

# “SUSTAINABILITY SCORE PLATFORM”

## Concept Summary

A mobile app that tracks recycling (of all sorts of materials) and acts as a platform to reward people who do recycle. Participating sponsors, like Target, Amazon, or Duracell can register their products on the app and when a user recycles that product, it gets saved to the users profile, notifying the sponsor.

## User Journey



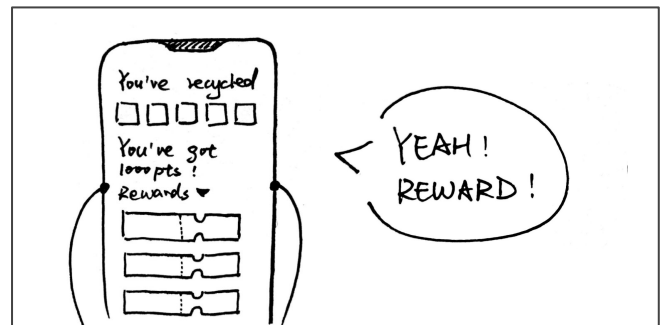
STEP 1: User sets up an account on the app, logging some basic information.



STEP 2: User drops their recyclables off at a collection site.



STEP 3: As the recycled materials are sorted, the barcodes are scanned.



STEP 4: The app tracks what the user has recycled and rewards them accordingly.

## Functional Requirements

Companies must register their products with the app platform so it is saved in the system. When the user drops off recycling material, their profile ID will need to be tracked (possibly QR) so that the recycling can be attributed to their account.

## Partnership Requirements

This concept requires user participation, primarily in researching what can be recycled, what needs to be cleaned, and where it can be dropped off. It also requires sponsor partnerships from other companies looking to recycle. Recycling sorters and scanners are also vital to this operation.

## Success Measurements

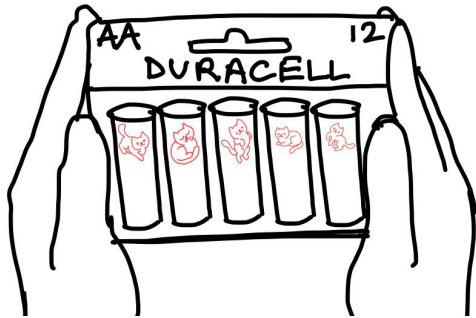
The download rate of the app as well as recycling rates of those who do have it downloaded should show community interest and involvement. This measurement can be clouded if the platform is not properly advertised. Success in this concept means an increased rate of recycling for those who have the app.

# UNIQUE BATTERY CHARACTERS

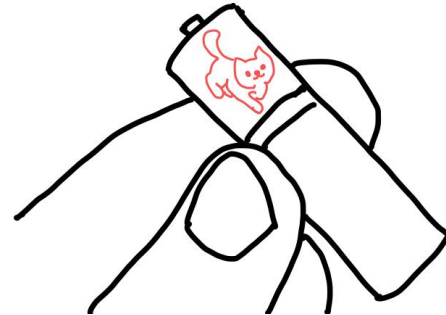
## Concept Summary

Batteries have cute random-generated character models printed on the outside of them, which promoted a feeling of significance and ownership over a singular small battery. The character models also act as barcodes, so people can lookup what their recycled batteries eventually became.

## User Journey



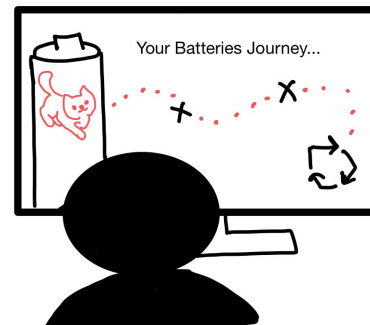
STEP 1: User buys a package of batteries and each one has a unique character printed on it.



STEP 2: User examines battery and takes note of the unique character, then proceeds to use the battery.



STEP 3: Once the battery dies, the user takes it out to replace it. The familiar character reminds them that the battery is more than just a piece of old metal.



STEP 4: After the user drops the battery off to be recycled, they can log on to a website and track what happens to their battery characters.

