

# **HAZARDOUS AREA MONITORING FOR INDUSTRIAL PLANTS POWERED BY IOT**

## **PROBLEM SOLUTION FIT**

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## 1. CUSTOMER SEGMENT(S)

CS

This project is mainly concentrated for large industries in which safety of the employees is the most concerned. This module checks various parameters in the region and alerts the workers accordingly.

## 6. CUSTOMER CONSTRAINTS

CC

In case of emergency it is difficult for the employer to check the conditions of the affected area and employees. This project helps the industry in such case.

## 5. AVAILABLE SOLUTIONS

AS

The available solutions for our module

- monitor the temperature parameters
- smart beacon devices
- smart wearable devices

## 2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Industrial plants are the ones that contain both hazardous and non-hazardous areas. The monitoring of the hazardous areas in industrial plants is important from time to time. If the damage that occurs in hazardous areas can result in the loss of property or lives.

## 9. PROBLEM ROOT CAUSE

RC

What is the real reason that this problem exists? What is the back story behind the need to do this job?  
i.e. customers have to do it because of the change in regulations.

The main reason for this is workers safety. Every worker in any industry first concerns about their health. Though it causes harm to health, many people choose to work in industrial plants for their livelihood. So here we ensure workers safety at every moment.

## 7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job done?

i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on

- Finding smarter ways to solve the problems
- Optimizing the usage of power and internet facilities.

**Identify  
strong  
TR &  
EM**

**3. TRIGGERS** **TR**

What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.

Safety is the most concerned aspect in the industries, This triggers the industries to use this product to ensure Workers safety.

**4. EMOTIONS: BEFORE / AFTER** **EM**

How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.

Before:  
Industries may lose their reputation when the safety of workers is not concerned and this also causes lot of lives in case of emergencies.  
After:  
The employees will be protected and industries can maintain its reputation.

**10. YOUR SOLUTION** **SL**

If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality.

If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

BLE Beacons are used here which is different form beacon. The main difference is the power consumption. Using BLE Beacons Bluetooth enabled smartphones are capable of scanning and displaying the data.

**8. CHANNELS of BEHAVIOUR** **CH**

**1. ONLINE**

What kind of actions do customers take online? Extract online channels from #7

**2. OFFLINE**

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Monitoring of temperature will be done in offline and data receiving will be done in online and offline.

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