



Melon

BIKE HELMET SHARE

An integrated proposal to provide bicycle helmets and encourage helmet use for Citi Bike users in New York City.

COURSE

Research and
Development
Methods

STUDENTS

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PRELIMINARY RESEARCH

We observed bikers at Citi Bike locations and noticed that there were no helmets available for use, and that Citi Bike users tended not to bring helmets of their own to wear.

After some preliminary research, we found that 47.5 million Americans bike regularly, an increase from 43 million bikers three years ago. Furthermore, the popularity of biking is increasing with awareness of climate change. The necessity of helmets is increasing with the use of electric scooters and bikes in urban areas. We found that 71% of bicycle fatalities occur in urban areas 97% of fatalities were not wearing a helmet.

↑ Posted by u/researchstudier 24 days ago

2 Helmets! Do you wear them?

↓

Hi! I am a design student, currently working on ways to make helmets more accessible and attractive, specifically for Citibike. I'm interested in knowing whether or not you use helmets, and why you may or may not choose to. Please, if you have any concerns, ideas, experiences or questions let me know! For specific prompts, see below, but I'd love to hear anything you might want to add. Thanks so much for taking the time to read/respond!

How dangerous do you consider riding a bicycle without a helmet to be?

What activities do you wear a helmet for?

Are you aware of laws regulating helmet use?

Would you support a laws that regulate wearing a helmet?

Would you be more likely to wear a helmet while biking if it was more stylish?

Would you be more likely to wear a helmet if it could take up less space when not in use or if you had somewhere to store it?

What do you use your bike for?

How far do you ride on your bike?

How do you carry your belongings throughout your day?

Are you concerned about your safety while riding your bike on the streets?

Do you wear a helmet? Why or why not?

12 Comments Share Save

zamansky 6 points · 24 days ago

I wear a helmet for the simple reason that you can do everything right and still be dumped on your head.

Share Report Save

zippityflip 8 points · 24 days ago

I have a daily commute of about 6 miles each way; I use the bike for commuting and other transport. I learned to ride on Citibike and I don't have my own bike. I ride bike share in other cities, too. I don't wear a helmet because:

- Not legally required for adults in NYC
- I bike pretty slowly, at about 7 miles per hour, and I walk at about 4 miles per hour. So if I fall down through my own clumsiness, I don't think I'm that much more likely to get a major head injury than I am in walking. If moving at this speed required a helmet, every competent jogger should be wearing a helmet.
- I'm conscientious of traffic laws when biking, much more so than when walking. I could get hit by a car either walking or biking. I don't think getting hit by a car on a bike is worse than off a bike.
- I'm definitely concerned about my safety in the streets, but my head is less than 1/8th of my body, damn people. When we've seen all these cyclists get killed so far this year, they've been pulled under the wheels of trucks or struck head on. A helmet doesn't make much difference in these cases. I think that non-head injuries are significantly more common for the average cyclist. I bike to protect my entire body.
- There's [that questionable study](#) that seems to indicate that seeing my blonde ponytail will make cars give me more space and be less likely to hit me than if they see me in a helmet; who knows what the truth is.
- I will say, though, that I'm also motivated by the idea that riding without a helmet reinforces the norm that biking

[VIEW ENTIRE DISCUSSION \(12 COMMENTS\)](#)

RESEARCH PLAN

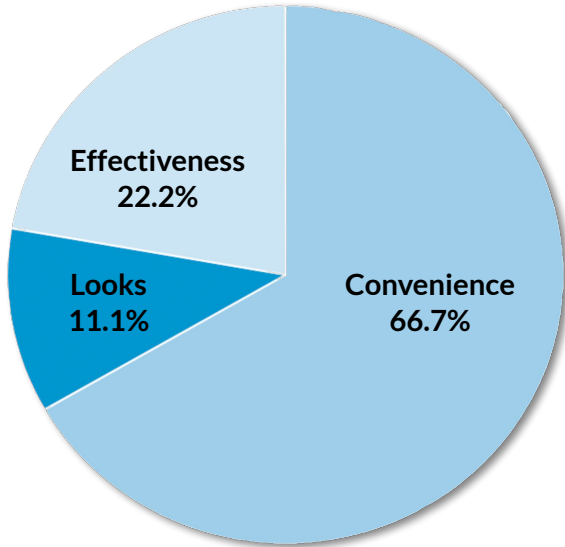
Our research included preliminary research, site observations, in person interviews, online surveys and user testing. Our primary points of insight came from survey questions posted in online biking and Citi Biking communities in Reddit and Quora.