## Functional Requirements

The corners around the character act as a QR code, which is read by a scanning system as a digital code, which can be tied to a battery ID number. Recycling machine will scan the batteries being fed in automatically, updating the record.

## Partnership Requirements

This concept relies on a clear and consistent collection partner where people know to recycle their batteries. It also relies on a user-friendly web interface that people can actually find.

## Success Measurements

The goal of this concept is to increase recycling rates and feelings of trust that recycling is actually occurring. Measurements will be the number of batteries recycled (both with and without character skins to check for a significant difference) and website traffic (to check if users are really validating their recycling effort).

# BATTERY COLLECTION MACHINE

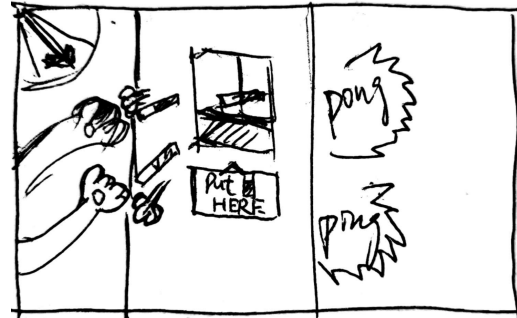
## Concept Summary

Vending machines in various stores that collect batteries and offer a chance of winning new batteries or store discounts every time a battery gets dropped in. It also shows information on recycling stats and 'ongoing competitions' with other cities/regions/stores.

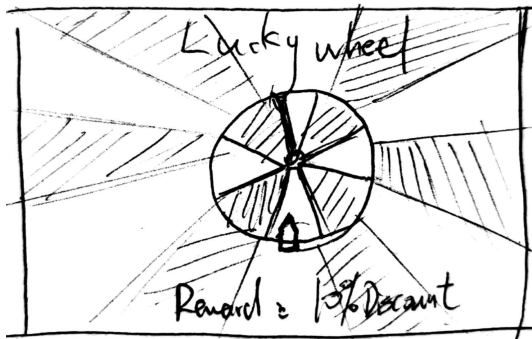
## User Journey



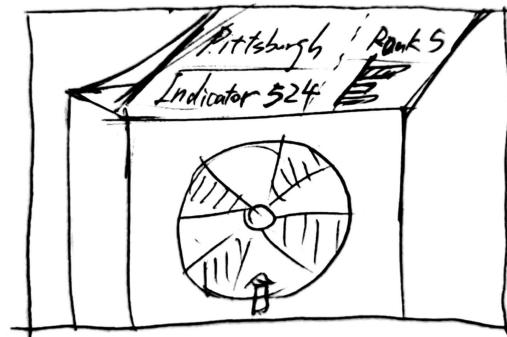
STEP 1: Entering a store and seeing the machine.



STEP 2: Tossing the battery into the machine.



STEP 3: Got a chance to play a lucky wheel on the main screen and earns a reward (coupon/new batteries)



STEP 4: User sees the environmental impact their saving and reads how other locations are doing comparatively.

## Functional Requirements

The vending machine will need to be manufactured and requires a custom interface. Live data exchange with Duracell database and retailer database is likely required. Could utilize facial recognition as a stretch goal.

## Partnership Requirements

The retail location will need to partner in order to allow placement of the machine in their space. Partnership of retailers also includes letting Duracell retrieve the batteries from the machine.

## Success Measurements

Measuring retail foot traffic as well as the deposit rate can be combined to see what the engagement rate is. Success in this domain would mean a high deposit rate of batteries relative to other drop-off sites. This concept could be placed at sporting events as well to let fans compete.

