

Project design phase-I

Problem solution fit

PROBLEM	SOLUTION
Customer segments?	1.Make clean India 2.Keep the city clean 3.Fleet management platform 4Automatic sensor based operation with zero manual invention. 5.The protection of the environment & the health of populations.
Customer constraints?	1.Recycling might be inexpensive. 2. More energy consumption and pollution. 3.Insufficient data collection.
Available solutions	Based on IOT technology, smart waste management aims to optimize resource allocation, reduce running costs, and increases the sustainability of waste services.
Behaviour	Ai-based smart waste bin, designed for public places, enabling them to Monitor and Manage.
Problem root cause	The greatest problem regarding waste management in developing countries begins at the very starting point of the process. Due to lack of proper systems for disposal and collections, wastes & garbage's end up in the roads and surrounding. According to a report from Google research, the amount of waste generation in 2010 was around 20,000 tons per day, and it is estimated that by 2025 the amount will be no less than around 47000 tons per day.with the existing methods of collecting and disposal it is near impossible to manage such amount of waste in the future as around 30% of waste end up on the roads and public places due to ineffective disposing & collecting methods.
Triggers	1. Ai recycling robots & solar -power trash compactor 2 Smart waste bins 3. Digitally improvement cities 4. Motivate & influence people to follow proper waste disposal.