



A market research on application of gamification (game elements) to a waste classification mobile app to enhance waste management (recycling)

This survey aims at evaluating markets' perception on the use of game elements to complement waste classification for recycling. This survey is designed to buttress the research work carried out on "*A Deep Learning Classification Model for Waste Management using a Gamification Approach*". The feedback of this research can help develop market strategies for deploying intelligent image classification and object detection models as well as to potentially enhance waste management. Data obtained from this survey will be saved and held confidentially, while its been used for research purposes only.

1. What age group do you belong to?

- ☐ 18 - 24
- ☐ 25 - 34
- ☐ 35 - 44
- ☐ 45+

2. Which country do you live in?

- ☐ Ireland
- ☐ India
- ☐ Nigeria
- ☐ United Kingdom (UK)
- ☐ United States of America (USA)

3. Do you classify or categorize your waste before disposal?

- ☐ Yes
- ☐ No
- ☐ Sometimes

4. Will you engage more in recycling if there are added incentives or benefits?

- ☐ Yes
- ☐ No
- ☐ Maybe

5. Do you think an intelligent waste classification mobile app can help you recycle better?

- ☐ Yes
- ☐ No
- ☐ Maybe

6. How often do you play games on a mobile device?

- ☐ Every day
- ☐ Often
- ☐ Once in a while
- ☐ I don't play games

7. Will you prefer to use a recycling mobile app with game elements (such as rewards, points, levels, leaderboards, challenges, achievements etc)?

- ☐ Yes
- ☐ No
- ☐ Maybe

8. Will you be motivated to recycle more if you had a gamified recycling mobile app that could directly translate to physical or monetary rewards?

- ☐ Yes
- ☐ No
- ☐ Maybe

9. Can gamification boost your motivation to recycle?

"Gamification" is the use of game design elements in a non-game contexts.

- ☐ Yes
- ☐ No
- ☐ Maybe

10. Will you contribute to recycling if you had a community of friends using an intelligent waste classification mobile app?

- ☐ Yes
- ☐ No
- ☐ Maybe