Target Market

Citi Bike Users who don't use helmets



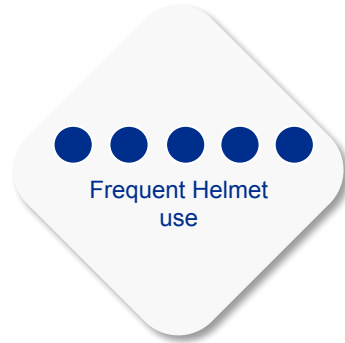
How can we promote more frequent, hygienic and portable helmet usage for Citi Bike users?



ANALYSIS

The data collected from online communities shows that people feel that helmets are inconvenient. Companies have tried to create helmet vending machines and failed. Designers have designed disposable helmets, but they haven't made an impact on the market. Helmet design may not be the driving force for more helmet use during bicycling.

DESIGN PRINCIPLES



GOAL

From our research we produced four questions to help focus our research.

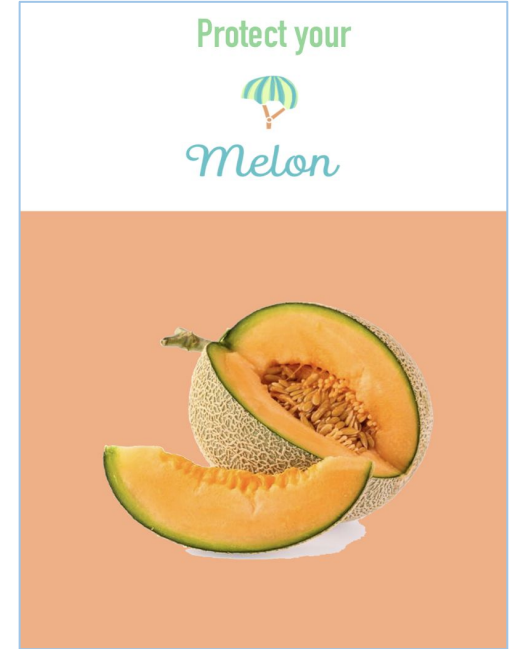
How might we...

- ...promote more frequent helmet use in New York City through design?
- ...design an accessible, engaging and hygienic system for Citi Bike users to obtain helmets?
- ...design a convenient system for storing bike helmets in urban settings?
- ...break down the perception of helmets being unattractive?



