Problem-Solution Fit canvas

Purpose / Vision

Version:

1. CUSTOMER SEGMENT(S) **CS**

The Smart Bin is ideal for busy locations such as road-side ,Houses campuses, office, theme parks, airports, railway stations, and shopping malls.

6. CUSTOMER LIMITATIONS EG. BUDGET, DEVICES **CL**

*Sensor nodes used in the dustbins have limited memory size.

*The trainining has to be provided to the people involved in the smart waste management system.

5. AVAILABLE SOLUTIONS PLUSES & MINUSES **AS**

Reduce, Recycle & Reuse: – Recycling not only saves energy but also prevents the materials from going to landfills & incineration, and provides raw materials for new products.

Explore AS, differentiate

Focus on PR, tap into BE, understand RC

2. PROBLEMS / PAINS + ITS FREQUENCY **PR**

*Not all dustbins are filled at the same rate and the dump vehicle waste time checking each and every dustbin.

*This leads to more fuel usage, labour and cost.

9. PROBLEM ROOT / CAUSE **RC**

*Smart waste management is characterized by the usage of technology in order to be more efficient when it comes to managing waste.

*This makes it possible to plan more efficient routes for the trash collectors who empty the bins, but also lowers the chance of any bin being full for over a week!

7. BEHAVIOR + ITS INTENSITY **BE**

* To collect dustbins placed at public places in city.

*Automatic open-close lid for ease of use.

* There is no contact touch between dustbin and Person so, prevention from germs and diseases.

* Warning message indication when a Smart Trash Bin is nearly full. Also send SMS to garbage collector.

Focus on PR, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS TO ACT **TR**

Exploring the three Rs of waste management — Reduce, Reuse, Recycle. In order to keep as much material out of the landfill as possible, it's important for each of us to do our part.

4. EMOTIONS BEFORE / AFTER **EM**

BEFORE:people throw garbage anywhere so, causing great harm to our environment. AFTER:The Smart Bin is ideal for busy locations such as campuses, theme parks, airports, railway stations, and shopping malls.

10. YOUR SOLUTION **SL**

*Smart waste management focuses on solving the previously mentioned solid wastemanagement problems using sensors, intelligent monitoring systems, and mobile applications.

*Waste thrown without touching the dustbin.

*Automatically opens the lid of the dustbin.

8. CHANNELS of BEHAVIOR **CH**

ONLINE

Smart waste management is based on IoT (Internet of Things) technology, smart waste management aims to optimize resource allocation, reduce running costs, and increase the sustainability of waste services.

OFFLINE

Smart Waste management is a process which involves collection of garbage as well as transportation and correct disposal to the appropriate places.

Extract online & offline CH of BE

IdeaHackers.NL