

Team 7 - FooBar

Netaji Subhas Institute of Technology

Proposal - VYARTH

From BEKAAR TO SWEETAR

Theme - Pollution and Waste Management

Overview

A website to make the users collaboratively manage waste in different communities such as household, offices, markets etc. Such communities can connect with those industries which can turn waste into raw/usable materials, thus converting waste material into usable components. The idea is to automate the waste collection and waste reusability process through the website. The different types of wastes are segregated at community levels such as plastic waste from markets and public places, organic waste and newspaper waste from households, specific liquid/solid/gaseous waste from industries. These wastes can be chosen by various types of industries, communities to be utilized efficiently.

Therefore, instead of dumping of waste to another area, we propose to deliver waste to those who require it. Hence, reducing the overall waste generated. Hence the “bekaar” is transported to the companies who “sweetar” it.

The Problem

The waste management routine currently employed in our country is not smart or efficient. The garbage collected is neither segregated nor properly decomposed. Thus the landfills size, where the garbage is dumped keeps on increasing.

Goals

1. **Get rid of the waste generated:** An average indian citizen is observed to generate 0.44 to 4.3 kg of waste day. Not only this an industry or a market region generates a n amount of waste which is much larger than the resources municipal has for its collection.

Henceforth, our website proposes to automate the retrieval of garbage generated from these domains by involving vendors who can actually be benefitted from such waste collection.

2. **Waste collection by the companies who require them:** A lot of companies primarily the ones targeting the packaging and stationary or the ones working on the recycling are the frequent collectors of waste. So our idea is to integrate these companies with the suppliers directly, so as the role of municipality is reduced as much as possible. This all will be implemented on a set radius. A business model can be linked to the same whose details are listed below.

Features:

1. The company involved in our project, for instance a company requiring the waste newspapers, are receiving their raw materials directly through our proposed model at a reduced price.
2. The delivery system will be managed by our portel only.
3. The users will also be provided an extra incentive, apart from the easy collection of garbage in the form of paytm cash.

Technologies To be Used:

1. Django Framework
2. Python
3. Paytm API

Basic Implementation:

1. Login Portal - There will be 2 types of login -
 - a. Generator - These are people/**waste generators** who are within a particular type of community (viz. Household, Offices, Market and Industries). They can perform actions like - i) Ordering on the website - once a certain specified amount of waste has been generated by a user, they can notify/list it on the website. The waste can be picked up by the physical agents/drivers sent through the website.
 - b. Collector - These are people who want to collect waste and want to use that waste for their own use. They include the companies and organizations who require those waste products as raw materials for their products. For instance, a company making registers from recycled paper requires waste paper and a lot of waste paper is generated in offices having a lot of paperwork. They can select/'accept'/sweekar what type of waste do they need and that waste will be delivered to their doorstep by the physical agents/drivers.

Future Scopes:

1. The future aspect can be extended to collection of wastes from community dustbins where the waste can be segregated at the instant it is dumped using Open Cv.
2. Further, the incentives can be improved upon.