

RecycleAid

Recycling Made Easy and Fun

Mobile App Case Study



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RecycleAid Mobile App

01. THE PROBLEM

02. USER RESEARCH

03. DEFINITION & IDEATION

04. PROTOTYPING

05. TESTING & ITERATING

THE PROBLEM:

New residents in a city have a difficult time learning the local recycling guidelines and lack community support that can provide quick and easy recycling information.

THE SOLUTION:

We believe an app that provides clear local recycling guidelines and friendly, goal-oriented competition/rewards for people who recycle or want to start recycling will create awareness, confidence and enthusiasm for community recycling.

OUR ROLE: UX research and design

TOOLS: Adobe Illustrator, Adobe XD, Figma, Miro

User Research / Define & Ideation / Prototyping / Testing & Iterations

User Research

Interview Plan

Interview Plan Outline

We began by surveying **65 participants,** who currently **utilize recycling as a waste disposal method.**

Based off of our survey results we began to conduct 6 user interviews in order to gain insight on the **level of comfort/knowledge that people had with recycling** as well as their **pain points**.

Interview Transcripts

User Interview Notes

A number of people that were interviewed mentioned that they struggle to identify which plastics can be recycled.

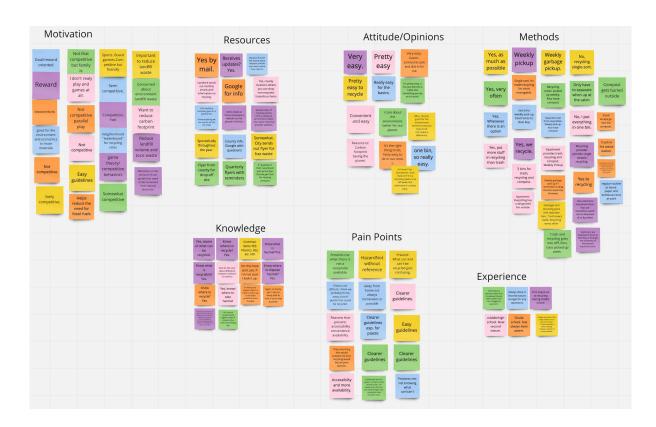
"I still don't really know the difference between the numbers for plastics. I typically put everything in the recycling when I'm unsure."

"Plastics are difficult. I think we probably throw away a lot of plastic that could be recycled."

Maria, Age 30

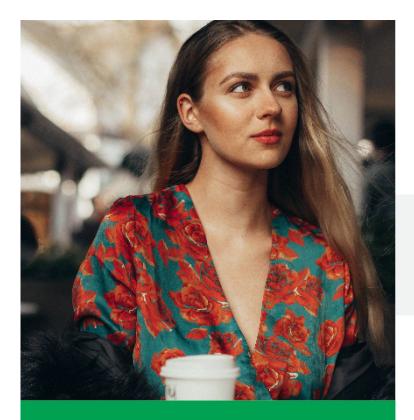
Jeanne, Age 45

Affinity Diagram



The data from the user interviews was organized into 7 categories. We then narrowed our focus to three key points.

- Guidelines not clear
- Accessibility
- Make it fun



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Living sustainably is important to me. I want to help give back to our planet and repair the damage that we have done.



Andrea West

 AGE
 35
 GENDER
 Female

 OCCUPATION
 Marketing Specialist
 LOCATION
 Minneapolis, MIN

 STATUS
 Married
 RESIDENCY
 House

PERSONAL BIO

Andrea is a 35 year old marketing specialist who was environmentally active in college, but has gotten busy with her career. Now she has more time, and is looking for ways to get involved with recycling in her community. Andrea recently moved to Minneapolis and is unclear as to what the recyling guidlines are for her new city. Andrea assumed if she was having issues with what could be recycled, others around here were, too. She is looking for a way to get everyone on the same page.

GOALS

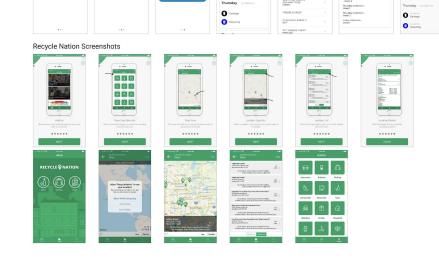
- Wants to live a more sustainable lifestyle
- Reduce the amount of landfill waste
- Needs easier guidlines on how to recycle
- Wants a fun and engaging way to get community more involved

FRUSTRATION

- Unclear guidelines
- · Lack of community resources
- Takes too much time to figure out what can and cannot be recyles
- Not having recyling accessible

Competitor Analysis

We downloaded, installed, and onboarded 6 recycling apps, and did a run through of features. This gave us an idea of the apps already out there, what worked and didn't work for onboarding, and where we had opportunities to provide features that the market is currently lacking.