# BATTERY INFORMATION DISPLAY

## Concept Summary

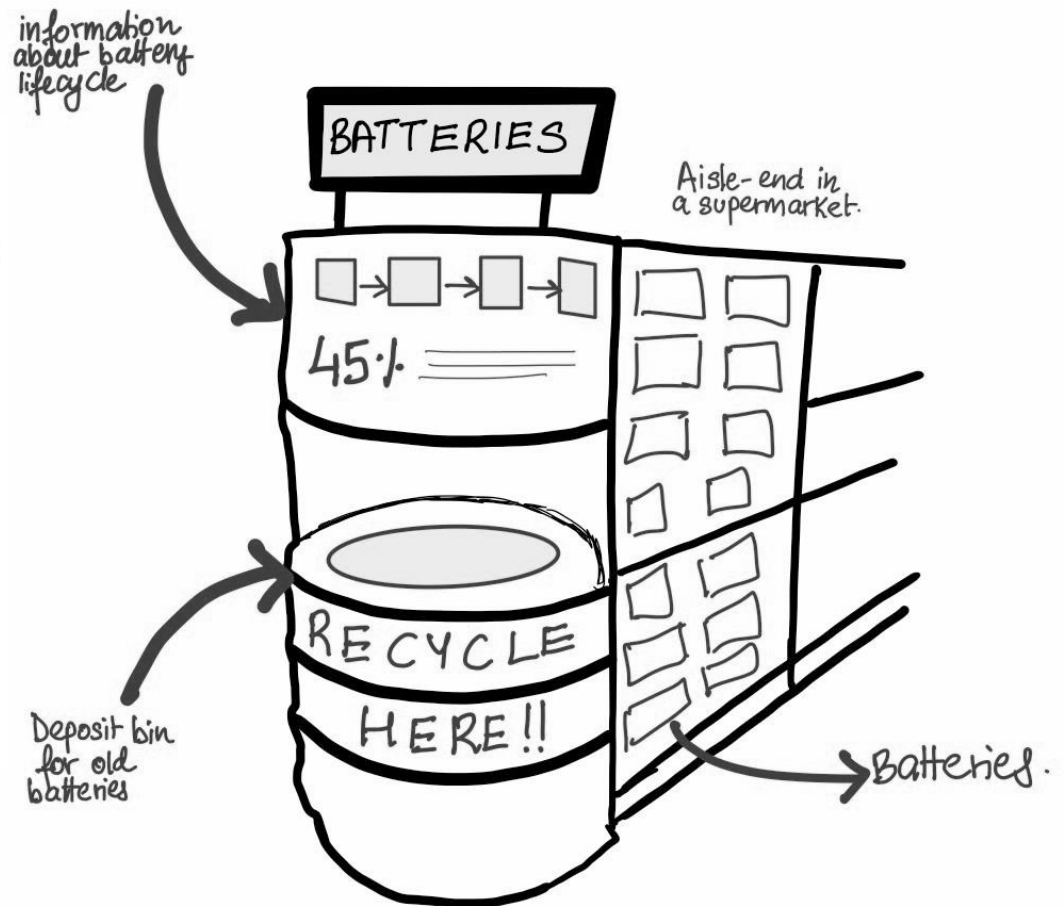
An aisle-end display in stores which shows information on the life cycle of batteries and stats that encourage recycling. It shows how batteries have changed over time and how they are becoming sustainable. The display also features a bin where users can drop off their dead batteries while at the store.

## User Journey

1 WHEN USERS BUY BATTERIES, THEY GET TO SEE INFORMATION ABOUT THE LIFE CYCLE.

2 WHEN THEIR OLD BATTERIES DIE, THEY BRING THEM TO THE STORE

3 THEY DEPOSIT THEM AT THE DISPLAY AND BUY THEIR NEW BATTERIES.



## Functional Requirements

The battery collection bin will notify the supermarket and Duracell when it is full via load sensors. This way, the store is able to empty the bin and Duracell is able to keep track of the number of batteries to expect without checking consistently.

## Partnership Requirements

A partnership will be required with the store to facilitate the placement of the informative display. It also relies on the store to occasionally collect dead batteries from the display and hand them over to Duracell for shipment.

## Success Measurements

The number of batteries being sold versus the number of batteries being returned in the bin can be measured. A higher rate of return, even if not the same batteries, would indicate a stable return rate compared to purchases. Success could also be engagement time of users spent reading at the display.

# QR CODE ON PACKAGING

## Concept Summary

Users simply scan the QR code on the back of the battery package to pull up a map of all nearby recycling drop-off sites for their specific kind of battery.

