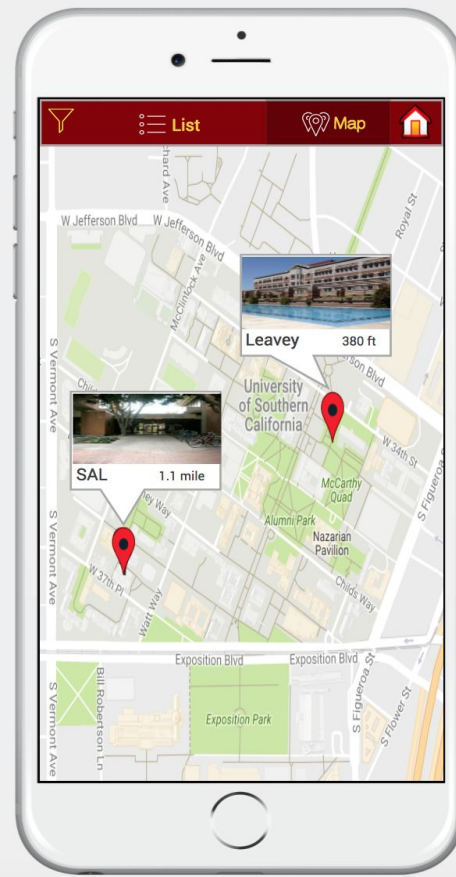
1



2



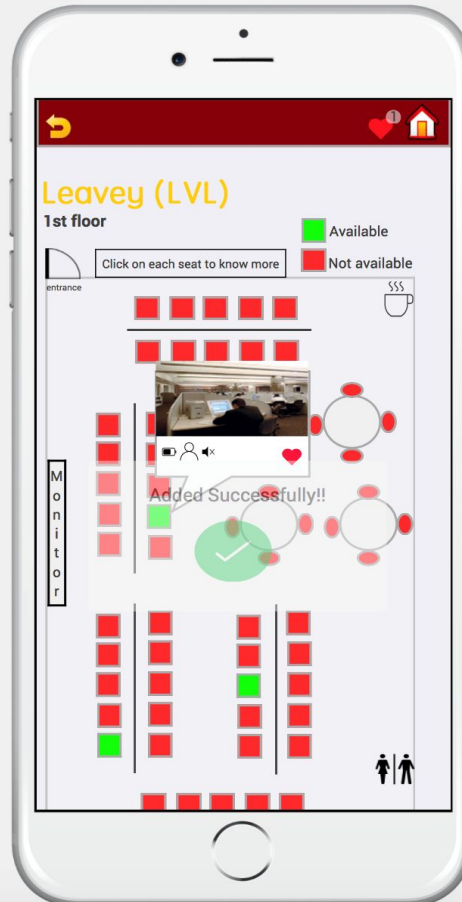
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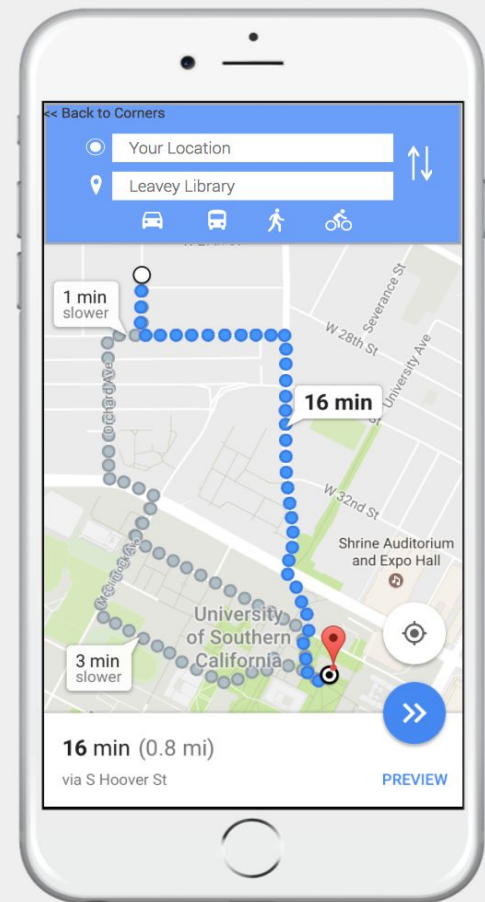
4



5



6



Field Research Execution



Scouted Leavey and Doheny library for participants.