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iRecycle Screenshots

Recycle Coach Screenshots

Competitor Analysis Matrix

Definition & Ideation

User Insight

Andrea needs convenient, accurate recycling information because of confusion about whether plastics and other materials can be recycled where she lives.

During interviews and surveys, we discovered that most people recycle and feel positive about it, but often are not sure which items can or cannot be recycled.

Therefore, we believe that household waste can be further reduced and that we might be able to help if we provided up to date resources for local recycling guidelines, and made recycling fun with friendly competition and/or rewards.

Problem Statement

Our recycling app was designed to provide up to date, local recycling guidelines, and generate enthusiasm for community recycling. We have observed that current apps don't have ways to connect a user with their recycling provider, and the general guidelines those apps list may not apply to the user's local area. Our app will link to the user's recycling service for up to date guidelines, and provide fun ways to get involved, like a community leaderboard that tracks waste reduction and recycling over time, or other activities.

I Like, I Wish, What If link

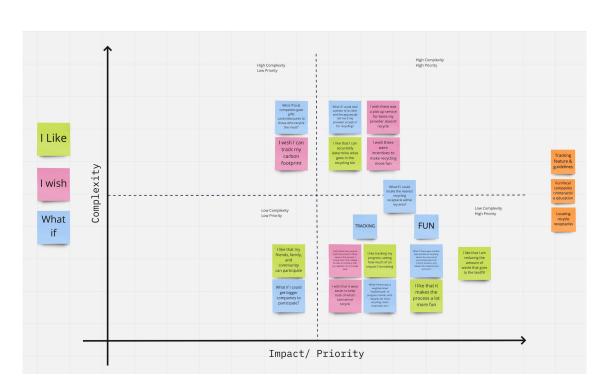
Ideation

Our group utilized the "I Like, I Wish, What If" brainstorming to determine ways in which we could address our user's needs, wants, and pain points with our app.

I like that I can accurately determine what goes in the recycling bin

I wish that it was easier to keep track of what I can and cannot recycle What if I could take a photo of an item and the app would tell me if my provider accepts it for recycling?

Feature Prioritization Matrix



Our priority matrix revealed common wants and needs from our interviews.

- Clear Recycling Guidelines
- Make Recycling Fun
- Track Your Recycling Progress

Value Proposition

New residents in a city have a difficult time learning the **local recycling guidelines** and lack community support that can provide **quick and easy recycling information**.

We believe an app that provides clear local recycling guidelines and friendly, goal-oriented competition/rewards for people who recycle or want to start recycling will create awareness, confidence and enthusiasm for community recycling.

- New Residents
- Recycling Guidelines
- Fun/Rewards
- Awareness/Enthusiasm

Storyboard

1. New City and Guidelines



Andrea has recently moved to Minneapolis and is unaware with her new city's recycling guidelines. She lacks a community resouce and social group on local recycling practices.

4. Creates Account and Starts Using



Andrea creates her account and is able to connect to her recycling provider. She now has quick reference to the guidelines and can set up reminders for her garbage/recycling pickup days.

2. Discovers the App



She saw a flyer from her apartment about a recycling app and decides to ask her neighbors for more information. They had mentioned that they use the app and it has made their recycling process much more efficient and enjoyable.

5. Recycling and Tracking



Now that Andrea knows her city's guidelines she can recycle with confindence, track her recycling habits, and participate in the local friendly recycling competitions.

3. Downloading the App



Andrea reads more about the app and decides to download it in hopes of making the recyling process in her new city easier.

6. Neighborhood Leader Victory Coffee



Using the app's tracking features, Andrea was able to measure her progress in recycling efficiency, and the competition features kept her motivated to stay on track to reach her monthly goal. Andrea is on her way to saving the planet, and is enjoying her free coffee reward for topping the neighborhood leader board for the month.

