Problem-Solution fit canvas 2.0

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Define CS, fit into

Focus on J&P, tap into BE, understand

Identify strong TR & EM

Explore AS, differentiate

Extract online & offline CH of BE

J&P

1. CUSTOMER SEGMENT(S) — CS

People who wish to stay in well Hygienic and maintained Environment.

6. CUSTOMER CONSTRAINTS — CC

Our customers are unable to access our solution due to network issues and network faults, since there are no other limits because our solution is an

5. AVAILABLE SOLUTIONS — AS

The GPS coordinates and the garbage level of the garbage bin is constantly monitored and viewed in the Web Application created. It alerts the admin when the bins are full.

2. JOBS-TO-BE-DONE / PROBLEMS

This project aims to automate the Garbage collection scheduling and optimize it. The status of the bins are constantly monitored, along with their location remotely via a Web Application and the data is collected and stored on a cloud platform. It alerts the admins to empty the bin when they are full.

9. PROBLEM ROOT CAUSE — RC

Improper waste collection leads to significant land pollution, especially in urban areas. This is due to reduced availability of garbage workers.

7. BEHAVIOUR — BE

There is reduced land pollution by waste and the workload of garbage collectors is reduced making the job easier for them. This improved the overall environmental safety and health of the workers.

The admin is notified when the bin is full. There is a feedback section in the website to ensure a solution will be provided after an analysis of the admin's situation.

3. TRIGGERS

The sight of the overfilled garbage bins and the plight of the overworked garbage collectors will make people switch to this easier automated system.

4. EMOTIONS: BEFORE / AFTER

There is reduced land pollution by waste and the workload of garbage collectors is reduced making the job easier for them. This improved the overall environmental safety and health of the workers.

10. YOUR SOLUTION — SL

The GPS coordinates and the garbage level of the garbage bin will be sent to the IBM IoT platform by developing a python script. The location of the bins along with bin status can be viewed in the Web Application created. This data is stored in Cloudant Database. It alerts the admin when the bins are full.

8. CHANNELS of BEHAVIOUR — CH

8.1 ONLINE

The Web application created using Node-RED service can be accessed to check the current status and location of the bins.

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