Since it was the week of the Spring Break, my assigned partner and I conducted our study in the library with the students who were at Leavey during the break.



Success Criteria for Validation: At least 70% (7 out of 10) would use the app when they want to go to the library.

Interview Quote

“It actually shows how each seat looks?! That’s so cool!”

“I really like this floor layout since I can easily see where the nearby restrooms, printers and all are on each floor!”



Interview in progress at Leavey library

Guerilla User Research Findings

90%



9 out of 10 USC students said they can barely find any seats in the library during exam week especially during finals

100%



10 out of 10 USC students said they can definitely see themselves using this app when they go to the library

50%



5 out of 10 USC students said they would not pay for the app but would use it if provided for free like campus cruiser




Validated ! -> PERSEVERE :)

Business Model- Tie up with USC


Facebook Campaign Results

1


USC Corners
 Sponsored ·

Like Page

No space in the library?
 Don't waste time looking for seats in the library!
 Download NOW to find ideal study locations on USC campus.




Let us find the perfect study space for you.

USC-CORNERS.XYZ


Download

2


USC Corners
 Sponsored ·

Like Page

Exams Week but no space in the library?
 Let us find the best study locations on campus for you with personalized features to help you pull that all-nighter.
 Try the USC Corners App Now!



Find study spaces in the library on-the-go!

USC-CORNERS.XYZ

Learn More

All Campaigns ▾

+ Create Campaign

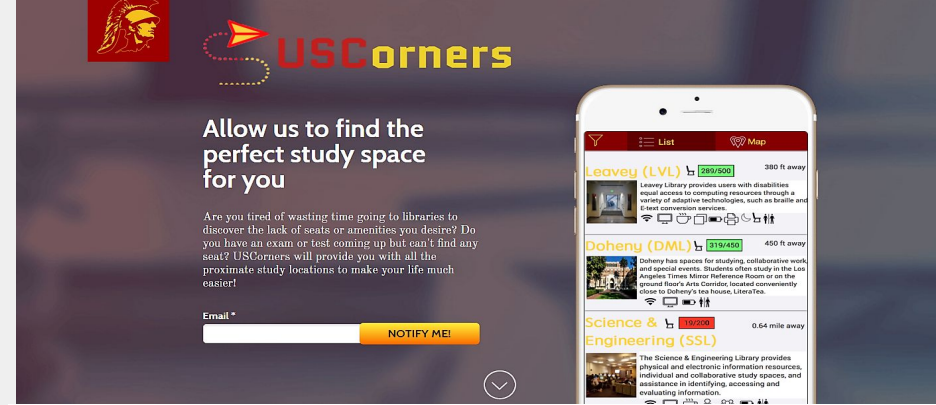
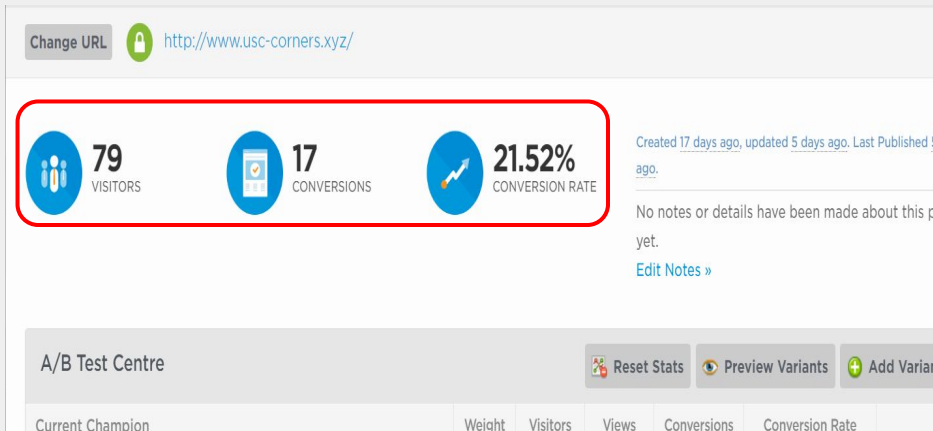
Columns: Performance ▾

