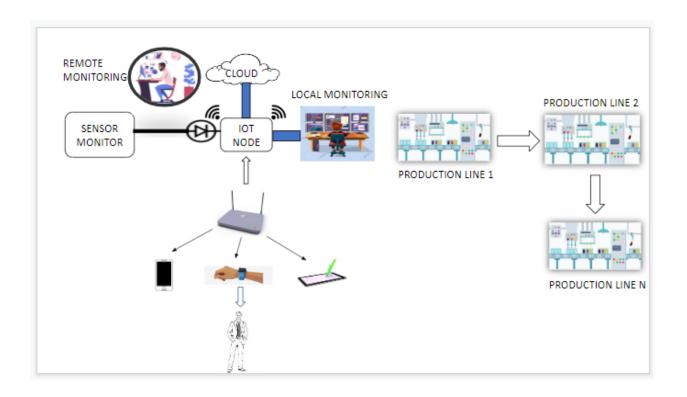
## PROJECT DESIGN PHASE - I SOLUTION ARCHITECTURE

## HAZARDOUS AREA MONITORING FOR INDUSTRIAL POWER PLANT BY IOT

**TEAM ID: PNT2022TMID16047** 

## **SOLUTION ARCHITECTURE:**

Solution architecture is the process of developing a solution based on predefined processes, guidelines, and best practices with the objective that the developed solution. It helps us to track the problems easily and find solutions to it.



- In this design, we develop an IOT based hazardous area monitoring system in industrial areas with the help of the environmental parameters since the environmental condition determines the living ability
- This project helps the employees in the industries to monitor the suitability condition of the environment to work peacefully without any concerns
- ❖ To initialize the project, first beacon devices are installed around the industrial areas, which contains sensor to monitor the temperature of the surrounding
- Temperature helps us determine the hazardous condition of the environment to avoid any dangerous incidents. Beacon devices records, process and analyzes the temperature of the surrounding
- These records are collected and stored in the cloud. The cloud services of IBM Watson Platform. The employees or workers are provided with wearable devices. Administrators are also present for remote monitoring
- ❖ The data in the cloud is sent to the wearable devices and the dashboard of the administrator. The data can be viewed if the workers move near to the beacon devices
- ❖ If the temperature exceeds the threshold temperature level,an alert message is sent to each worker through SMS and displayed in the dashboard. With the help of this, they can evacuate the areas before the occurrence of any incidents.