

Project Design Phase – I

Problem - Solution Fit

Problem Solution Fit

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Swimmers and Ordinary people, Organization and Trainers	6. CUSTOMER CONSTRAINTS CC It will be Affordable and Device compatibility and User-friendly device	5. AVAILABLE SOLUTIONS AS The existing solution which gets the data and after training the model, predicts the results. Various software and device have been developed but not gives high accuracy rate	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P Lifeguards and trainers can't monitor all the swimmers /persons at a same time Detection system to detect drowning persons was not fast and accurate	9. PROBLEM ROOT CAUSE RC The possibilities of detection of drowning were not up to the expected level and accuracy rate of the detection of existing system was low so there is a need for developing a system with high accuracy rate in detection	7. BEHAVIOUR BE Get information from others Search and learn about drowning detection system Search for solution in online	
Focus on J&P, tap into BE, understand RC	3. TRIGGERS TR Death rate of drowning was become high nowadays. System to detect drowning was not give high accuracy rate	10. YOUR SOLUTION SL Using CNN -YOLOv7 algorithm to detects the drowning people to get high and fast accuracy rate. It detects the drowning person and alerting by beep alarm and shows the exact position of a drowning person.	8.CHANNELS of BEHAVIOUR CH 8.1 ONLINE Share information, social media, Blogs 8.2 OFFLINE Monitor persons, Friends and Colleague, get help from lifeguards or trainers	Focus on J&P, tap into BE, understand RC
	4. EMOTIONS: BEFORE / AFTER EM Before: Insecure and stressful After: Relaxed, Comfortable, feel secure			
Identify strong TR & EM				Extract online & offline CH of BE