Breakdown ▾

Export ▾

	Campaign Name	Delivery ⓘ ▴	Results ⓘ	Reach ⓘ	Cost per R... ⓘ	Amount Spent ⓘ	Ends ⓘ
<input type="checkbox"/>	2nd week	● Inactive	56 Link Clicks	2,474	\$0.37 Per Link Click	\$20.73	Yesterday
<input type="checkbox"/>	usc ux second try	● Inactive	18 Link Clicks	652	\$0.28 Per Link Click	\$5.00	Mar 31, 2017
<input type="checkbox"/>	usc ux	● Inactive	10 Link Clicks	691	\$0.50 Per Link Click	\$5.00	Mar 30, 2017
▶ Results from 3 Campaigns			84 Link Clicks	3,556 People	\$0.37 Per Link Click	\$30.73 Total Spent	

Unbounce Campaign Results



Say Goodbye To Unfavorable Study Spaces



Personalized Filters

Choose from the diverse amenities available at different libraries needed to enhance your academic achievement.



Real-time Availability of Seats

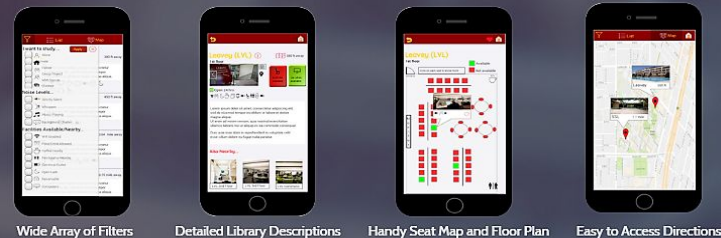
Be constantly updated on seat openings on all floors of each library on campus with the ability to bookmark favorites.



Save Time

We don't want you wasting your time searching for seats at libraries. You can easily access open seats on-the-go.

Key Features






Findings/Conclusions:

	Facebook Ad-week 1	Facebook Ad-week 2	Unbounce- 2 weeks
Reach	1343 (2 days)	2474 (4 days)	79
Click	28	56	17
CTR (Click Through Rate)	1.59%	1.91%	21.52%
Findings/Conclusions	<p>The campaign was not very successful with only 84 clicks out of 3556 people reached. Also with the leads, I got only a 21.5 percent which is a below average performance.</p> <p>Next time, instead of a facebook campaign, I would try running the ads directly on USC-related facebook pages where it's definitely bound to reach my targeted audience.</p> <p>Also, the timing may not have been correct to run the campaign, partly because it was exam's week.</p>		

Road Map:

The product will definitely have a wide spread acceptance among students once released. Given the number of admits to USC every year, I do not see an end to it anytime soon. Once it gains momentum, the same idea can be extended to other schools/universities that have a similar customer-problem thereby having the opportunity to expand and grow iteratively.

If an investor were to give me \$100,000 to move forward, I would:

-  Conduct research to explore efficient and reliable sensor hardwares or different other options available in the market to estimate the feasibility of the app/idea.
-  Develop a working prototype and run more targeted tests to constantly improve and iterate based on the feedback.
-  Run aggressive marketing campaigns with the help of a market/sales expert.