# EMPATHY MAP

- Empathy maps are a great way of gaining a deeper, more holistic understanding of how our users experience things.
- Use this template to help you summarize your learnings about your users' needs and pain points by stepping into their mindset after doing field research.

## 1 DEFINING

- Review your notes, pictures, audio, and video from your research/fieldwork and fill out each of the four quadrants.

### SAYS

"The bin doesn't open when I wave my hand."

"I don't understand what the blinking light means."

"Why do we need smart bins? The old ones were easier."

"Sometimes, the bin overflows, but no one comes to empty it."

### THINKS

"Is this really an improvement over regular bins?"

"If the sensor stops working, what do I do?"

"This technology should be simple for everyone, not just tech-savvy people."

"What if the bin doesn't open when I need to throw something?"

### DOES

Avoid using smart bins and search for traditional ones.

Complain to municipal authorities about malfunctioning bins.

Try to figure out the bin system but give up if it's too complicated.

Throw waste improperly due to misunderstanding indicators.

### FEELS

Frustrated – when the bin doesn't respond as expected.

Confused – due to unclear LED indicators.

Hesitant – about switching to smart bins, especially older users.

Concerned – about hygiene when bins overflow or don't work properly.

## 2 SYNTHESISE THE USER'S NEEDS AND FORM INSIGHTS

- Identify needs based on contradictions between two attributes, such as a disconnection between what a user says and what the user does.
- You can also synthesize insights by asking yourself: "Why?" when you notice strange, tense, or surprising behavior.

| NEEDS | INSIGHTS |
|---|---|
| "As a _____ (user type) I want / need to _____ (desire) so that I can _____ (result)." | "I wonder if this means that _____ (persona / character) wants _____ (action/situation) because _____ (aim, need, outcome) but _____ (restriction, obstacle, friction)." |
| As a city resident, I want a smart trash bin that functions reliably so that I can dispose of waste easily and hygienically. | "I wonder if this means that users prefer simplicity over automation because they want a hassle-free waste disposal experience but face obstacles due to unclear instructions and technical failures." |
| As an elderly citizen, I need a simple and accessible waste disposal method so that I can use it without confusion. | "It seems that older generations resist adopting smart bins because they lack familiarity with technology, but providing simple instructions or a manual option could ease their transition." |
| As a sanitation worker, I want accurate bin status alerts so that I can collect waste efficiently and prevent overflow. | "The confusing LED indicators and sensor malfunctions suggest that users struggle to trust the system, meaning that better communication methods (audio cues, colors, or displays) are essential." |
| As a city administrator, I need real-time performance data of smart bins so that I can improve maintenance and public satisfaction. | "Since bins often overflow due to missed alerts, a more reliable notification system could improve waste collection efficiency and maintain cleanliness." |