

Problem: Efficient Water Quality Analysis & Prediction using Machine Learning

Define CS, fit CC	<div>1. CUSTOMER SEGMENT(S)<div>CS</div><div>Social Activists, Common people, Researchers, Students and Professors.</div></div>	<div>6. CUSTOMER CONSTRTAINTS<div>CC</div><div>Some of customers are not familiar with measuring the parameters to evaluate the quality index.</div></div>	<div>5. AVAILABLE SOLUTIONS<div>AS</div><div>Quality of water is evaluated manually and by regression algorithms based on the parameters such as BOD, Minerals, Nitrates.</div></div>	Explore AS,	
	<div>2. JOBS-TO-BE-DONE / PROBLEMS<div>J&P</div><div>The water quality must analyze periodically. Because the water quality can be easily changed with nutrients, bacteria and dissolved oxygen that are being added on. So, we have to test the quality of water with period of time.</div></div>	<div>9. PROBLEM ROOT CAUSE<div>RC</div><div>The surface water and groundwater are intimately connected and are constantly interacting. This makes the quality and quantity of water change in response to change in climate, land use and management practices. This issue occurs when the industry releases their toxic industrial water into surface water or rivers. The people polluting the water by throwing the non-biodegradable wastes into the streams.</div></div>	<div>7. BEHAVIOUR<div>BE</div><div>The quality is measured on the record of period. Whenever there is any external particle or sudden climate change happen then we have to evaluate the index.</div></div>		Focus on J&P, tap into BE, understand
	<div>3. TRIGGERS<div>TR</div><div>The customer gets triggered when the estimated quality gets differ on the same water sample.</div></div> <div>4. EMOTIONS: BEFORE / AFTER<div>EM</div><div>The trust of the customer damaged when these issues arises and the consistent of product sales get damaged due to the problems</div></div>	<div>10. YOUR SOLUTION<div>SL</div><div>The solution to the problem is to evaluate the quality index of water with the parameters such as turbidity, D.O, conductivity, nitrate content, pH and temperature. With the KNN we are going to determine the index of quality.</div></div>	<div>8. CHANNELS of BEHAVIOUR<div>CH</div><div>8.1 ONLINE The customer let the other users know about the issue and that may cause the loss. They try to let the company know about the issues they are facing and try to find the similar user who face the similar problem 8.2 OFFLINE Customer ask for compensation or free services for the damages that the issue have caused.</div></div>		
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