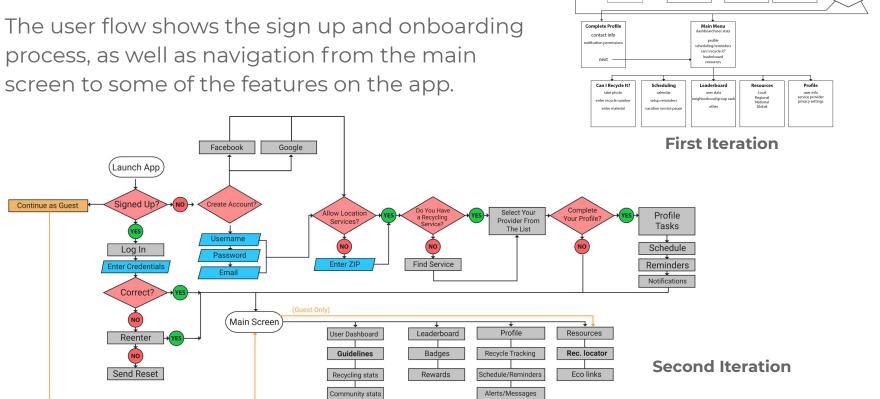
User Journey

Problem Discovery Actions Results Andrea has recently moved to Her neighbors mentioned the Andrea creates and account on With a clear understanding of MPLS and is unaware of the "app" that has helped them the app and continues with the what can/can't be recycled, onboarding. recycling guidelines with their recyling experience. Andrea's recycling increased by 25% since she began using the app, according to the tracking feature. Andrea lacks a community Andrea reads more about the app She enters in her current location Andrea celebrates her "recycler of resouce and social group on and decides to download it in and is able to find the local the month" victory with a free coffee at her corner coffee shop. local recycling practices. hopes of making the recyling recycling guidelines for her city. process in her new city easier. She begins to track her recycling habits. Wow! I've significantly reduced "Maybe I should the amount of waste look into this app that I've thrown away "I'm so confused my neighbor told "I hope this app is within the last month." about what i me about." "I hope this will really as good as should and "Free coffee my neighbor says tell me what the shouldn't throw "Where are the just because I it is." city recycling recycled!" community away" rules are." resources for recycling?!" 3

Prototyping

User Flow

process, as well as navigation from the main screen to some of the features on the app.



Returning

Google

Create Account

Google

email

create password

Allow Location

Allow Location

Manual Location

1st Time

Welcome

Explainer 1 Explainer 2 Explainer 3

Create Account

Sian Up Provider

links to external sites

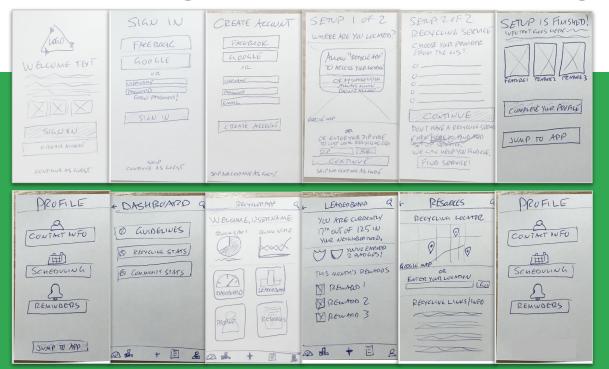
Select Provider choose from list

enter other

Need a provider? —

Sketches & Digital Wireframes

Sketches brought into Adobe XD for user testing.

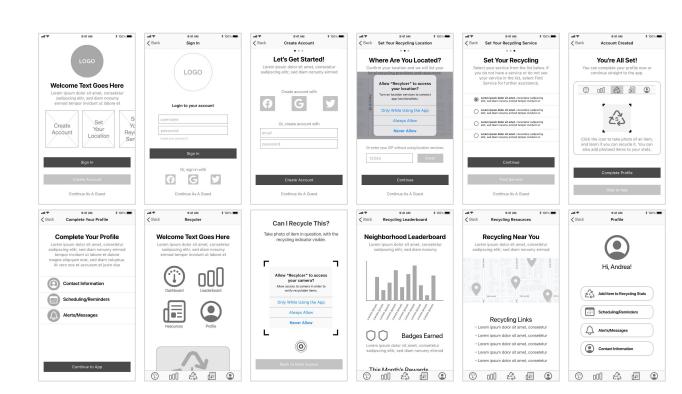




Testing and Iterating

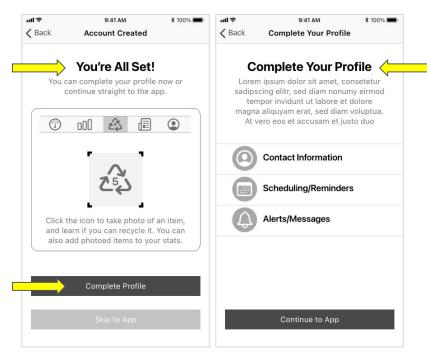
Hi-Fi XD Prototype & Guerrilla Testing

Guerrilla testing was done with 5 people to identify any further issues with user flow.