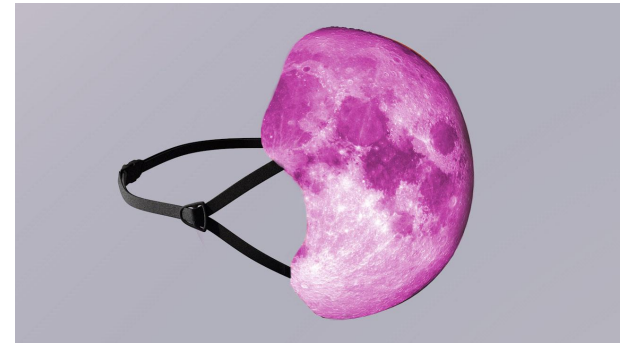
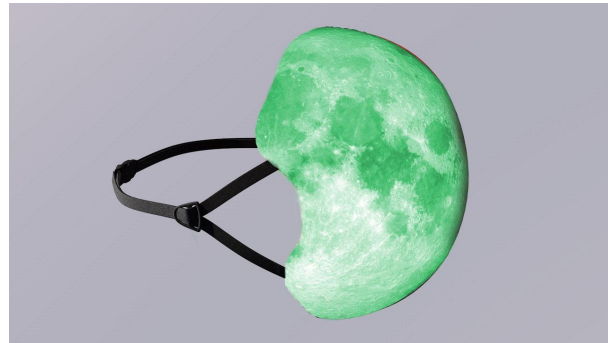
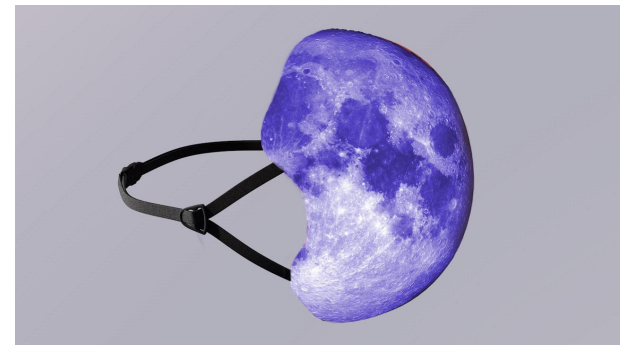
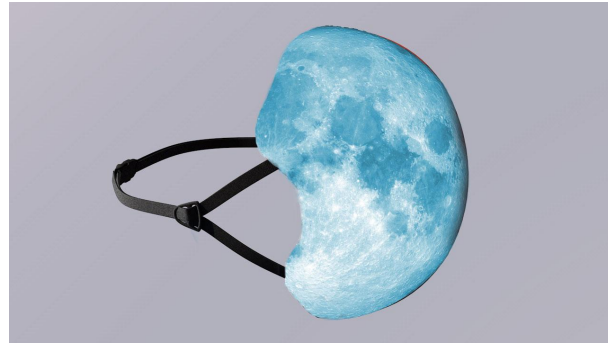
New York's First Helmet Share System

We designed a system to provide helmets to Citi Bike users in New York City. Our system focuses on convenience, access, branding, sanitation and rewards. Our name “melon”, and our branding intends to make safety fun and attractive. Melon will be located at Citi Bike locations, providing a new service in a pre existing system. Users can interact with Melon through their phone or credit card, which will unlock a helmet of their choice from the vending machine. Users with accounts can simply select to use a helmet and scan the code on our app. Users without accounts can swipe their credit card, primarily in case a helmet goes missing.



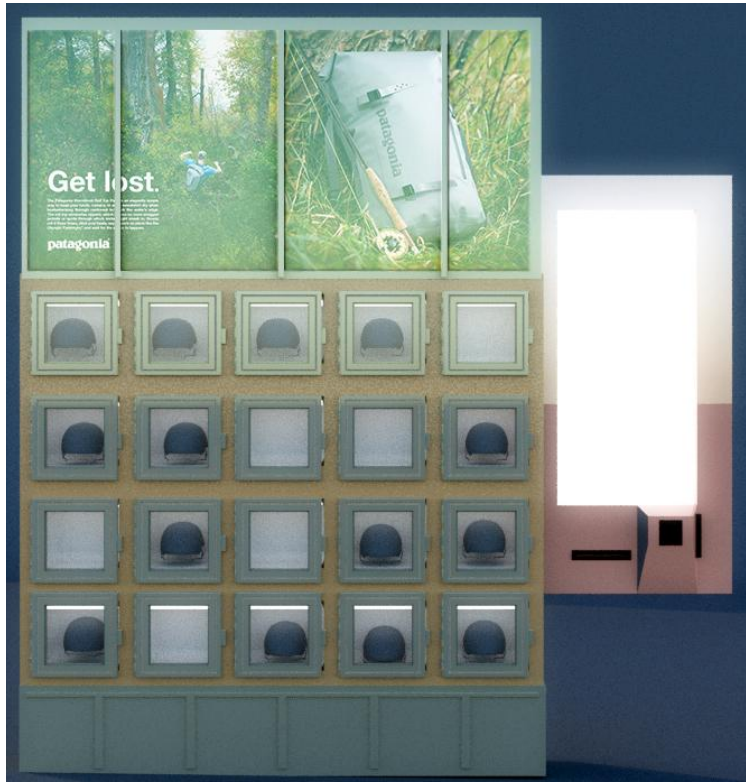
Branding Plan

Our branding is fun, quirky and eye catching to make helmets more attractive. At the top of our Melon vender machines, there is a screen to show our branding and to provide space for advertisements from our sponsors.