## User Journey



STEP 1: User realizes that they have a dead battery.



STEP 2: User flips to the back of the battery package and sees the scan option.



STEP 3: After scanning, the user sees a local map of places that will accept their batteries.



STEP 4: The user goes to one of the drop-off sites and delivers their batteries, without having to worry about extensive research.

## Functional Requirements

QR code and dedicated website are required. The user's location will have to be determined through a web function. Database of store locations that accept a given type of battery is also necessary.

## Partnership Requirements

This concept relies on partnerships with large retailer chains such as Target, Walmart, or Starbucks to add more recycle points in the community, therefore enhancing convenience of battery recycling.

## Success Measurements

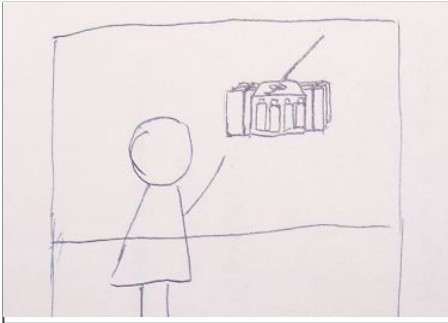
The rate of QR scanning is the primary method of measuring success, but tracking the amount of batteries gathered by the recycling boxes placed in those retail chains could also be an indicator.

# MAILBOX RETURN SERVICE

## Concept Summary

The battery package comes with several pre-labeled return envelopes that users can put dead batteries in and place in their mailbox. Carriers pick it up and charge shipping to Duracell accordingly.

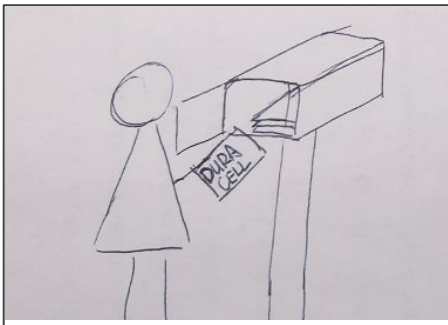
## User Journey



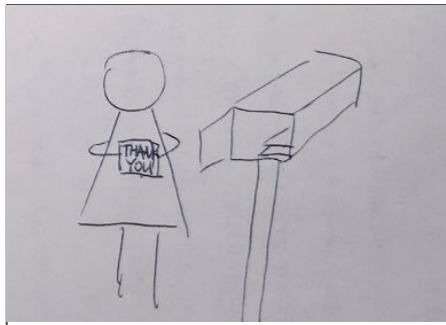
STEP 1: User buys batteries, and in the package is a pre-labeled return envelope.



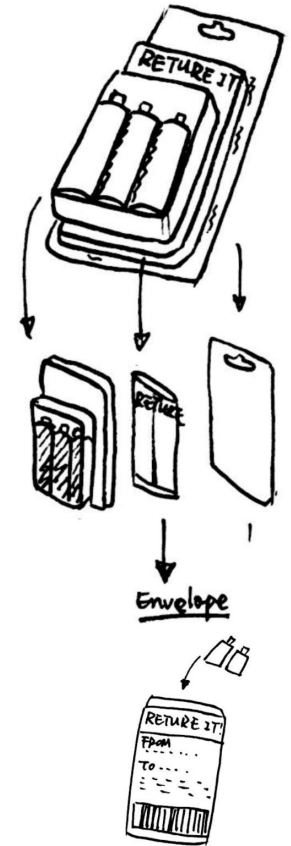
STEP 2: When the user has some dead batteries, they place them in the envelope.



STEP 3: The user drops the battery return envelope into their mailbox next time they go to get the mail.



STEP 4: The next time the user goes back to the mailbox, the envelope of batteries is gone.



Envelope in the package

## Functional Requirements

Prepaid dynamic shipping labels attached to properly insulated envelopes is required.

## Partnership Requirements

It requires Duracell to partner with a mail service (ideally USPS).

## Success Measurements

Battery return rate via mail is the primary metric for tracking success with this concept. However, shipping costs versus recycling value could also be measured and reported to indicate if people are optimizing their shipping space.