Key Takeaways from Guerrilla Tests

We conducted five guerrilla user tests on the new prototype and found a few key issues. Some of the onboarding steps were confusing, and users weren't quite sure what all of the navigation icons were for the first time they used the app.



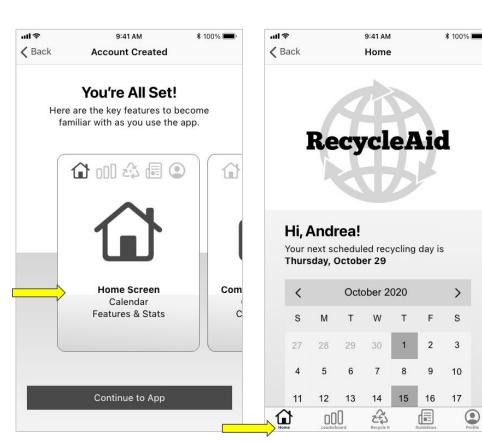
Confusing Onboarding Steps



Ambiguous Nav Icons

Iterations Made Based on User Test

- Eliminated unnecessary screen at the end of onboarding
- Added coaching cards to explain the navigation and features
- Added text to the nav icons to better inform the user



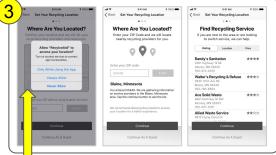
iOS Mockups

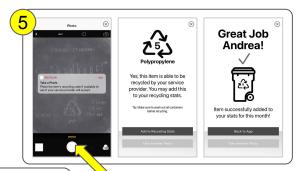


Sign In

Login to your account

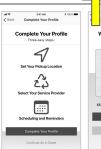
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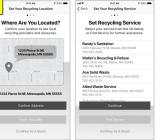










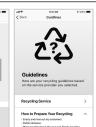




















1. Splash Screens

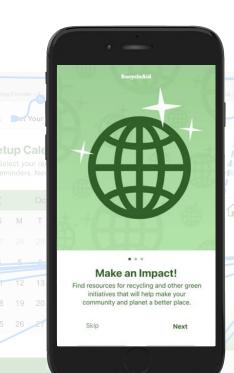
15

16

- 2. Onboarding
- 3. Permissions
- 4. Main App
- 5. Camera Feature

iOS Prototype

iOS Prototype Link





Polypropylene

Yes, this item is able to be

recycled by your service

provider. You may add this

to your recycling stats.

Tip: Make sure to wash out all containers

before recycling.















s	М	т	w	т	F	s	
27	28	29	30	1	2	3	
4	5	6	7	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	



Your Recycling Stats



Recycling Guidelines





Guidelines

Here are your recycling guidelines based on the service provider you selected.



- Empty and rinse out any containers. Flatten all hoves

- Place recycling loose into your cart. Empty recycling out of paper bags (paper bag may be placed in the recycling cart) and plastic bags (plastic bags must be placed in the trash) to allow for effective sorting at the recycling facility.

 Place extra recycling that does not fit in your cart in a cardboard box or paper bag next to your cart. Extra cardboard should be flattened, bundled and tied with less than 40 pounds.



Collection Time Recycling Codes



cleaner bottles, yogurt tubs, cere



Polyvinyl chloride Fruit trays, bubble wrap, siding, & Shopping bags, plastic bags fo windows. Typically not accepted by curbside recycling services. wrap, six-pack rings, and dry cleaning plastic covers. Typically not accepted by curbside recycling services. ⟨ Back Community Leaderboard Community Leaderboard Here's how your community group stacks up against the competition for the month. Great w

Community Progress



Your Stats for the Month



See All of Your Stats







All-Star







Final Thoughts / Conclusion

Even though recycling is an everyday part of most people's lives, there is still confusion and ongoing changes regarding what can be recycled. The RecycleAid app eliminates that confusion and makes recycling fun with its tracking features and friendly neighborhood competitions and rewards.

Next Steps

Finalize features and content Develop tracking and rewards systems (content and design)



KPI/Metrics

Recycling company ad revenue Local business support/revenue User retention/activity

Questions?