Branding

In the future, we plan on working with artists and designers to create speciality helmets. The images above show a helmet concept based off of a Robert Geller design.



Cost and Funding Strategy

We want users to be able to access helmets for little cost. In order to allow this, we provide space for investors to use our systems for advertisement.



ARTS & CULTURE

The Environment's New Clothes: Biodegradable Textiles Grown from Live Organisms

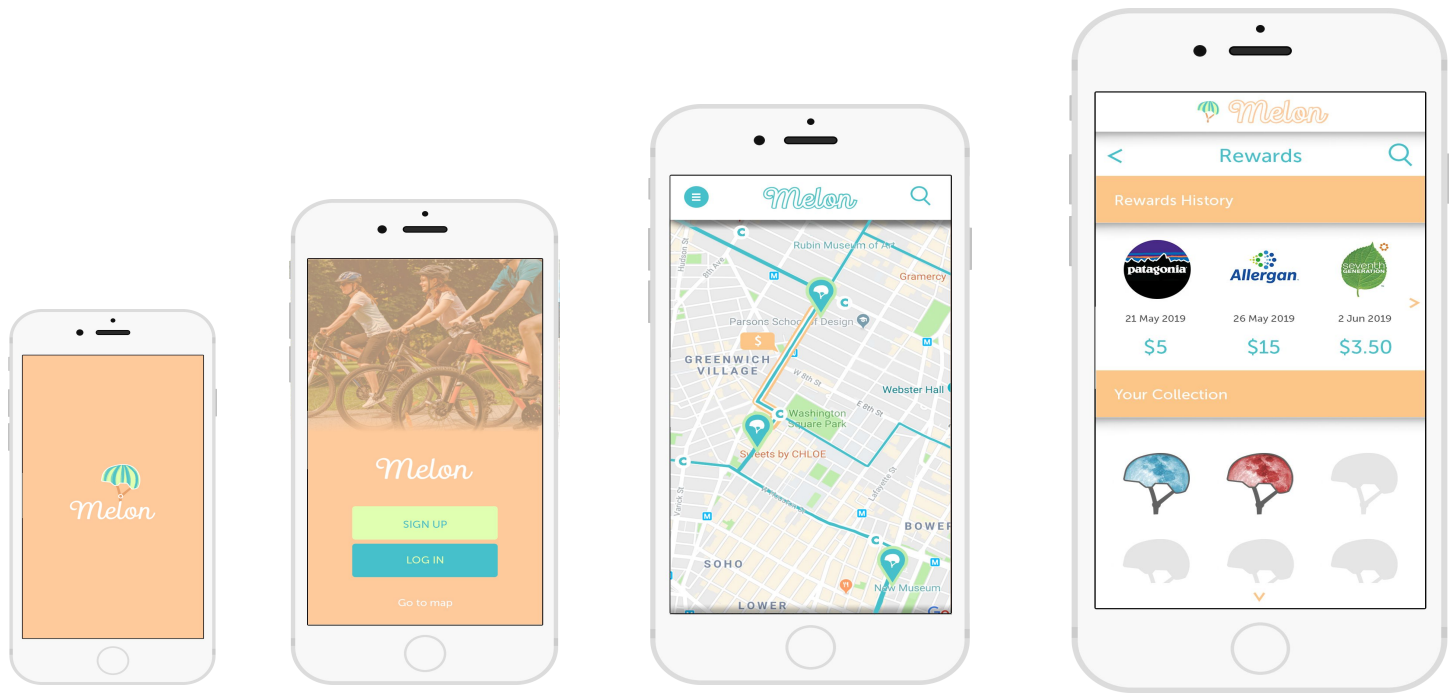
To combat the ill effects of "fast fashion," designers look for more sustainable methods

