

Project Design Phase I- solution Fit Template

Project Title: Real Time River Water Quality Management And Control System

Team Id: PNT2022TMID48179

1. CUSTOMER SEGMENT(S) CS <ul style="list-style-type: none"> ➤ Aqua ponics ➤ Dam safety organisation (SDSO) ➤ Wholesaler of mineral water 	5. CUSTOMER CONSTRAINTS CC <ul style="list-style-type: none"> ➤ Sensors are used ➤ Compact in size ➤ Consumes low power 	8. AVAILABLE SOLUTIONS AS <ul style="list-style-type: none"> ➤ The technology develops a means to supervise and track river water in real time so that quality and flow can be maintained to use less electricity and deliver at a lower cost ➤ The device will be small and simple to operate and cons is Device use without sufficient network connection
2. JOBS-TO-BE-DONE / PROBLEMS J&P <ul style="list-style-type: none"> ➤ To control the flow of water using IOT ➤ To identify the ph value and mineral content in the water ➤ To identify the presents of algal bloom in the tank or water bodies ➤ The quality , quantity and temperature of the water can be maintained 	6. PROBLEM ROOT CAUSE RC <ul style="list-style-type: none"> ➤ It involves improper upkeep of the water supply and inappropriate upkeep of the people. ➤ Lack of system administration and upkeep is the problem. ➤ It uses a lot of electricity. 	9. BEHAVIOUR BE <ul style="list-style-type: none"> ➤ To recognise the tank's algae growth, checks the PH level, mineral content, temperature, water flow direction, and water quantity. ➤ These are portable and are easily maintainable. ➤ It uses less data and power. Additionally, it might serve as a reference for the best safety steps to take.
3. TRIGGERS TR <ul style="list-style-type: none"> ➤ They are able to recognise the issue with the water without anyone's assistance. ➤ It uses little energy and is small in size. Customers will find it easy to use 4. EMOTIONS: BEFORE / AFTER EM <ul style="list-style-type: none"> ➤ Before :Anxiety,time consumption and unaware of things ➤ After:aware of things ,less time consumption and pleasure 	7. YOUR SOLUTION SL <ul style="list-style-type: none"> ➤ The system finds a way for supervising and monitoring the real time river water so that quality & flow can be maintained ➤ To consume less powerconsumption and to provide in cheaper cost ➤ The device will be in compact size and user friendly to use 	10. CHANNELS of BEHAVIOUR CH ONLINE <ul style="list-style-type: none"> ➤ The cloud storage can be used to regulate water flow. OFFLINE <ul style="list-style-type: none"> ➤ The proposed system includes a number of sensors to test and guarantee the water's quality based on factors including pH, temperature, conductivity, turbidity, and arduino.