

Project Design Phase-I

Project Title: Hazardous area monitoring for industrial plant powered by IOT

Team ID: PNT2022TMID31893

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| Define CS, fit into CC | 1. CUSTOMER SEGMENT(S) CS Employees who monitor hazardous area in industrial plants | 6. CUSTOMER CONSTRAINTS CC Smart beacon coverage area Network access for beacon Beacon to watch connectivity | 5. AVAILABLE SOLUTIONS AS Smart area monitoring sensors Wifi connectivity for sensors Pros: Successful monitoring of area Cons: Network coverage for sensors can't be reached | Explore AS, differentiate |
| | 2. JOBS-TO-BE-DONE / PROBLEMS J&P To check and alert the humidity, Temperature, Infrared radiation and Air quality | 9. PROBLEM ROOT CAUSE RC It is important to note the employees safety. Working in hazardous area in industries are highly risk. Therefore, this project helps employee to know about their environment. | 7. BEHAVIOUR BE The employees have a wearable watch where they can see the required or specified details and act safely according to it | |

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| Identify strong TR & EM | 3. TRIGGERS TR Successful execution of our solution will make even other industry to implement this solution | 10. YOUR SOLUTION SL We are going to monitor the area using suitable sensors in the beacons. We will connect our wearable to the beacons. We will send updates to online cloud from the beacon. From the cloud we will be accessing the reading and using that we will have a web page and a mobile application to display them. We will have sms service to alert abnormal readings | 8. CHANNELS of BEHAVIOUR CH ONLINE All the information's will be stored in cloud. so the employees can see the cloud storage or mobile application for referring the details of surroundings. OFFLINE Employees used to wear a watch which captures the information of the surroundings. | Identify strong TR & EM |
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| | <div data-bbox="154 60 483 86" data-label="Section-Header"><p>4. EMOTIONS: BEFORE / AFTER</p></div> <div data-bbox="723 54 770 86" data-label="Text"><p>EM</p></div> <div data-bbox="154 138 786 213" data-label="Text"><p>It will be easy for employees to identify or to know about their environment</p></div> | | | |
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