Project Design Phase – I Problem Solution Fit

Date	30 September 2022
Team ID	PNT2022TMID47977
Project Name	REAL TIME RIVER WATER QUALITY MONITORING AND CONTROL SYSTEM

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) In the fast world the water will be easily polluted by industries, people and etc. So, a real time river water monitoring and control system is important for	5. CUSTOMER LIMIATIONS Now a days at least in river side areas are using by people in every place. So the monitoring and control system is applied to the river for non profit commercial usage and the commercial usage like industries areas.	8. AVAILABLE SOLUTIONS The sensor - enables solution helps to prevent the high risk of polluted river water affecting and casualties the premises. The monitoring sensor will concentrate of the water oxygen , mineral level to avoid the pollution like polluting the water.
Focus on J&P, tap into BE, understand	2. JOBS-TO-BE-DONE / PROBLEMS The system consists of several sensors which is used to measure physical and chemical parameters of the water. The main components of Wireless Sensor Network (WSN) include a microcontroller for processing the system, communication system for	The wireless sensor node in the system is designed for monitoring the pH of water, which is one of the main parameters that affect the quality of water. Water quality refers to the chemical, biological, radiological, and biological parameters of the water	9. BEHAVIOUR With out checking or monitoring the river water used by people. It will caused the health issues. And it's heavily risk and causes different type of health issues too.
Identify Strong TR & EM	3. TRIGGERS TO ACT Most of the people are affected by the polluted water it doesn't monitored. So the real time river water monitoring and control system is needed. 4. EMOTIONS BEFORE/AFTER Before: The health issues are affected to the people and other living beings by the polluted water. After: Increased the confidence level for the people by monitoring the river water can be used are not.	7. YOUR SOLUTION Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. Data collected at the apart site can be displayed in a visual format on a server PC with the help of Spark streaming analysis through Spark MLlib, Deep learning neural network models, Belief Rule Based (BRB) system and is also compared with standard value	10. CHANNELS of BEHAVIOUR ONLINE Promoting through social media. With the help of social media entrepreneurs/influencer. OFFLINE Newspaper advertisements.