

Project Design Phase-1

Problem Solution Fit Template

Date	20 th October 2022
Team ID	PNT2022TMID15034
Project Name	Project – Real Time River Water Quality Monitoring System

Problem Solution Fit:

Problem-Solution fit canvas 2.0

Purpose / Vision

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Farmers for farming, Food and Manufacturing Industries, General people .	6. CUSTOMER CONSTRAINTS CC Devices are needed to be deployed which takes some battery power and requires cost of establishment. It becomes a constraint when small villages don't have budget even to cater their food.	5. AVAILABLE SOLUTIONS AS There are some techniques already present which are to be used but with the help of IOT, AI and wireless Adhoc Networks, it saves time as well as reduces the cost such that it can be scaled easily.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P •Checking the Ph,Temperature,Turbidity,TDS Levels of water. • Checks whether the water is suitable for consumption. •Checks suitable for Agriculture Purposes.	9. PROBLEM ROOT CAUSE RC The lack of awareness in the quality of water by people is the major drawback. And it adds on to the negligence of people as well as the officials who makes the water resources polluting in a day-day basis.	7. BEHAVIOUR BE Understanding the importance of monitoring River water and the need to co-operate in order to make it a safer option to consume water. The use of available resources based on social and economic issues need to be considered as a good will for the people.	
Identify strong TR & EM	3. TRIGGERS TR The lack of good water management system which ensures the safety of consumers whoever uses it, based on the data obtained by using sensors and devices.	10. YOUR SOLUTION SL Implementing IOT based Wireless River water Quality Monitoring System which alerts the nearby locality of people using SMS regarding the quality of which is fit/unfit for consumption or for agriculture.	8. CHANNELS of BEHAVIOUR CH 8.1 ONLINE Online channels can be used to address any issues or can be used to report problems. It can even be used to recommend some better ideas.	Extract online & offline CH of BE
	4. EMOTIONS: BEFORE / AFTER EM Diseases caused due to unsafe water which are consumed even by children,adults and livestock, but now with the help of the river water quality monitoring, it analyses whether the water is fit for consumption.		8.2 OFFLINE Via offline channels , customers can even act as volunteers to serve for their place.	