By Erica Cirino on September 14, 2018



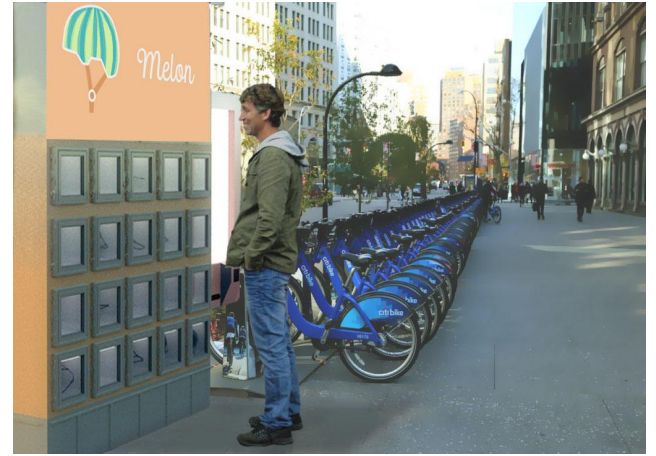
Sanitation

We use biodegradable cloth liners for our helmets. These liners are dispensed from our helmet system when users make a selection to take a helmet. Liners can then be disposed of without the production of waste.



App Access/Rewards

The data collected from online communities shows that people feel helmets are inconvenient. Companies have tried to create helmet vending machines and failed. Our app allows users to see where Melon helmet providers are located and how many helmets are available at their nearest location. Similar to “bike angels”, a system to disperse bikes throughout Citi Bike locations, our app allows users to move helmets from concentrated locations to locations that need helmets by providing them with rewards for our sponsoring companies. This also encourages investors to fund us by directing our users towards their products.



Melon stations rendered at Citi Bike locations with figure for scale and advertisement renders in Subway stations

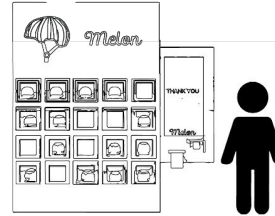
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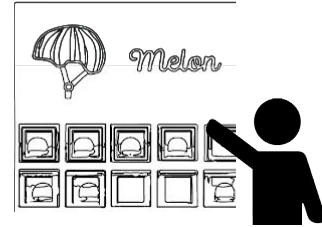
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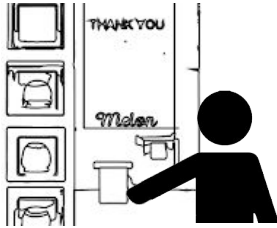
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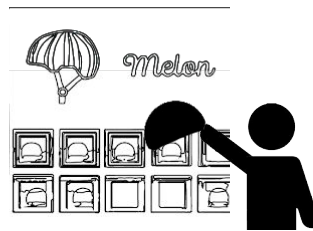
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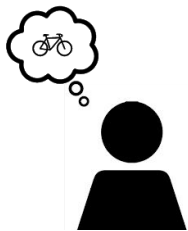
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JOURNEY MAP

This journey map shows the process of a user with an account

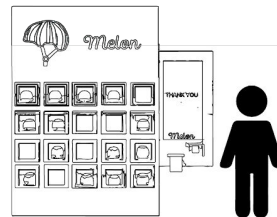
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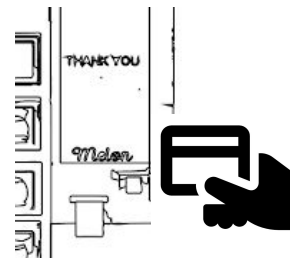
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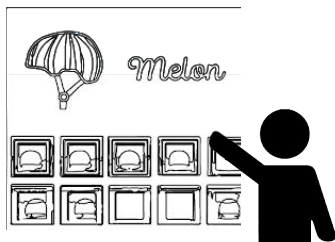
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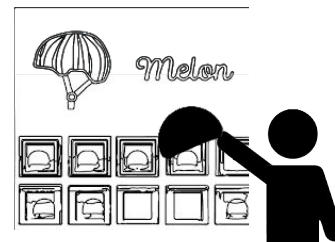
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JOURNEY MAP

This journey map shows the process of a user without an account



Melon