Project: CleanTech: Transforming Waste Management with Transfer Learning

Document Type: Empathy Map Canvas

Team ID: LTVIP2025TMID45663

User Persona: General Public / Householder

SAY

- "I need to properly sort my daily waste for recycling."

- "I can upload an image of waste from my mobile camera."

- "I can view the classification result."

- "I can give feedback on the waste classification result."

THINK

- "Is this waste recyclable or not?"

- "Traditional waste sorting is confusing and takes too much time."

- "I hope this app is easy to use and gives me a quick, accurate result."

DO

- Uploads an image of waste using a web interface.

- Views the classification result (Recyclable / Non-recyclable).

- Provides feedback on the classification result.

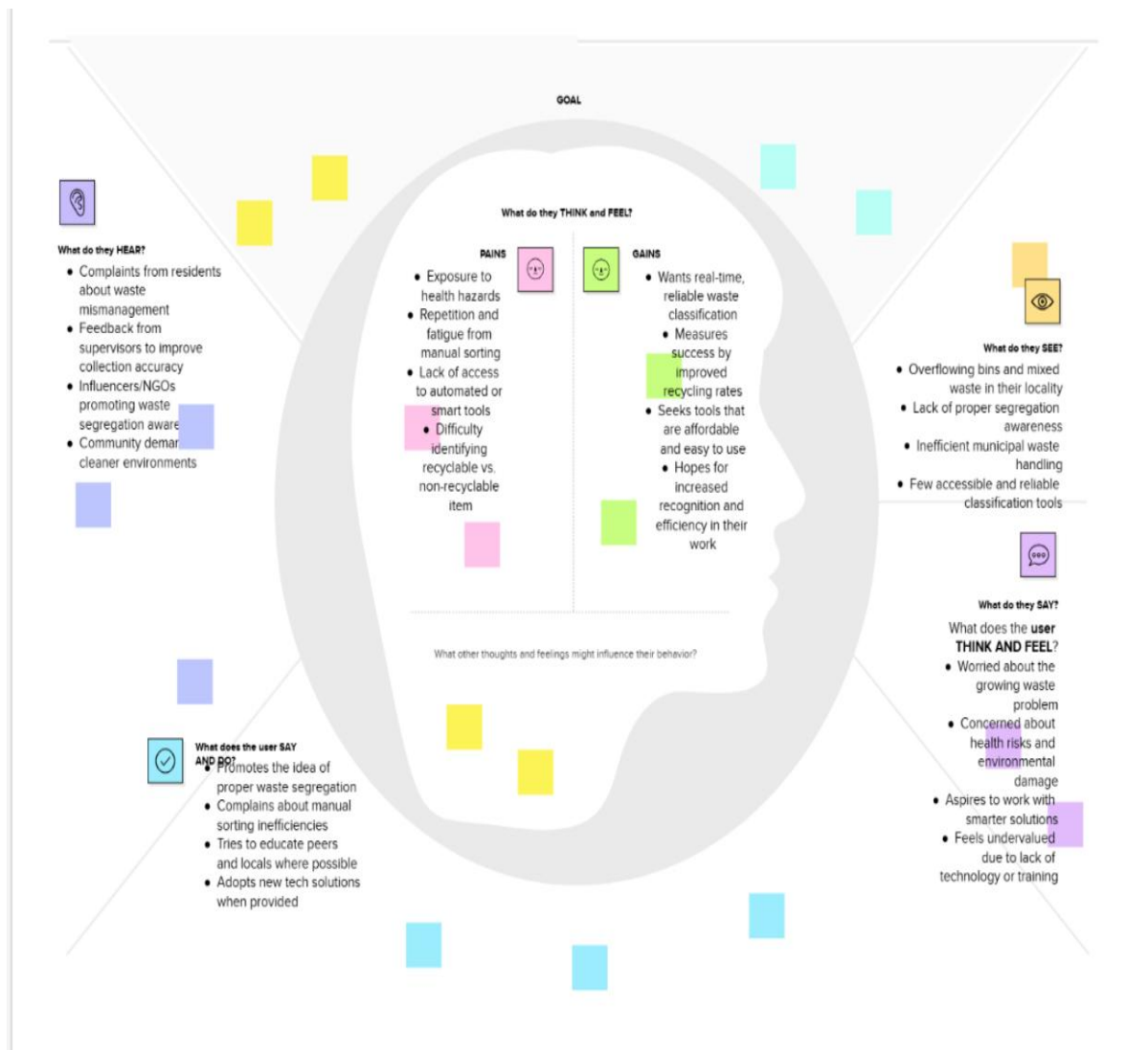**FEEL**

- Uncertain and concerned about contributing to environmental pollution.

- Frustrated with manual and error-prone sorting methods.

- Relieved when they get a clear and accurate result.

PAINS

- Traditional waste sorting methods are manual, time-consuming, and prone to errors.

- The inefficient classification and disposal of waste lead to environmental pollution and health hazards.

- Uncertainty about properly sorting their waste at home.

- **GAINS**

- Get instant waste classification results.

- Learn how to properly classify daily waste using a simple interface.

- Contribute to efficient and eco-friendly waste segregation.

GOAL

What do they THINK and FEEL?

What do they HEAR?
- Complaints from residents about waste mismanagement
- Feedback from supervisors to improve collection accuracy
- Influencers/NGOs promoting waste segregation aware
- Community deman cleaner environments

PAINS
- Exposure to health hazards
- Repetition and fatigue from manual sorting
- Lack of access to automated or smart tools
- Difficulty identifying recyclable vs. non-recyclable item

GAINS
- Wants real-time, reliable waste classification
- Measures success by improved recycling rates
- Seeks tools that are affordable and easy to use
- Hopes for increased recognition and efficiency in their work

What do they SEE?
- Overflowing bins and mixed waste in their locality
- Lack of proper segregation awareness
- Inefficient municipal waste handling
- Few accessible and reliable classification tools

What other thoughts and feelings might influence their behavior?

What does the user SAY AND DO?
- Promotes the idea of proper waste segregation
- Complains about manual sorting inefficiencies
- Tries to educate peers and locals where possible
- Adopts new tech solutions when provided

What do they SAY?
What does the **user THINK AND FEEL?**
- Worried about the growing waste problem
- Concerned about health risks and environmental damage
- Aspires to work with smarter solutions
- Feels undervalued due to lack of technology or training

Reference: https://www.mural.co/templates/empathy-map-canvas