Industrial labours who works on gas

Leakage of Gas is the major problem that need to be focused in these gas or gas using industries. It may leads to

The leakage of hazardous gas creates health related

issues on the labours who are exposed to it. Causes skin

irritation, Eyesore, Nausea and some gases tends to cancer.

explosion of an industry and includes the loss of lives.

industry and also who works with gases on their

production & manufacturing process.

2. JOBS-T0-BE-DONE/PROBLEMS

# 1. CUSTOMER SEGMENT(S)



# 6. CUSTOMER CONSTRAINS



RC

# 5. AVAILABLE SOLUTOIONS



Explore AS, differentiate

Extract online & offline CH of BE

- Some of the available solutions are:
- ➤ Portable leak detectors like refrigerant leakage detectors.
- ➤ Ultrasonic industrial imager.
- > Service teams and also the monitoring could be done by the man power.



# 9. PROBLEM ROOT/CAUSE



> Not having a regular maintenance and service.

The sensors should be placed at areas where

the gas leaks are most likely to occur, the placement

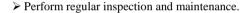
of detectors should be determined with the advice of

experts. And keep in consider about the possible

damages caused to the Sensors was important.

- > Due to some unreliable metal-to-metal seals and poor tubing selection.
- > Improper monitoring and labour inactive behavior by stress and pressure on work

# 7. BEHAVIOR



- ➤ Detect the location where the gas leaks from the data on web app and try to fix the leakage immediately (Always wear air respirators at the time of gas leakage)
- ➤ If explosion happens, do the necessary procedure to control the fire and evacuate all.

3. TRIGGERS

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- > The Loss happened by the damages caused by gas leak explosion. The insecure feeling of the labour's life.
- > To ensure better occupational Health and eliminate potential hazards for optimum safety.

10. YOUR SOLUTION



### 8. CHANNELS of BEHAVIOR



# Online

- Monitor the sensor parameters.
- Know the location at where the gas leakage occurred.

# Offline

- > Try to fix the leakage of the gas and to find the cause for the gas leakage.
- > The number of sensors and the areas where they are to be fixed are determined carefully. Take some considerable guidance is available from standards such as EN50073 etc.
- ➤ Have a regular inspection on the sensor and other detection devices.

# 4. EMOTIONS: BEFORE / AFTER



Having some fear and pressure on work Physical and mental health damages Industrial loss may also happens

> Feels secured. Keeps health in good condition. Possibilities of saving industries from losses an mainly for saving labours life is High.

The solution is placing multiple gas sensors strategically across the areas at where the gas leaks are most likely to occur. We planned to create a web app that is linked with those sensors. If any gas leakage happens, the sensor placed at those point sends notification to the control room (Safety in charge of the industry) along with the location of where the gas leaks take placed and also alert the workers who all are working at those sectors by an Emergency sound system like fire alarms, buzzers.