25th April, 2021

TryCycle

Challenge:
MathWorks®

Recycling in Germany be like...

Mathworks_video1

Q1. So you think you can Trash?

TryCycle

METAL   PAPER   ORGANIC   GLASS   PLASTIC   BATTERIES   E-WASTE
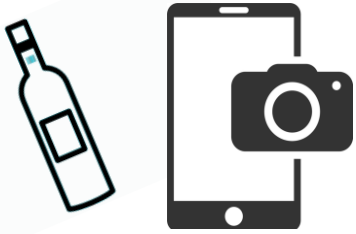
?

FFP2

Q2. To Re or not to Re?

Recycling

Upcycling

?

How TryCycle works

User input
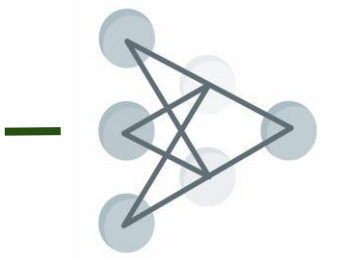
Object recognition

Recycling   Upcycling
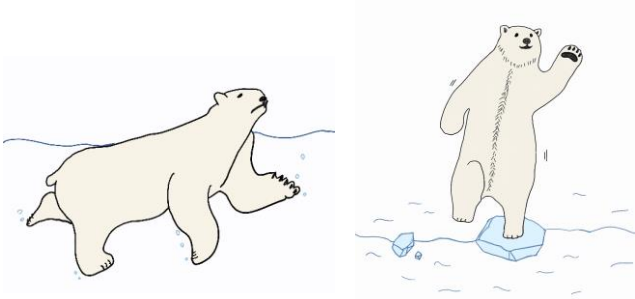
Suggestions

Statistics

TryCycle

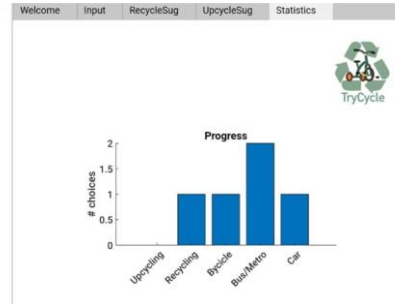# How TryCycle works

Visual rewards based on Internal Scoring metrics

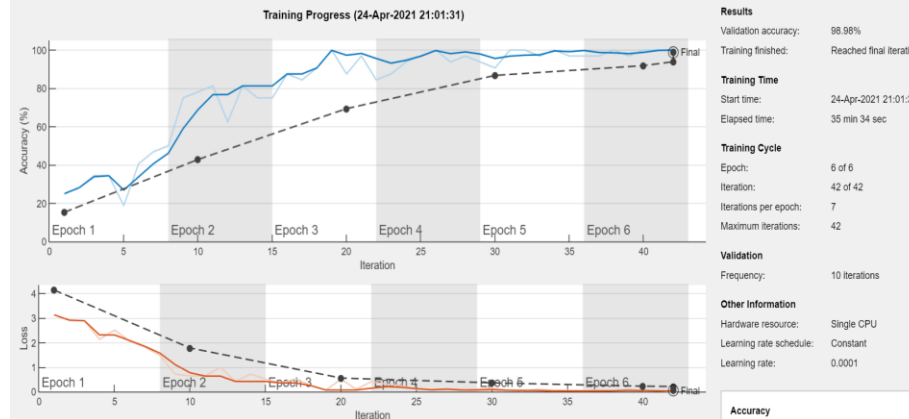**Community participation- Statistics & Score board**

Object Recognition

Resnet101
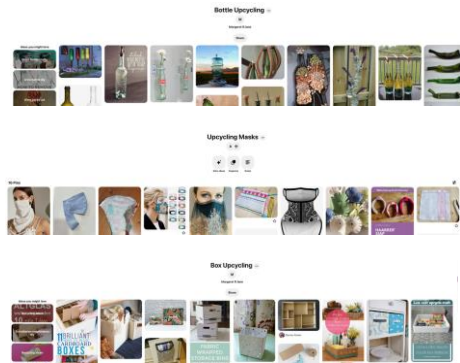
98,98%

TryCycle Demo

Mathworks_video2

TryCycle provides:

