

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID08054

Project Title: REAL TIME RIVER WATER QUALITY MONITORING AND CONTROLLING SYSTEM

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none">Localities.Dam safety organizer.Water consumers.	6. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none">Wifi modulus are used.Sensors are used.Low power consumptionClouds for storage purpose.	5. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none">In this technique several sensors is employed to measuring physical and chemical parameters of the water.Manual system with a monotonous process and is very time consuming	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none">To identify any dust particles present in the water.To identify PH level of the water can be monitored.To measure Water temperature .	9. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none">Lack of training for data management and statistical tools.Lack of software to analyse the data for trend analyses and data validation.	7. BEHAVIOUR BE <ul style="list-style-type: none">To recognize the water quality.check ph level,water temperature,parameters.The water quality can be maintainable.	

<p>3. TRIGGERS TR</p> <ul style="list-style-type: none"> • The benefit of water quality standards is that they protect state waters for the ways that we want and need to use them. 	<p>10. YOUR SOLUTION SL</p> <ul style="list-style-type: none"> • System must be low-cost,most efficient as well as processing,sending and viewing data on cloud through wifi modules. • To collect data from the cloud and develop a web application to present the condition of water and to recommend according to condition it will alert or not. 	<p>8.CHANNELS of BEHAVIOR CH</p> <p>8.1 ONLINE</p> <ul style="list-style-type: none"> • To intimate the people through message.If the water condition is good or bad. <p>8.2 OFFLINE</p> <ul style="list-style-type: none"> • It processes the pH levels,water temperature,and parameters of the water. • It includes a number of sensors to test the water's quality based on factors including pH, temperature conductivity, turbidity, and arduino.
<p>4. EMOTIONS: BEFORE / AFTER EM</p> <p>BEFORE:No knowledge about water quality, unaware of health issues.</p> <p>AFTER:knowledge about water quality,awareness about health issues.</p>		