Challenge:

TryCycle

25th April, 2021

MathWorks®
Recycling in Germany be like...

Mathworks_video1
Q1. So you think you can Trash?
Q2. To Re or not to Re?

Recycling

Upcycling
How TryCycle works

User input → Object recognition → Suggestions → Statistics

- Recycling
- Upcycling
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 Environmental Experts
4. Community Marketplace

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

Donation-based Model
TryCycle Workflow

Team Assembly

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

Strategy

Progress Report + Feedback
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