Segregation Guidelines

Community-based Suggestions

User friendly statistics visualization

TryCycle could be improved:
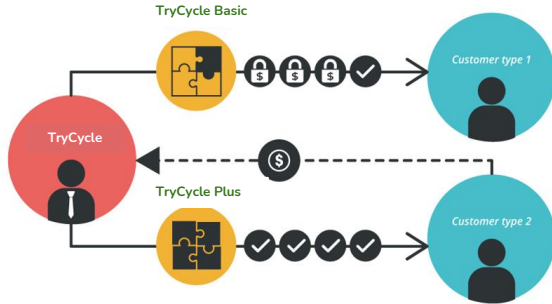

Data +

Material & Objects +

Community

Functionality ++

TryCycle Case Study

Freemium Model

TryCycle Basic

1. Segregation Suggestion
2. Impact Scores
3. Community Interaction and Scoring

TryCycle Plus

1. Exclusive discounts on products from select Sellers
2. Completely Ad-free
3. Connect with Enviromental Experts
4. Community Marketplace

Donation-based Model

TryCycle Pro
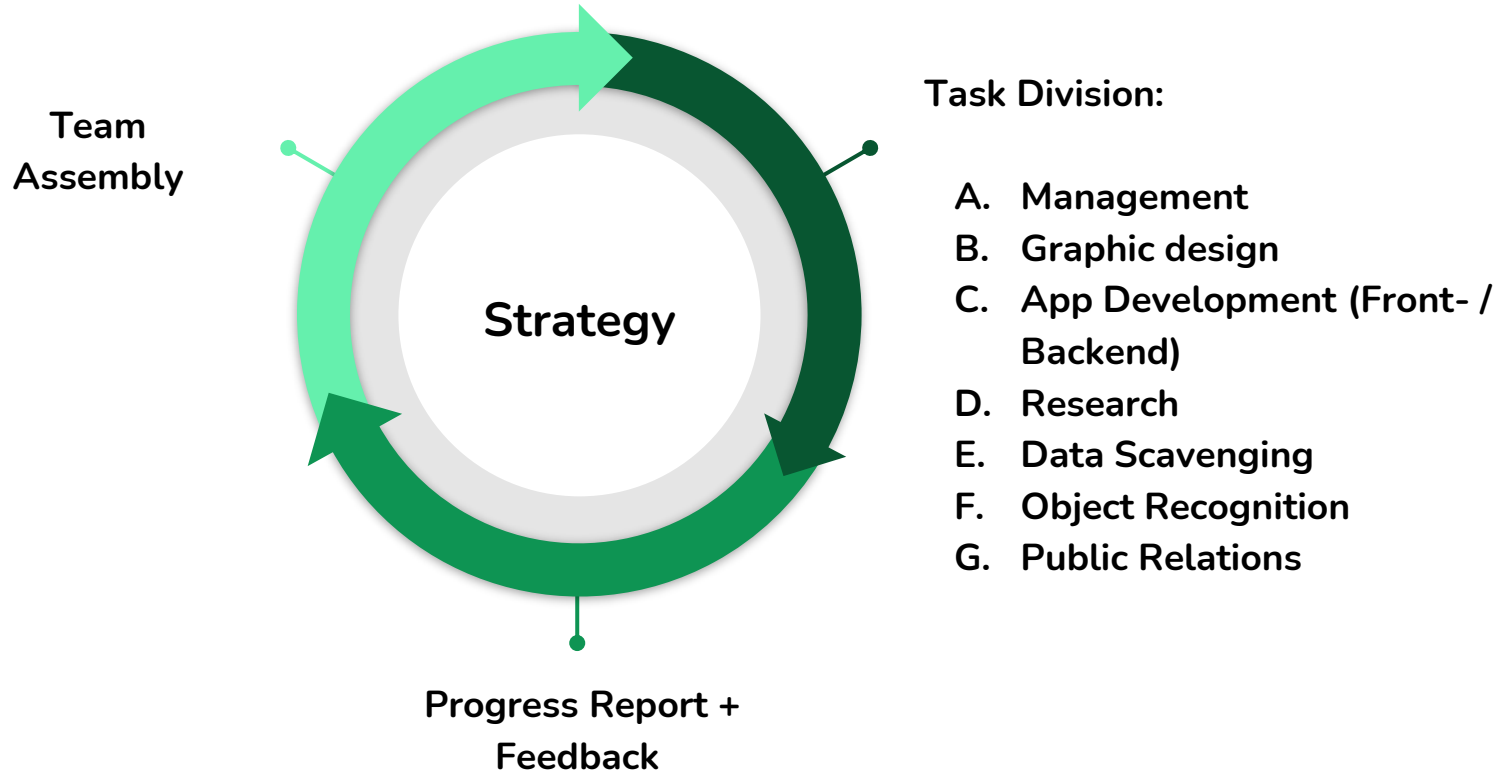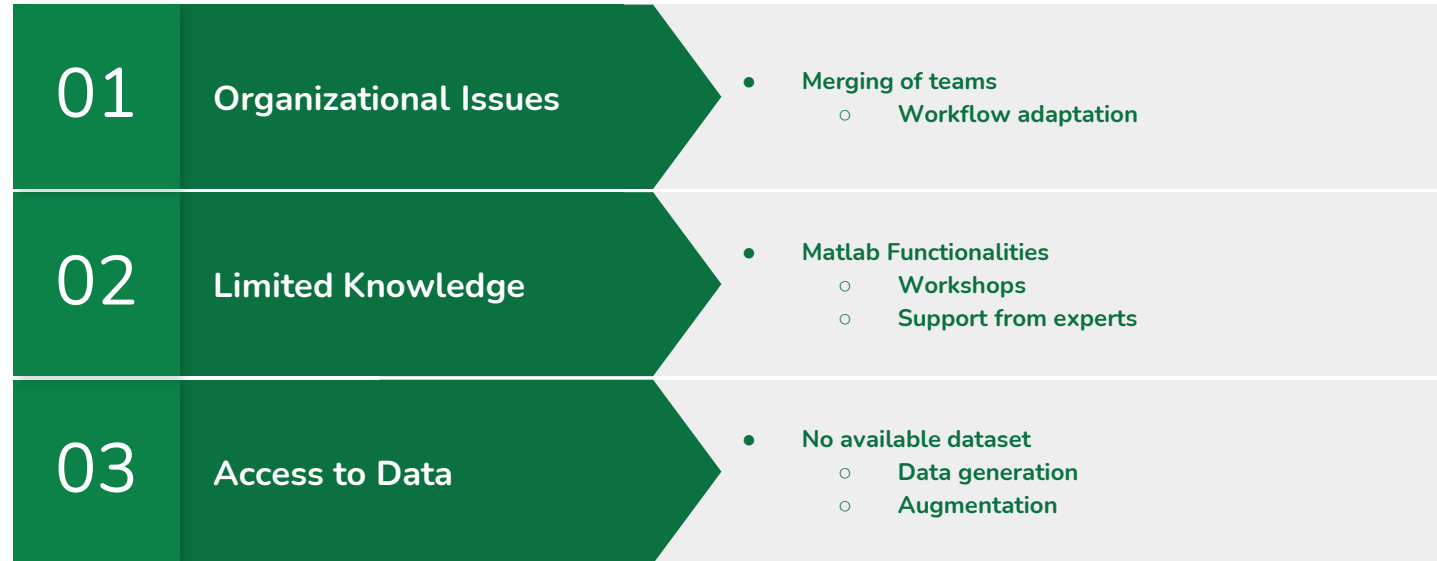
1. Segregation Suggestion
2. Impact Scores
3. Community Interaction and Scoring
4. Local Industrial footprint statistics
5. Local Environmental Metrics

TryCycle Workflow

Strategy

Team Assembly

Progress Report + Feedback

Task Division:

A. Management
B. Graphic design
C. App Development (Front- / Backend)
D. Research
E. Data Scavenging
F. Object Recognition
G. Public Relations

Problem Management

01 **Organizational Issues**

- **Merging of teams**
  - **Workflow adaptation**

02 **Limited Knowledge**

- **Matlab Functionalities**
  - **Workshops**
  - **Support from experts**

03 **Access to Data**

- **No available dataset**
  - **Data generation**
  - **Augmentation**

Team TryCycle

Meg   Xingying   Ashish

Rafael   Jin   Jisen

Diego   Aditya

MathWorks®

Harald Julia Kathi Sagar Sebastian Suresh

Developing apps on iOS/Android

Developing apps on Matlab